



API Reference

# Amazon Lightsail



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# Amazon Lightsail: API Reference

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# Table of Contents

<b>Welcome</b> .....	<b>1</b>
<b>Actions</b> .....	<b>2</b>
AllocateStaticIp .....	8
Request Syntax .....	8
Request Parameters .....	8
Response Syntax .....	8
Response Elements .....	9
Errors .....	9
See Also .....	10
AttachCertificateToDistribution .....	12
Request Syntax .....	12
Request Parameters .....	12
Response Syntax .....	13
Response Elements .....	14
Errors .....	14
See Also .....	15
AttachDisk .....	16
Request Syntax .....	16
Request Parameters .....	16
Response Syntax .....	17
Response Elements .....	18
Errors .....	18
See Also .....	19
AttachInstancesToLoadBalancer .....	21
Request Syntax .....	21
Request Parameters .....	21
Response Syntax .....	22
Response Elements .....	22
Errors .....	23
See Also .....	24
AttachLoadBalancerTlsCertificate .....	25
Request Syntax .....	25
Request Parameters .....	25
Response Syntax .....	26

---

Response Elements .....	26
Errors .....	27
See Also .....	28
AttachStaticIp .....	29
Request Syntax .....	29
Request Parameters .....	29
Response Syntax .....	29
Response Elements .....	30
Errors .....	30
See Also .....	32
CloseInstancePublicPorts .....	33
Request Syntax .....	33
Request Parameters .....	33
Response Syntax .....	34
Response Elements .....	34
Errors .....	34
See Also .....	36
CopySnapshot .....	37
Request Syntax .....	37
Request Parameters .....	37
Response Syntax .....	39
Response Elements .....	40
Errors .....	40
Examples .....	41
See Also .....	44
CreateBucket .....	45
Request Syntax .....	45
Request Parameters .....	45
Response Syntax .....	46
Response Elements .....	48
Errors .....	48
See Also .....	49
CreateBucketAccessKey .....	51
Request Syntax .....	51
Request Parameters .....	51
Response Syntax .....	52



Response Elements .....	52
Errors .....	53
See Also .....	54
CreateCertificate .....	55
Request Syntax .....	55
Request Parameters .....	55
Response Syntax .....	56
Response Elements .....	59
Errors .....	59
See Also .....	60
CreateCloudFormationStack .....	61
Request Syntax .....	61
Request Parameters .....	61
Response Syntax .....	62
Response Elements .....	62
Errors .....	63
See Also .....	64
CreateContactMethod .....	65
Request Syntax .....	65
Request Parameters .....	65
Response Syntax .....	66
Response Elements .....	67
Errors .....	67
See Also .....	68
CreateContainerService .....	69
Request Syntax .....	69
Request Parameters .....	70
Response Syntax .....	73
Response Elements .....	75
Errors .....	75
Examples .....	76
See Also .....	78
CreateContainerServiceDeployment .....	80
Request Syntax .....	80
Request Parameters .....	81
Response Syntax .....	81

Response Elements .....	84
Errors .....	84
See Also .....	85
CreateContainerServiceRegistryLogin .....	86
Response Syntax .....	86
Response Elements .....	87
Errors .....	87
See Also .....	88
CreateDisk .....	89
Request Syntax .....	89
Request Parameters .....	89
Response Syntax .....	91
Response Elements .....	91
Errors .....	92
See Also .....	93
CreateDiskFromSnapshot .....	94
Request Syntax .....	94
Request Parameters .....	94
Response Syntax .....	97
Response Elements .....	98
Errors .....	98
See Also .....	99
CreateDiskSnapshot .....	101
Request Syntax .....	101
Request Parameters .....	102
Response Syntax .....	103
Response Elements .....	103
Errors .....	104
See Also .....	105
CreateDistribution .....	106
Request Syntax .....	106
Request Parameters .....	107
Response Syntax .....	109
Response Elements .....	111
Errors .....	112
See Also .....	113

---

CreateDomain .....	114
Request Syntax .....	114
Request Parameters .....	114
Response Syntax .....	115
Response Elements .....	115
Errors .....	115
See Also .....	117
CreateDomainEntry .....	118
Request Syntax .....	118
Request Parameters .....	118
Response Syntax .....	119
Response Elements .....	119
Errors .....	120
See Also .....	121
CreateGUISessionAccessDetails .....	122
Request Syntax .....	122
Request Parameters .....	122
Response Syntax .....	122
Response Elements .....	123
Errors .....	124
See Also .....	125
CreateInstances .....	126
Request Syntax .....	126
Request Parameters .....	126
Response Syntax .....	129
Response Elements .....	130
Errors .....	130
See Also .....	132
CreateInstancesFromSnapshot .....	133
Request Syntax .....	133
Request Parameters .....	134
Response Syntax .....	137
Response Elements .....	138
Errors .....	138
See Also .....	140
CreateInstanceSnapshot .....	141

---

Request Syntax .....	141
Request Parameters .....	141
Response Syntax .....	142
Response Elements .....	142
Errors .....	143
See Also .....	144
CreateKeyPair .....	145
Request Syntax .....	145
Request Parameters .....	145
Response Syntax .....	146
Response Elements .....	147
Errors .....	147
See Also .....	149
CreateLoadBalancer .....	150
Request Syntax .....	150
Request Parameters .....	150
Response Syntax .....	153
Response Elements .....	153
Errors .....	154
See Also .....	155
CreateLoadBalancerTlsCertificate .....	156
Request Syntax .....	156
Request Parameters .....	156
Response Syntax .....	157
Response Elements .....	158
Errors .....	158
See Also .....	160
CreateRelationalDatabase .....	161
Request Syntax .....	161
Request Parameters .....	161
Response Syntax .....	166
Response Elements .....	166
Errors .....	167
See Also .....	168
CreateRelationalDatabaseFromSnapshot .....	169
Request Syntax .....	169

---

Request Parameters .....	169
Response Syntax .....	172
Response Elements .....	172
Errors .....	173
See Also .....	174
CreateRelationalDatabaseSnapshot .....	175
Request Syntax .....	175
Request Parameters .....	175
Response Syntax .....	176
Response Elements .....	177
Errors .....	177
See Also .....	178
DeleteAlarm .....	179
Request Syntax .....	179
Request Parameters .....	179
Response Syntax .....	179
Response Elements .....	180
Errors .....	180
See Also .....	181
DeleteAutoSnapshot .....	183
Request Syntax .....	183
Request Parameters .....	183
Response Syntax .....	183
Response Elements .....	184
Errors .....	184
See Also .....	185
DeleteBucket .....	187
Request Syntax .....	187
Request Parameters .....	187
Response Syntax .....	188
Response Elements .....	189
Errors .....	189
See Also .....	190
DeleteBucketAccessKey .....	191
Request Syntax .....	191
Request Parameters .....	191

Response Syntax .....	192
Response Elements .....	192
Errors .....	192
See Also .....	193
DeleteCertificate .....	195
Request Syntax .....	195
Request Parameters .....	195
Response Syntax .....	195
Response Elements .....	196
Errors .....	196
See Also .....	197
DeleteContactMethod .....	199
Request Syntax .....	199
Request Parameters .....	199
Response Syntax .....	200
Response Elements .....	200
Errors .....	200
See Also .....	202
DeleteContainerImage .....	203
Request Syntax .....	203
Request Parameters .....	203
Response Elements .....	204
Errors .....	204
See Also .....	205
DeleteContainerService .....	206
Request Syntax .....	206
Request Parameters .....	206
Response Elements .....	206
Errors .....	206
See Also .....	207
DeleteDisk .....	209
Request Syntax .....	209
Request Parameters .....	209
Response Syntax .....	210
Response Elements .....	210
Errors .....	211

---

See Also .....	212
DeleteDiskSnapshot .....	213
Request Syntax .....	213
Request Parameters .....	213
Response Syntax .....	213
Response Elements .....	214
Errors .....	214
See Also .....	216
DeleteDistribution .....	217
Request Syntax .....	217
Request Parameters .....	217
Response Syntax .....	217
Response Elements .....	218
Errors .....	218
See Also .....	219
DeleteDomain .....	220
Request Syntax .....	220
Request Parameters .....	220
Response Syntax .....	220
Response Elements .....	221
Errors .....	221
See Also .....	222
DeleteDomainEntry .....	224
Request Syntax .....	224
Request Parameters .....	224
Response Syntax .....	225
Response Elements .....	225
Errors .....	225
See Also .....	227
DeleteInstance .....	228
Request Syntax .....	228
Request Parameters .....	228
Response Syntax .....	228
Response Elements .....	229
Errors .....	229
See Also .....	231

DeleteInstanceSnapshot .....	232
Request Syntax .....	232
Request Parameters .....	232
Response Syntax .....	232
Response Elements .....	233
Errors .....	233
See Also .....	234
DeleteKeyPair .....	236
Request Syntax .....	236
Request Parameters .....	236
Response Syntax .....	237
Response Elements .....	237
Errors .....	238
See Also .....	239
DeleteKnownHostKeys .....	240
Request Syntax .....	240
Request Parameters .....	240
Response Syntax .....	240
Response Elements .....	241
Errors .....	241
See Also .....	243
DeleteLoadBalancer .....	244
Request Syntax .....	244
Request Parameters .....	244
Response Syntax .....	244
Response Elements .....	245
Errors .....	245
See Also .....	246
DeleteLoadBalancerTlsCertificate .....	248
Request Syntax .....	248
Request Parameters .....	248
Response Syntax .....	249
Response Elements .....	249
Errors .....	250
See Also .....	251
DeleteRelationalDatabase .....	252



---

Request Syntax .....	252
Request Parameters .....	252
Response Syntax .....	253
Response Elements .....	254
Errors .....	254
See Also .....	255
DeleteRelationalDatabaseSnapshot .....	257
Request Syntax .....	257
Request Parameters .....	257
Response Syntax .....	257
Response Elements .....	258
Errors .....	258
See Also .....	259
DetachCertificateFromDistribution .....	261
Request Syntax .....	261
Request Parameters .....	261
Response Syntax .....	261
Response Elements .....	262
Errors .....	262
See Also .....	263
DetachDisk .....	265
Request Syntax .....	265
Request Parameters .....	265
Response Syntax .....	265
Response Elements .....	266
Errors .....	266
See Also .....	267
DetachInstancesFromLoadBalancer .....	269
Request Syntax .....	269
Request Parameters .....	269
Response Syntax .....	270
Response Elements .....	270
Errors .....	270
See Also .....	272
DetachStaticIp .....	273
Request Syntax .....	273

---

Request Parameters .....	273
Response Syntax .....	273
Response Elements .....	274
Errors .....	274
See Also .....	275
<b>DisableAddOn .....</b>	<b>277</b>
Request Syntax .....	277
Request Parameters .....	277
Response Syntax .....	277
Response Elements .....	278
Errors .....	278
See Also .....	279
<b>DownloadDefaultKeyPair .....</b>	<b>281</b>
Response Syntax .....	281
Response Elements .....	281
Errors .....	281
See Also .....	283
<b>EnableAddOn .....</b>	<b>284</b>
Request Syntax .....	284
Request Parameters .....	284
Response Syntax .....	285
Response Elements .....	285
Errors .....	285
See Also .....	287
<b>ExportSnapshot .....</b>	<b>288</b>
Request Syntax .....	288
Request Parameters .....	288
Response Syntax .....	289
Response Elements .....	289
Errors .....	290
See Also .....	291
<b>GetActiveNames .....</b>	<b>292</b>
Request Syntax .....	292
Request Parameters .....	292
Response Syntax .....	292
Response Elements .....	292

---

Errors .....	293
See Also .....	294
GetAlarms .....	295
Request Syntax .....	295
Request Parameters .....	295
Response Syntax .....	296
Response Elements .....	297
Errors .....	297
See Also .....	298
GetAutoSnapshots .....	300
Request Syntax .....	300
Request Parameters .....	300
Response Syntax .....	300
Response Elements .....	301
Errors .....	301
See Also .....	303
GetBlueprints .....	304
Request Syntax .....	304
Request Parameters .....	304
Response Syntax .....	305
Response Elements .....	306
Errors .....	306
See Also .....	307
GetBucketAccessKeys .....	309
Request Syntax .....	309
Request Parameters .....	309
Response Syntax .....	309
Response Elements .....	310
Errors .....	310
Examples .....	311
See Also .....	312
GetBucketBundles .....	314
Request Syntax .....	314
Request Parameters .....	314
Response Syntax .....	314
Response Elements .....	315

---

Errors .....	315
See Also .....	316
GetBucketMetricData .....	317
Request Syntax .....	317
Request Parameters .....	317
Response Syntax .....	320
Response Elements .....	320
Errors .....	321
See Also .....	322
GetBuckets .....	323
Request Syntax .....	323
Request Parameters .....	323
Response Syntax .....	324
Response Elements .....	325
Errors .....	326
See Also .....	327
GetBundles .....	328
Request Syntax .....	328
Request Parameters .....	328
Response Syntax .....	329
Response Elements .....	330
Errors .....	330
See Also .....	331
GetCertificates .....	333
Request Syntax .....	333
Request Parameters .....	333
Response Syntax .....	334
Response Elements .....	336
Errors .....	337
See Also .....	338
GetCloudFormationStackRecords .....	339
Request Syntax .....	339
Request Parameters .....	339
Response Syntax .....	339
Response Elements .....	340
Errors .....	341

---

See Also .....	342
GetContactMethods .....	343
Request Syntax .....	343
Request Parameters .....	343
Response Syntax .....	343
Response Elements .....	344
Errors .....	344
See Also .....	345
GetContainerAPIMetadata .....	347
Response Syntax .....	347
Response Elements .....	347
Errors .....	347
See Also .....	348
GetContainerImages .....	349
Request Syntax .....	349
Request Parameters .....	349
Response Syntax .....	349
Response Elements .....	350
Errors .....	350
See Also .....	351
GetContainerLog .....	352
Request Syntax .....	352
Request Parameters .....	352
Response Syntax .....	354
Response Elements .....	355
Errors .....	355
See Also .....	356
GetContainerServiceDeployments .....	358
Request Syntax .....	358
Request Parameters .....	358
Response Syntax .....	359
Response Elements .....	359
Errors .....	360
See Also .....	361
GetContainerServiceMetricData .....	362
Request Syntax .....	362

---

Request Parameters .....	362
Response Syntax .....	364
Response Elements .....	365
Errors .....	365
See Also .....	366
GetContainerServicePowers .....	367
Response Syntax .....	367
Response Elements .....	367
Errors .....	367
See Also .....	368
GetContainerServices .....	370
Request Syntax .....	370
Request Parameters .....	370
Response Syntax .....	370
Response Elements .....	373
Errors .....	373
See Also .....	374
GetCostEstimate .....	375
Request Syntax .....	375
Request Parameters .....	375
Response Syntax .....	376
Response Elements .....	377
Errors .....	377
See Also .....	378
GetDisk .....	379
Request Syntax .....	379
Request Parameters .....	379
Response Syntax .....	379
Response Elements .....	380
Errors .....	380
See Also .....	382
GetDisks .....	383
Request Syntax .....	383
Request Parameters .....	383
Response Syntax .....	383
Response Elements .....	384

---

Errors .....	385
See Also .....	386
GetDiskSnapshot .....	387
Request Syntax .....	387
Request Parameters .....	387
Response Syntax .....	387
Response Elements .....	388
Errors .....	388
See Also .....	389
GetDiskSnapshots .....	391
Request Syntax .....	391
Request Parameters .....	391
Response Syntax .....	391
Response Elements .....	392
Errors .....	393
See Also .....	394
GetDistributionBundles .....	395
Response Syntax .....	395
Response Elements .....	395
Errors .....	395
See Also .....	397
GetDistributionLatestCacheReset .....	398
Request Syntax .....	398
Request Parameters .....	398
Response Syntax .....	398
Response Elements .....	398
Errors .....	399
See Also .....	400
GetDistributionMetricData .....	401
Request Syntax .....	401
Request Parameters .....	401
Response Syntax .....	405
Response Elements .....	405
Errors .....	406
See Also .....	407
GetDistributions .....	408

---

Request Syntax .....	408
Request Parameters .....	408
Response Syntax .....	409
Response Elements .....	410
Errors .....	411
See Also .....	412
<b>GetDomain</b> .....	<b>413</b>
Request Syntax .....	413
Request Parameters .....	413
Response Syntax .....	413
Response Elements .....	414
Errors .....	414
See Also .....	416
<b>GetDomains</b> .....	<b>417</b>
Request Syntax .....	417
Request Parameters .....	417
Response Syntax .....	417
Response Elements .....	418
Errors .....	419
See Also .....	420
<b>GetExportSnapshotRecords</b> .....	<b>422</b>
Request Syntax .....	422
Request Parameters .....	422
Response Syntax .....	422
Response Elements .....	423
Errors .....	424
See Also .....	425
<b>GetInstance</b> .....	<b>426</b>
Request Syntax .....	426
Request Parameters .....	426
Response Syntax .....	426
Response Elements .....	429
Errors .....	429
See Also .....	430
<b>GetInstanceAccessDetails</b> .....	<b>432</b>
Request Syntax .....	432



---

Request Parameters .....	432
Response Syntax .....	433
Response Elements .....	433
Errors .....	434
See Also .....	435
GetInstanceMetricData .....	436
Request Syntax .....	436
Request Parameters .....	436
Response Syntax .....	440
Response Elements .....	441
Errors .....	441
See Also .....	443
GetInstancePortStates .....	444
Request Syntax .....	444
Request Parameters .....	444
Response Syntax .....	444
Response Elements .....	445
Errors .....	445
See Also .....	446
GetInstances .....	447
Request Syntax .....	447
Request Parameters .....	447
Response Syntax .....	447
Response Elements .....	450
Errors .....	450
Examples .....	452
See Also .....	456
GetInstanceSnapshot .....	458
Request Syntax .....	458
Request Parameters .....	458
Response Syntax .....	458
Response Elements .....	460
Errors .....	460
See Also .....	461
GetInstanceSnapshots .....	463
Request Syntax .....	463

---

Request Parameters .....	463
Response Syntax .....	463
Response Elements .....	465
Errors .....	465
See Also .....	467
<b>GetInstanceState .....</b>	<b>468</b>
Request Syntax .....	468
Request Parameters .....	468
Response Syntax .....	468
Response Elements .....	468
Errors .....	469
See Also .....	470
<b>GetKeyPair .....</b>	<b>471</b>
Request Syntax .....	471
Request Parameters .....	471
Response Syntax .....	471
Response Elements .....	472
Errors .....	472
See Also .....	473
<b>GetKeyPairs .....</b>	<b>475</b>
Request Syntax .....	475
Request Parameters .....	475
Response Syntax .....	475
Response Elements .....	476
Errors .....	477
See Also .....	478
<b>GetLoadBalancer .....</b>	<b>479</b>
Request Syntax .....	479
Request Parameters .....	479
Response Syntax .....	479
Response Elements .....	480
Errors .....	481
See Also .....	482
<b>GetLoadBalancerMetricData .....</b>	<b>483</b>
Request Syntax .....	483
Request Parameters .....	483

---

Response Syntax .....	488
Response Elements .....	488
Errors .....	489
See Also .....	490
<b>GetLoadBalancers .....</b>	<b>491</b>
Request Syntax .....	491
Request Parameters .....	491
Response Syntax .....	491
Response Elements .....	492
Errors .....	493
See Also .....	494
<b>GetLoadBalancerTlsCertificates .....</b>	<b>495</b>
Request Syntax .....	495
Request Parameters .....	495
Response Syntax .....	495
Response Elements .....	497
Errors .....	497
See Also .....	498
<b>GetLoadBalancerTlsPolicies .....</b>	<b>500</b>
Request Syntax .....	500
Request Parameters .....	500
Response Syntax .....	500
Response Elements .....	501
Errors .....	501
See Also .....	502
<b>GetOperation .....</b>	<b>504</b>
Request Syntax .....	504
Request Parameters .....	504
Response Syntax .....	504
Response Elements .....	505
Errors .....	505
See Also .....	506
<b>GetOperations .....</b>	<b>508</b>
Request Syntax .....	508
Request Parameters .....	508
Response Syntax .....	508

Response Elements .....	509
Errors .....	509
See Also .....	511
<b>GetOperationsForResource .....</b>	<b>512</b>
Request Syntax .....	512
Request Parameters .....	512
Response Syntax .....	512
Response Elements .....	513
Errors .....	514
See Also .....	515
<b>GetRegions .....</b>	<b>517</b>
Request Syntax .....	517
Request Parameters .....	517
Response Syntax .....	517
Response Elements .....	518
Errors .....	518
See Also .....	520
<b>GetRelationalDatabase .....</b>	<b>521</b>
Request Syntax .....	521
Request Parameters .....	521
Response Syntax .....	521
Response Elements .....	523
Errors .....	523
See Also .....	524
<b>GetRelationalDatabaseBlueprints .....</b>	<b>525</b>
Request Syntax .....	525
Request Parameters .....	525
Response Syntax .....	525
Response Elements .....	526
Errors .....	526
See Also .....	527
<b>GetRelationalDatabaseBundles .....</b>	<b>529</b>
Request Syntax .....	529
Request Parameters .....	529
Response Syntax .....	530
Response Elements .....	530

---

Errors .....	531
See Also .....	532
GetRelationalDatabaseEvents .....	533
Request Syntax .....	533
Request Parameters .....	533
Response Syntax .....	534
Response Elements .....	534
Errors .....	535
See Also .....	536
GetRelationalDatabaseLogEvents .....	537
Request Syntax .....	537
Request Parameters .....	537
Response Syntax .....	539
Response Elements .....	539
Errors .....	540
See Also .....	541
GetRelationalDatabaseLogStreams .....	542
Request Syntax .....	542
Request Parameters .....	542
Response Syntax .....	542
Response Elements .....	542
Errors .....	543
See Also .....	544
GetRelationalDatabaseMasterUserPassword .....	545
Request Syntax .....	545
Request Parameters .....	545
Response Syntax .....	546
Response Elements .....	546
Errors .....	546
See Also .....	547
GetRelationalDatabaseMetricData .....	549
Request Syntax .....	549
Request Parameters .....	549
Response Syntax .....	552
Response Elements .....	553
Errors .....	553

---

See Also .....	555
GetRelationalDatabaseParameters .....	556
Request Syntax .....	556
Request Parameters .....	556
Response Syntax .....	557
Response Elements .....	557
Errors .....	558
See Also .....	559
GetRelationalDatabases .....	560
Request Syntax .....	560
Request Parameters .....	560
Response Syntax .....	560
Response Elements .....	562
Errors .....	562
See Also .....	563
GetRelationalDatabaseSnapshot .....	565
Request Syntax .....	565
Request Parameters .....	565
Response Syntax .....	565
Response Elements .....	566
Errors .....	566
See Also .....	567
GetRelationalDatabaseSnapshots .....	569
Request Syntax .....	569
Request Parameters .....	569
Response Syntax .....	569
Response Elements .....	570
Errors .....	571
See Also .....	572
GetSetupHistory .....	573
Request Syntax .....	573
Request Parameters .....	573
Response Syntax .....	574
Response Elements .....	574
Errors .....	575
See Also .....	576

---

GetStaticIp .....	577
Request Syntax .....	577
Request Parameters .....	577
Response Syntax .....	577
Response Elements .....	578
Errors .....	578
See Also .....	579
GetStaticIps .....	580
Request Syntax .....	580
Request Parameters .....	580
Response Syntax .....	580
Response Elements .....	581
Errors .....	581
See Also .....	583
ImportKeyPair .....	584
Request Syntax .....	584
Request Parameters .....	584
Response Syntax .....	584
Response Elements .....	585
Errors .....	585
See Also .....	586
IsVpcPeered .....	588
Response Syntax .....	588
Response Elements .....	588
Errors .....	588
See Also .....	589
OpenInstancePublicPorts .....	591
Request Syntax .....	591
Request Parameters .....	591
Response Syntax .....	592
Response Elements .....	592
Errors .....	593
See Also .....	594
PeerVpc .....	595
Response Syntax .....	595
Response Elements .....	595

---

Errors .....	595
See Also .....	597
PutAlarm .....	598
Request Syntax .....	598
Request Parameters .....	598
Response Syntax .....	603
Response Elements .....	603
Errors .....	604
See Also .....	605
PutInstancePublicPorts .....	606
Request Syntax .....	606
Request Parameters .....	606
Response Syntax .....	607
Response Elements .....	607
Errors .....	608
See Also .....	609
RebootInstance .....	610
Request Syntax .....	610
Request Parameters .....	610
Response Syntax .....	610
Response Elements .....	611
Errors .....	611
See Also .....	612
RebootRelationalDatabase .....	614
Request Syntax .....	614
Request Parameters .....	614
Response Syntax .....	614
Response Elements .....	615
Errors .....	615
See Also .....	616
RegisterContainerImage .....	618
Request Syntax .....	618
Request Parameters .....	618
Response Syntax .....	619
Response Elements .....	620
Errors .....	620



---

See Also .....	621
ReleaseStaticIp .....	622
Request Syntax .....	622
Request Parameters .....	622
Response Syntax .....	622
Response Elements .....	623
Errors .....	623
See Also .....	624
ResetDistributionCache .....	626
Request Syntax .....	626
Request Parameters .....	626
Response Syntax .....	626
Response Elements .....	627
Errors .....	627
See Also .....	629
SendContactMethodVerification .....	630
Request Syntax .....	630
Request Parameters .....	630
Response Syntax .....	631
Response Elements .....	631
Errors .....	631
See Also .....	633
SetIpAddressType .....	634
Request Syntax .....	634
Request Parameters .....	634
Response Syntax .....	636
Response Elements .....	636
Errors .....	637
See Also .....	638
SetResourceAccessForBucket .....	639
Request Syntax .....	639
Request Parameters .....	639
Response Syntax .....	640
Response Elements .....	640
Errors .....	641
See Also .....	642

SetupInstanceHttps .....	643
Request Syntax .....	643
Request Parameters .....	643
Response Syntax .....	644
Response Elements .....	645
Errors .....	645
See Also .....	646
StartGUISession .....	647
Request Syntax .....	647
Request Parameters .....	647
Response Syntax .....	647
Response Elements .....	648
Errors .....	648
See Also .....	649
StartInstance .....	651
Request Syntax .....	651
Request Parameters .....	651
Response Syntax .....	652
Response Elements .....	652
Errors .....	652
See Also .....	654
StartRelationalDatabase .....	655
Request Syntax .....	655
Request Parameters .....	655
Response Syntax .....	655
Response Elements .....	656
Errors .....	656
See Also .....	657
StopGUISession .....	659
Request Syntax .....	659
Request Parameters .....	659
Response Syntax .....	659
Response Elements .....	660
Errors .....	660
See Also .....	661
StopInstance .....	662

---

Request Syntax .....	662
Request Parameters .....	662
Response Syntax .....	663
Response Elements .....	663
Errors .....	664
See Also .....	665
StopRelationalDatabase .....	666
Request Syntax .....	666
Request Parameters .....	666
Response Syntax .....	667
Response Elements .....	667
Errors .....	668
See Also .....	669
TagResource .....	670
Request Syntax .....	670
Request Parameters .....	670
Response Syntax .....	671
Response Elements .....	671
Errors .....	672
See Also .....	673
TestAlarm .....	674
Request Syntax .....	674
Request Parameters .....	674
Response Syntax .....	675
Response Elements .....	675
Errors .....	676
See Also .....	677
UnpeerVpc .....	678
Response Syntax .....	678
Response Elements .....	678
Errors .....	678
See Also .....	680
UntagResource .....	681
Request Syntax .....	681
Request Parameters .....	681
Response Syntax .....	682

Response Elements .....	682
Errors .....	683
See Also .....	684
UpdateBucket .....	685
Request Syntax .....	685
Request Parameters .....	685
Response Syntax .....	687
Response Elements .....	688
Errors .....	689
See Also .....	690
UpdateBucketBundle .....	691
Request Syntax .....	691
Request Parameters .....	691
Response Syntax .....	692
Response Elements .....	692
Errors .....	693
See Also .....	694
UpdateContainerService .....	695
Request Syntax .....	695
Request Parameters .....	695
Response Syntax .....	697
Response Elements .....	700
Errors .....	700
Examples .....	701
See Also .....	704
UpdateDistribution .....	705
Request Syntax .....	705
Request Parameters .....	706
Response Syntax .....	708
Response Elements .....	708
Errors .....	709
See Also .....	710
UpdateDistributionBundle .....	711
Request Syntax .....	711
Request Parameters .....	711
Response Syntax .....	712

Response Elements .....	712
Errors .....	713
See Also .....	714
UpdateDomainEntry .....	715
Request Syntax .....	715
Request Parameters .....	715
Response Syntax .....	716
Response Elements .....	716
Errors .....	717
See Also .....	718
UpdateInstanceMetadataOptions .....	719
Request Syntax .....	719
Request Parameters .....	719
Response Syntax .....	721
Response Elements .....	721
Errors .....	722
See Also .....	723
UpdateLoadBalancerAttribute .....	724
Request Syntax .....	724
Request Parameters .....	724
Response Syntax .....	725
Response Elements .....	726
Errors .....	726
See Also .....	728
UpdateRelationalDatabase .....	729
Request Syntax .....	729
Request Parameters .....	729
Response Syntax .....	732
Response Elements .....	733
Errors .....	733
See Also .....	734
UpdateRelationalDatabaseParameters .....	736
Request Syntax .....	736
Request Parameters .....	736
Response Syntax .....	737
Response Elements .....	737

---

Errors .....	738
See Also .....	739
<b>Data Types .....</b>	<b>740</b>
AccessKey .....	745
Contents .....	745
See Also .....	746
AccessKeyLastUsed .....	748
Contents .....	748
See Also .....	749
AccessRules .....	750
Contents .....	750
See Also .....	751
AccountLevelBpaSync .....	752
Contents .....	752
See Also .....	754
AddOn .....	755
Contents .....	755
See Also .....	756
AddOnRequest .....	757
Contents .....	757
See Also .....	758
Alarm .....	759
Contents .....	759
See Also .....	764
AttachedDisk .....	765
Contents .....	765
See Also .....	765
AutoSnapshotAddOnRequest .....	766
Contents .....	766
See Also .....	767
AutoSnapshotDetails .....	768
Contents .....	768
See Also .....	768
AvailabilityZone .....	770
Contents .....	770
See Also .....	770

---

Blueprint .....	771
Contents .....	771
See Also .....	773
Bucket .....	775
Contents .....	775
See Also .....	778
BucketAccessLogConfig .....	780
Contents .....	780
See Also .....	781
BucketBundle .....	782
Contents .....	782
See Also .....	783
BucketState .....	784
Contents .....	784
See Also .....	784
Bundle .....	785
Contents .....	785
See Also .....	787
CacheBehavior .....	789
Contents .....	789
See Also .....	789
CacheBehaviorPerPath .....	790
Contents .....	790
See Also .....	791
CacheSettings .....	792
Contents .....	792
See Also .....	794
Certificate .....	795
Contents .....	795
See Also .....	800
CertificateSummary .....	801
Contents .....	801
See Also .....	802
CloudFormationStackRecord .....	803
Contents .....	803
See Also .....	805

CloudFormationStackRecordSourceInfo .....	806
Contents .....	806
See Also .....	806
ContactMethod .....	808
Contents .....	808
See Also .....	810
Container .....	811
Contents .....	811
See Also .....	812
ContainerImage .....	813
Contents .....	813
See Also .....	813
ContainerService .....	814
Contents .....	814
See Also .....	819
ContainerServiceDeployment .....	820
Contents .....	820
See Also .....	821
ContainerServiceDeploymentRequest .....	822
Contents .....	822
See Also .....	822
ContainerServiceECRImagePullerRole .....	823
Contents .....	823
See Also .....	823
ContainerServiceECRImagePullerRoleRequest .....	824
Contents .....	824
See Also .....	824
ContainerServiceEndpoint .....	825
Contents .....	825
See Also .....	825
ContainerServiceHealthCheckConfig .....	826
Contents .....	826
See Also .....	827
ContainerServiceLogEvent .....	828
Contents .....	828
See Also .....	828



---

ContainerServicePower .....	829
Contents .....	829
See Also .....	830
ContainerServiceRegistryLogin .....	831
Contents .....	831
See Also .....	832
ContainerServiceStateDetail .....	833
Contents .....	833
See Also .....	834
CookieObject .....	835
Contents .....	835
See Also .....	835
CostEstimate .....	836
Contents .....	836
See Also .....	836
DestinationInfo .....	837
Contents .....	837
See Also .....	837
Disk .....	838
Contents .....	838
See Also .....	842
DiskInfo .....	843
Contents .....	843
See Also .....	843
DiskMap .....	845
Contents .....	845
See Also .....	845
DiskSnapshot .....	846
Contents .....	846
See Also .....	849
DiskSnapshotInfo .....	850
Contents .....	850
See Also .....	850
DistributionBundle .....	851
Contents .....	851
See Also .....	852

DnsRecordCreationState .....	853
Contents .....	853
See Also .....	854
Domain .....	855
Contents .....	855
See Also .....	857
DomainEntry .....	858
Contents .....	858
See Also .....	860
DomainValidationRecord .....	861
Contents .....	861
See Also .....	862
EndpointRequest .....	863
Contents .....	863
See Also .....	863
EstimateByTime .....	864
Contents .....	864
See Also .....	865
ExportSnapshotRecord .....	866
Contents .....	866
See Also .....	867
ExportSnapshotRecordSourceInfo .....	869
Contents .....	869
See Also .....	870
HeaderObject .....	871
Contents .....	871
See Also .....	872
HostKeyAttributes .....	873
Contents .....	873
See Also .....	874
InputOrigin .....	876
Contents .....	876
See Also .....	877
Instance .....	878
Contents .....	878
See Also .....	882

InstanceAccessDetails .....	883
Contents .....	883
See Also .....	885
InstanceEntry .....	886
Contents .....	886
See Also .....	888
InstanceHardware .....	889
Contents .....	889
See Also .....	889
InstanceHealthSummary .....	890
Contents .....	890
See Also .....	891
InstanceMetadataOptions .....	893
Contents .....	893
See Also .....	894
InstanceNetworking .....	896
Contents .....	896
See Also .....	896
InstancePortInfo .....	897
Contents .....	897
See Also .....	901
InstancePortState .....	902
Contents .....	902
See Also .....	905
InstanceSnapshot .....	906
Contents .....	906
See Also .....	909
InstanceSnapshotInfo .....	910
Contents .....	910
See Also .....	910
InstanceState .....	912
Contents .....	912
See Also .....	912
KeyPair .....	913
Contents .....	913
See Also .....	914

LightsailDistribution .....	916
Contents .....	916
See Also .....	920
LoadBalancer .....	921
Contents .....	921
See Also .....	925
LoadBalancerTlsCertificate .....	926
Contents .....	926
See Also .....	932
LoadBalancerTlsCertificateDnsRecordCreationState .....	933
Contents .....	933
See Also .....	933
LoadBalancerTlsCertificateDomainValidationOption .....	934
Contents .....	934
See Also .....	934
LoadBalancerTlsCertificateDomainValidationRecord .....	935
Contents .....	935
See Also .....	936
LoadBalancerTlsCertificateRenewalSummary .....	937
Contents .....	937
See Also .....	938
LoadBalancerTlsCertificateSummary .....	939
Contents .....	939
See Also .....	939
LoadBalancerTlsPolicy .....	940
Contents .....	940
See Also .....	941
LogEvent .....	942
Contents .....	942
See Also .....	942
MetricDatapoint .....	943
Contents .....	943
See Also .....	944
MonitoredResourceInfo .....	945
Contents .....	945
See Also .....	946

---

MonthlyTransfer .....	947
Contents .....	947
See Also .....	947
NameServersUpdateState .....	948
Contents .....	948
See Also .....	948
Operation .....	950
Contents .....	950
See Also .....	953
Origin .....	954
Contents .....	954
See Also .....	955
PasswordData .....	956
Contents .....	956
See Also .....	957
PendingMaintenanceAction .....	958
Contents .....	958
See Also .....	958
PendingModifiedRelationalDatabaseValues .....	960
Contents .....	960
See Also .....	960
PortInfo .....	961
Contents .....	961
See Also .....	964
PrivateRegistryAccess .....	965
Contents .....	965
See Also .....	965
PrivateRegistryAccessRequest .....	966
Contents .....	966
See Also .....	966
QueryStringObject .....	967
Contents .....	967
See Also .....	967
R53HostedZoneDeletionState .....	968
Contents .....	968
See Also .....	968

Region .....	970
Contents .....	970
See Also .....	971
RegisteredDomainDelegationInfo .....	972
Contents .....	972
See Also .....	973
RelationalDatabase .....	974
Contents .....	974
See Also .....	979
RelationalDatabaseBlueprint .....	980
Contents .....	980
See Also .....	981
RelationalDatabaseBundle .....	982
Contents .....	982
See Also .....	983
RelationalDatabaseEndpoint .....	984
Contents .....	984
See Also .....	984
RelationalDatabaseEvent .....	985
Contents .....	985
See Also .....	985
RelationalDatabaseHardware .....	987
Contents .....	987
See Also .....	987
RelationalDatabaseParameter .....	988
Contents .....	988
See Also .....	989
RelationalDatabaseSnapshot .....	990
Contents .....	990
See Also .....	993
RenewalSummary .....	994
Contents .....	994
See Also .....	995
ResourceBudgetEstimate .....	996
Contents .....	996
See Also .....	997

ResourceLocation .....	998
Contents .....	998
See Also .....	998
ResourceReceivingAccess .....	999
Contents .....	999
See Also .....	999
ResourceRecord .....	1000
Contents .....	1000
See Also .....	1000
Session .....	1001
Contents .....	1001
See Also .....	1001
SetupExecutionDetails .....	1003
Contents .....	1003
See Also .....	1004
SetupHistory .....	1005
Contents .....	1005
See Also .....	1006
SetupHistoryResource .....	1007
Contents .....	1007
See Also .....	1008
SetupRequest .....	1009
Contents .....	1009
See Also .....	1010
StaticIp .....	1011
Contents .....	1011
See Also .....	1013
StopInstanceOnIdleRequest .....	1014
Contents .....	1014
See Also .....	1014
Tag .....	1015
Contents .....	1015
See Also .....	1015
TimePeriod .....	1016
Contents .....	1016
See Also .....	1016

---

<b>Lightsail for Research actions .....</b>	<b>1017</b>
<b>Object storage actions .....</b>	<b>1021</b>
<b>Common Parameters .....</b>	<b>1024</b>
<b>Common Errors .....</b>	<b>1027</b>



# Welcome

Amazon Lightsail is the easiest way to get started with Amazon Web Services (AWS) for developers who need to build websites or web applications. It includes everything you need to launch your project quickly - instances (virtual private servers), container services, storage buckets, managed databases, SSD-based block storage, static IP addresses, load balancers, content delivery network (CDN) distributions, DNS management of registered domains, and resource snapshots (backups) - for a low, predictable monthly price.

You can manage your Lightsail resources using the Lightsail console, Lightsail API, AWS Command Line Interface (AWS CLI), or SDKs. For more information about Lightsail concepts and tasks, see the [Amazon Lightsail Developer Guide](#).

This API Reference provides detailed information about the actions, data types, parameters, and errors of the Lightsail service. For more information about the supported AWS Regions, endpoints, and service quotas of the Lightsail service, see [Amazon Lightsail Endpoints and Quotas](#) in the *AWS General Reference*.

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# Actions

The following actions are supported:

- [AllocateStaticIp](#)
- [AttachCertificateToDistribution](#)
- [AttachDisk](#)
- [AttachInstancesToLoadBalancer](#)
- [AttachLoadBalancerTlsCertificate](#)
- [AttachStaticIp](#)
- [CloseInstancePublicPorts](#)
- [CopySnapshot](#)
- [CreateBucket](#)
- [CreateBucketAccessKey](#)
- [CreateCertificate](#)
- [CreateCloudFormationStack](#)
- [CreateContactMethod](#)
- [CreateContainerService](#)
- [CreateContainerServiceDeployment](#)
- [CreateContainerServiceRegistryLogin](#)
- [CreateDisk](#)
- [CreateDiskFromSnapshot](#)
- [CreateDiskSnapshot](#)
- [CreateDistribution](#)
- [CreateDomain](#)
- [CreateDomainEntry](#)
- [CreateGUISessionAccessDetails](#)
- [CreateInstances](#)
- [CreateInstancesFromSnapshot](#)
- [CreateInstanceSnapshot](#)
- [CreateKeyPair](#)

- [CreateLoadBalancer](#)
- [CreateLoadBalancerTlsCertificate](#)
- [CreateRelationalDatabase](#)
- [CreateRelationalDatabaseFromSnapshot](#)
- [CreateRelationalDatabaseSnapshot](#)
- [DeleteAlarm](#)
- [DeleteAutoSnapshot](#)
- [DeleteBucket](#)
- [DeleteBucketAccessKey](#)
- [DeleteCertificate](#)
- [DeleteContactMethod](#)
- [DeleteContainerImage](#)
- [DeleteContainerService](#)
- [DeleteDisk](#)
- [DeleteDiskSnapshot](#)
- [DeleteDistribution](#)
- [DeleteDomain](#)
- [DeleteDomainEntry](#)
- [DeleteInstance](#)
- [DeleteInstanceSnapshot](#)
- [DeleteKeyPair](#)
- [DeleteKnownHostKeys](#)
- [DeleteLoadBalancer](#)
- [DeleteLoadBalancerTlsCertificate](#)
- [DeleteRelationalDatabase](#)
- [DeleteRelationalDatabaseSnapshot](#)
- [DetachCertificateFromDistribution](#)
- [DetachDisk](#)
- [DetachInstancesFromLoadBalancer](#)
- [DetachStaticIp](#)

- [DisableAddOn](#)
- [DownloadDefaultKeyPair](#)
- [EnableAddOn](#)
- [ExportSnapshot](#)
- [GetActiveNames](#)
- [GetAlarms](#)
- [GetAutoSnapshots](#)
- [GetBlueprints](#)
- [GetBucketAccessKeys](#)
- [GetBucketBundles](#)
- [GetBucketMetricData](#)
- [GetBuckets](#)
- [GetBundles](#)
- [GetCertificates](#)
- [GetCloudFormationStackRecords](#)
- [GetContactMethods](#)
- [GetContainerAPIMetadata](#)
- [GetContainerImages](#)
- [GetContainerLog](#)
- [GetContainerServiceDeployments](#)
- [GetContainerServiceMetricData](#)
- [GetContainerServicePowers](#)
- [GetContainerServices](#)
- [GetCostEstimate](#)
- [GetDisk](#)
- [GetDisks](#)
- [GetDiskSnapshot](#)
- [GetDiskSnapshots](#)
- [GetDistributionBundles](#)
- [GetDistributionLatestCacheReset](#)

- [GetDistributionMetricData](#)
- [GetDistributions](#)
- [GetDomain](#)
- [GetDomains](#)
- [GetExportSnapshotRecords](#)
- [GetInstance](#)
- [GetInstanceAccessDetails](#)
- [GetInstanceMetricData](#)
- [GetInstancePortStates](#)
- [GetInstances](#)
- [GetInstanceSnapshot](#)
- [GetInstanceSnapshots](#)
- [GetInstanceState](#)
- [GetKeyPair](#)
- [GetKeyPairs](#)
- [GetLoadBalancer](#)
- [GetLoadBalancerMetricData](#)
- [GetLoadBalancers](#)
- [GetLoadBalancerTlsCertificates](#)
- [GetLoadBalancerTlsPolicies](#)
- [GetOperation](#)
- [GetOperations](#)
- [GetOperationsForResource](#)
- [GetRegions](#)
- [GetRelationalDatabase](#)
- [GetRelationalDatabaseBlueprints](#)
- [GetRelationalDatabaseBundles](#)
- [GetRelationalDatabaseEvents](#)
- [GetRelationalDatabaseLogEvents](#)
- [GetRelationalDatabaseLogStreams](#)

- [GetRelationalDatabaseMasterUserPassword](#)
- [GetRelationalDatabaseMetricData](#)
- [GetRelationalDatabaseParameters](#)
- [GetRelationalDatabases](#)
- [GetRelationalDatabaseSnapshot](#)
- [GetRelationalDatabaseSnapshots](#)
- [GetSetupHistory](#)
- [GetStaticIp](#)
- [GetStaticIps](#)
- [ImportKeyPair](#)
- [IsVpcPeered](#)
- [OpenInstancePublicPorts](#)
- [PeerVpc](#)
- [PutAlarm](#)
- [PutInstancePublicPorts](#)
- [RebootInstance](#)
- [RebootRelationalDatabase](#)
- [RegisterContainerImage](#)
- [ReleaseStaticIp](#)
- [ResetDistributionCache](#)
- [SendContactMethodVerification](#)
- [SetIpAddressType](#)
- [SetResourceAccessForBucket](#)
- [SetupInstanceHttps](#)
- [StartGUISession](#)
- [StartInstance](#)
- [StartRelationalDatabase](#)
- [StopGUISession](#)
- [StopInstance](#)
- [StopRelationalDatabase](#)

- [TagResource](#)
- [TestAlarm](#)
- [UnpeerVpc](#)
- [UntagResource](#)
- [UpdateBucket](#)
- [UpdateBucketBundle](#)
- [UpdateContainerService](#)
- [UpdateDistribution](#)
- [UpdateDistributionBundle](#)
- [UpdateDomainEntry](#)
- [UpdateInstanceMetadataOptions](#)
- [UpdateLoadBalancerAttribute](#)
- [UpdateRelationalDatabase](#)
- [UpdateRelationalDatabaseParameters](#)

# AllocateStaticIp

Allocates a static IP address.

## Request Syntax

```
{
  "staticIpName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### staticIpName

The name of the static IP address.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",

```



```
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AttachCertificateToDistribution

Attaches an SSL/TLS certificate to your Amazon Lightsail content delivery network (CDN) distribution.

After the certificate is attached, your distribution accepts HTTPS traffic for all of the domains that are associated with the certificate.

Use the `CreateCertificate` action to create a certificate that you can attach to your distribution.

## Important

Only certificates created in the `us-east-1` AWS Region can be attached to Lightsail distributions. Lightsail distributions are global resources that can reference an origin in any AWS Region, and distribute its content globally. However, all distributions are located in the `us-east-1` Region.

## Request Syntax

```
{
  "certificateName": "string",
  "distributionName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateName

The name of the certificate to attach to a distribution.

Only certificates with a status of `ISSUED` can be attached to a distribution.

Use the `GetCertificates` action to get a list of certificate names that you can specify.

**Note**

This is the name of the certificate resource type and is used only to reference the certificate in other API actions. It can be different than the domain name of the certificate. For example, your certificate name might be `WordPress-Blog-Certificate` and the domain name of the certificate might be `example.com`.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

**distributionName**

The name of the distribution that the certificate will be attached to.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

**Response Syntax**

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
```

```
"resourceType": "string",  
"status": "string",  
"statusChangedAt": number  
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An object that describes the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AttachDisk

Attaches a block storage disk to a running or stopped Lightsail instance and exposes it to the instance with the specified disk name.

The `attach disk` operation supports tag-based access control via resource tags applied to the resource identified by `disk name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "autoMounting": boolean,
  "diskName": "string",
  "diskPath": "string",
  "instanceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [autoMounting](#)

A Boolean value used to determine the automatic mounting of a storage volume to a virtual computer. The default value is `False`.

#### **Important**

This value only applies to Lightsail for Research resources.

Type: Boolean

Required: No

### [diskName](#)

The unique Lightsail disk name (`my-disk`).



Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### diskPath

The disk path to expose to the instance (`/dev/xvdf`).

Type: String

Pattern: `.*\S.*`

Required: Yes

### instanceName

The name of the Lightsail instance where you want to utilize the storage disk.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
    }
  ]
}
```

```
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AttachInstancesToLoadBalancer

Attaches one or more Lightsail instances to a load balancer.

After some time, the instances are attached to the load balancer and the health check status is available.

The `attach instances to load balancer` operation supports tag-based access control via resource tags applied to the resource identified by `load balancer name`. For more information, see the [Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceNames": [ "string" ],
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceNames

An array of strings representing the instance name(s) you want to attach to your load balancer.

An instance must be running before you can attach it to your load balancer.

There are no additional limits on the number of instances you can attach to your load balancer, aside from the limit of Lightsail instances you can create in your account (20).

Type: Array of strings

Pattern: `\w[\w\ -]*\w`

Required: Yes

### loadBalancerName

The name of the load balancer.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# AttachLoadBalancerTlsCertificate

Attaches a Transport Layer Security (TLS) certificate to your load balancer. TLS is just an updated, more secure version of Secure Socket Layer (SSL).

Once you create and validate your certificate, you can attach it to your load balancer. You can also use this API to rotate the certificates on your account. Use the `AttachLoadBalancerTlsCertificate` action with the non-attached certificate, and it will replace the existing one and become the attached certificate.

The `AttachLoadBalancerTlsCertificate` operation supports tag-based access control via resource tags applied to the resource identified by `load_balancer_name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "certificateName": "string",
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateName

The name of your SSL/TLS certificate.

Type: String

Pattern: `\w[\w\-\ ]*\w`

Required: Yes

### loadBalancerName

The name of the load balancer to which you want to associate the SSL/TLS certificate.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

These SSL/TLS certificates are only usable by Lightsail load balancers. You can't get the certificate and use it for another purpose.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# AttachStaticIp

Attaches a static IP address to a specific Amazon Lightsail instance.

## Request Syntax

```
{  
  "instanceName": "string",  
  "staticIpName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The instance name to which you want to attach the static IP address.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### staticIpName

The name of the static IP.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# CloseInstancePublicPorts

Closes ports for a specific Amazon Lightsail instance.

The `CloseInstancePublicPorts` action supports tag-based access control via resource tags applied to the resource identified by `instanceName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceName": "string",
  "portInfo": {
    "cidrListAliases": [ "string" ],
    "cidrs": [ "string" ],
    "fromPort": number,
    "ipv6Cidrs": [ "string" ],
    "protocol": "string",
    "toPort": number
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [instanceName](#)

The name of the instance for which to close ports.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

### [portInfo](#)

An object to describe the ports to close for the specified instance.

Type: [PortInfo](#) object

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An object that describes the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CopySnapshot

Copies a manual snapshot of an instance or disk as another manual snapshot, or copies an automatic snapshot of an instance or disk as a manual snapshot. This operation can also be used to copy a manual or automatic snapshot of an instance or a disk from one AWS Region to another in Amazon Lightsail.

When copying a *manual snapshot*, be sure to define the `source region`, `source snapshot name`, and `target snapshot name` parameters.

When copying an *automatic snapshot*, be sure to define the `source region`, `source resource name`, `target snapshot name`, and either the `restore date` or the `use latest restorable auto snapshot` parameters.

## Request Syntax

```
{
  "restoreDate": "string",
  "sourceRegion": "string",
  "sourceResourceName": "string",
  "sourceSnapshotName": "string",
  "targetSnapshotName": "string",
  "useLatestRestorableAutoSnapshot": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### restoreDate

The date of the source automatic snapshot to copy. Use the `get auto snapshots` operation to identify the dates of the available automatic snapshots.

Constraints:

- Must be specified in YYYY-MM-DD format.

- This parameter cannot be defined together with the `use latest restorable auto snapshot` parameter. The `restore date` and `use latest restorable auto snapshot` parameters are mutually exclusive.
- Define this parameter only when copying an automatic snapshot as a manual snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

### sourceRegion

The AWS Region where the source manual or automatic snapshot is located.

Type: String

Valid Values: `us-east-1` | `us-east-2` | `us-west-1` | `us-west-2` | `eu-west-1` | `eu-west-2` | `eu-west-3` | `eu-central-1` | `ca-central-1` | `ap-south-1` | `ap-southeast-1` | `ap-southeast-2` | `ap-northeast-1` | `ap-northeast-2` | `eu-north-1`

Required: Yes

### sourceResourceName

The name of the source instance or disk from which the source automatic snapshot was created.

Constraint:

- Define this parameter only when copying an automatic snapshot as a manual snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

### sourceSnapshotName

The name of the source manual snapshot to copy.

Constraint:

- Define this parameter only when copying a manual snapshot as another manual snapshot.

Type: String

Pattern: `\w[\w\-*]\w`

Required: No

### targetSnapshotName

The name of the new manual snapshot to be created as a copy.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

### useLatestRestorableAutoSnapshot

A Boolean value to indicate whether to use the latest available automatic snapshot of the specified source instance or disk.

Constraints:

- This parameter cannot be defined together with the `restoreDate` parameter. The `useLatestRestorableAutoSnapshot` and `restoreDate` parameters are mutually exclusive.
- Define this parameter only when copying an automatic snapshot as a manual snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
    }
  ]
}
```

```
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.



**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**Examples**

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *AWS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [AWS Command Line Interface \(AWS CLI\)](#) or one of the [AWS SDKs](#) to make requests to AWS, these tools automatically sign the requests for you with the access key that you specify when

you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

## Copy an automatic snapshot

The following example creates a new manual snapshot named CopiedAutoSnapshot-2019-09-25 as a copy of the existing automatic snapshot named 2019-09-25 from the WordPress-1 instance in the us-west-2 AWS Region.

### Sample Request

```
POST / HTTP/1.1
Host: lightsail.us-west-2.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: Lightsail_20161128.CopySnapshot
Content-Type: application/x-amz-json-1.1
User-Agent: AGENT
X-Amz-Date: 20190927T194244Z
Authorization: AUTHPARAMS
Content-Length: 150

{
  "sourceResourceName": "WordPress-1",
  "restoreDate": "2019-09-25",
  "targetSnapshotName": "CopiedAutoSnapshot-2019-09-25",
  "sourceRegion": "us-west-2"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Server: Server
Date: Fri, 27 Sep 2019 19:42:46 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 380
x-amzn-RequestId: 69449102-9023-431e-8a00-7EXAMPLE6970
Connection: keep-alive

{
  "operations": [{
    "createdAt": 1.56961336589E9,
    "id": "0710de23-b848-4146-887d-ec12093c049d",
```

```
"isTerminal": false,
"location": {
  "availabilityZone": "all",
  "regionName": "us-west-2"
},
"operationDetails": "us-west-2:WordPress-1",
"operationType": "CopySnapshot",
"resourceName": "CopiedAutoSnapshot-2019-09-25",
"resourceType": "InstanceSnapshot",
"status": "Started",
"statusChangedAt": 1.56961336589E9
}]
}
```

## Copy a manual snapshot

The following example creates a new manual snapshot named `CopiedManualSnapshot-2019-09-25` as a copy of the existing manual snapshot named `WordPress-1-1569608575` in the `us-west-2` AWS Region.

### Sample Request

```
POST / HTTP/1.1
Host: lightsail.us-west-2.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: Lightsail_20161128.CopySnapshot
Content-Type: application/x-amz-json-1.1
User-Agent: AGENT
X-Amz-Date: 20190927T195200Z
Authorization: AUTHPARAMS
Content-Length: 134

{
  "sourceSnapshotName": "WordPress-1-1569608575",
  "targetSnapshotName": "CopiedManualSnapshot-2019-09-25",
  "sourceRegion": "us-west-2"
}
```

### Sample Response

```
HTTP/1.1 200 OK
Server: Server
```

```
Date: Fri, 27 Sep 2019 19:52:01 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 395
x-amzn-RequestId: 5e3e211b-0afe-439e-bead-8EXAMPLEb3c8
Connection: keep-alive
```

```
{
  "operations": [{
    "createdAt": 1.569613921044E9,
    "id": "0d4f2d2a-78ce-44d1-82fe-33588af9afa0",
    "isTerminal": false,
    "location": {
      "availabilityZone": "all",
      "regionName": "us-west-2"
    },
    "operationDetails": "us-west-2:WordPress-1-1569608575",
    "operationType": "CopySnapshot",
    "resourceName": "CopiedManualSnapshot-2019-09-25",
    "resourceType": "InstanceSnapshot",
    "status": "Started",
    "statusChangedAt": 1.569613921044E9
  }]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateBucket

Creates an Amazon Lightsail bucket.

A bucket is a cloud storage resource available in the Lightsail object storage service. Use buckets to store objects such as data and its descriptive metadata. For more information about buckets, see [Buckets in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "bucketName": "string",
  "bundleId": "string",
  "enableObjectVersioning": boolean,
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### bucketName

The name for the bucket.

For more information about bucket names, see [Bucket naming rules in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

## bundleId

The ID of the bundle to use for the bucket.

A bucket bundle specifies the monthly cost, storage space, and data transfer quota for a bucket.

Use the [GetBucketBundles](#) action to get a list of bundle IDs that you can specify.

Use the [UpdateBucketBundle](#) action to change the bundle after the bucket is created.

Type: String

Pattern: `.*\S.*`

Required: Yes

## enableObjectVersioning

A Boolean value that indicates whether to enable versioning of objects in the bucket.

For more information about versioning, see [Enabling and suspending object versioning in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

Type: Boolean

Required: No

## tags

The tag keys and optional values to add to the bucket during creation.

Use the [TagResource](#) action to tag the bucket after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "bucket": {
    "ableToUpdateBundle": boolean,
    "accessLogConfig": {
      "destination": "string",
      "enabled": boolean,
      "prefix": "string"
    }
  }
}
```

```
    },
    "accessRules": {
      "allowPublicOverrides": boolean,
      "getObject": "string"
    },
    },
    "arn": "string",
    "bundleId": "string",
    "createdAt": number,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    },
    "name": "string",
    "objectVersioning": "string",
    "readonlyAccessAccounts": [ "string" ],
    "resourcesReceivingAccess": [
      {
        "name": "string",
        "resourceType": "string"
      }
    ],
    "resourceType": "string",
    "state": {
      "code": "string",
      "message": "string"
    },
    },
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    },
    "url": "string"
  },
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
```

```
    "regionName": "string",
  },
  "operationDetails": "string",
  "operationType": "string",
  "resourceName": "string",
  "resourceType": "string",
  "status": "string",
  "statusChangedAt": number
}
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### bucket

An object that describes the bucket that is created.

Type: [Bucket](#) object

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400



## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# CreateBucketAccessKey

Creates a new access key for the specified Amazon Lightsail bucket. Access keys consist of an access key ID and corresponding secret access key.

Access keys grant full programmatic access to the specified bucket and its objects. You can have a maximum of two access keys per bucket. Use the [GetBucketAccessKeys](#) action to get a list of current access keys for a specific bucket. For more information about access keys, see [Creating access keys for a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Important

The `secretAccessKey` value is returned only in response to the `CreateBucketAccessKey` action. You can get a secret access key only when you first create an access key; you cannot get the secret access key later. If you lose the secret access key, you must create a new access key.

## Request Syntax

```
{
  "bucketName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [bucketName](#)

The name of the bucket that the new access key will belong to, and grant access to.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
  "accessKey": {
    "accessKeyId": "string",
    "createdAt": number,
    "lastUsed": {
      "lastUsedDate": number,
      "region": "string",
      "serviceName": "string"
    },
    "secretAccessKey": "string",
    "status": "string"
  },
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [accessKey](#)

An object that describes the access key that is created.

Type: [AccessKey](#) object

## [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateCertificate

Creates an SSL/TLS certificate for an Amazon Lightsail content delivery network (CDN) distribution and a container service.

After the certificate is valid, use the `AttachCertificateToDistribution` action to use the certificate and its domains with your distribution. Or use the `UpdateContainerService` action to use the certificate and its domains with your container service.

## Important

Only certificates created in the `us-east-1` AWS Region can be attached to Lightsail distributions. Lightsail distributions are global resources that can reference an origin in any AWS Region, and distribute its content globally. However, all distributions are located in the `us-east-1` Region.

## Request Syntax

```
{
  "certificateName": "string",
  "domainName": "string",
  "subjectAlternativeNames": [ "string" ],
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateName

The name for the certificate.

Type: String

Required: Yes

### domainName

The domain name (example.com) for the certificate.

Type: String

Required: Yes

### subjectAlternativeNames

An array of strings that specify the alternate domains (example2.com) and subdomains (blog.example.com) for the certificate.

You can specify a maximum of nine alternate domains (in addition to the primary domain name).

Wildcard domain entries (\*.example.com) are not supported.

Type: Array of strings

Required: No

### tags

The tag keys and optional values to add to the certificate during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "certificate": {
    "certificateArn": "string",
    "certificateDetail": {
      "arn": "string",
      "createdAt": number,
      "domainName": "string",
      "domainValidationRecords": [
```



```
{
  "dnsRecordCreationState": {
    "code": "string",
    "message": "string"
  },
  "domainName": "string",
  "resourceRecord": {
    "name": "string",
    "type": "string",
    "value": "string"
  },
  "validationStatus": "string"
}
],
"eligibleToRenew": "string",
"inUseResourceCount": number,
"issuedAt": number,
"issuerCA": "string",
"keyAlgorithm": "string",
"name": "string",
"notAfter": number,
"notBefore": number,
"renewalSummary": {
  "domainValidationRecords": [
    {
      "dnsRecordCreationState": {
        "code": "string",
        "message": "string"
      },
      "domainName": "string",
      "resourceRecord": {
        "name": "string",
        "type": "string",
        "value": "string"
      },
      "validationStatus": "string"
    }
  ],
  "renewalStatus": "string",
  "renewalStatusReason": "string",
  "updatedAt": number
},
"requestFailureReason": "string",
"revocationReason": "string",
```

```
    "revokedAt": number,
    "serialNumber": "string",
    "status": "string",
    "subjectAlternativeNames": [ "string" ],
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "certificateName": "string",
  "domainName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
},
"operations": [
  {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificate

An object that describes the certificate created.

Type: [CertificateSummary](#) object

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateCloudFormationStack

Creates an AWS CloudFormation stack, which creates a new Amazon EC2 instance from an exported Amazon Lightsail snapshot. This operation results in a CloudFormation stack record that can be used to track the AWS CloudFormation stack created. Use the `get cloud formation stack records` operation to get a list of the CloudFormation stacks created.

## Important

Wait until after your new Amazon EC2 instance is created before running the `create cloud formation stack` operation again with the same export snapshot record.

## Request Syntax

```
{
  "instances": [
    {
      "availabilityZone": "string",
      "instanceType": "string",
      "portInfoSource": "string",
      "sourceName": "string",
      "userData": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instances

An array of parameters that will be used to create the new Amazon EC2 instance. You can only pass one instance entry at a time in this array. You will get an invalid parameter error if you pass more than one instance entry in this array.

Type: Array of [InstanceEntry](#) objects

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# CreateContactMethod

Creates an email or SMS text message contact method.

A contact method is used to send you notifications about your Amazon Lightsail resources. You can add one email address and one mobile phone number contact method in each AWS Region. However, SMS text messaging is not supported in some AWS Regions, and SMS text messages cannot be sent to some countries/regions. For more information, see [Notifications in Amazon Lightsail](#).

## Request Syntax

```
{  
  "contactEndpoint": "string",  
  "protocol": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [contactEndpoint](#)

The destination of the contact method, such as an email address or a mobile phone number.

Use the E.164 format when specifying a mobile phone number. E.164 is a standard for the phone number structure used for international telecommunication. Phone numbers that follow this format can have a maximum of 15 digits, and they are prefixed with the plus character (+) and the country code. For example, a U.S. phone number in E.164 format would be specified as +1XXX5550100. For more information, see [E.164](#) on *Wikipedia*.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

### [protocol](#)

The protocol of the contact method, such as Email or SMS (text messaging).

The SMS protocol is supported only in the following AWS Regions.

- US East (N. Virginia) (us-east-1)
- US West (Oregon) (us-west-2)
- Europe (Ireland) (eu-west-1)
- Asia Pacific (Tokyo) (ap-northeast-1)
- Asia Pacific (Singapore) (ap-southeast-1)
- Asia Pacific (Sydney) (ap-southeast-2)

For a list of countries/regions where SMS text messages can be sent, and the latest AWS Regions where SMS text messaging is supported, see [Supported Regions and Countries](#) in the *Amazon SNS Developer Guide*.

For more information about notifications in Amazon Lightsail, see [Notifications in Amazon Lightsail](#).

Type: String

Valid Values: Email | SMS

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
```

```
    "status": "string",  
    "statusChangedAt": number  
  }  
]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateContainerService

Creates an Amazon Lightsail container service.

A Lightsail container service is a compute resource to which you can deploy containers. For more information, see [Container services in Amazon Lightsail](#) in the *Lightsail Dev Guide*.

## Request Syntax

```
{
  "deployment": {
    "containers": {
      "string": {
        "command": [ "string" ],
        "environment": {
          "string": "string"
        },
        "image": "string",
        "ports": {
          "string": "string"
        }
      }
    },
    "publicEndpoint": {
      "containerName": "string",
      "containerPort": number,
      "healthCheck": {
        "healthyThreshold": number,
        "intervalSeconds": number,
        "path": "string",
        "successCodes": "string",
        "timeoutSeconds": number,
        "unhealthyThreshold": number
      }
    }
  },
  "power": "string",
  "privateRegistryAccess": {
    "ecrImagePullerRole": {
      "isActive": boolean
    }
  },
  "publicDomainNames": {
```

```
    "string" : [ "string" ]
  },
  "scale": number,
  "serviceName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### deployment

An object that describes a deployment for the container service.

A deployment specifies the containers that will be launched on the container service and their settings, such as the ports to open, the environment variables to apply, and the launch command to run. It also specifies the container that will serve as the public endpoint of the deployment and its settings, such as the HTTP or HTTPS port to use, and the health check configuration.

Type: [ContainerServiceDeploymentRequest](#) object

Required: No

### power

The power specification for the container service.

The power specifies the amount of memory, vCPUs, and base monthly cost of each node of the container service. The `power` and `scale` of a container service makes up its configured capacity. To determine the monthly price of your container service, multiply the base price of the `power` with the `scale` (the number of nodes) of the service.

Use the `GetContainerServicePowers` action to get a list of power options that you can specify using this parameter, and their base monthly cost.

Type: String

Valid Values: nano | micro | small | medium | large | xlarge

Required: Yes

### [privateRegistryAccess](#)

An object to describe the configuration for the container service to access private container image repositories, such as Amazon Elastic Container Registry (Amazon ECR) private repositories.

For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

Type: [PrivateRegistryAccessRequest](#) object

Required: No

### [publicDomainNames](#)

The public domain names to use with the container service, such as `example.com` and `www.example.com`.

You can specify up to four public domain names for a container service. The domain names that you specify are used when you create a deployment with a container configured as the public endpoint of your container service.

If you don't specify public domain names, then you can use the default domain of the container service.

#### **Important**

You must create and validate an SSL/TLS certificate before you can use public domain names with your container service. Use the `CreateCertificate` action to create a certificate for the public domain names you want to use with your container service.

You can specify public domain names using a string to array map as shown in the example later on this page.

Type: String to array of strings map

Required: No

### scale

The scale specification for the container service.

The scale specifies the allocated compute nodes of the container service. The `power` and `scale` of a container service makes up its configured capacity. To determine the monthly price of your container service, multiply the base price of the `power` with the `scale` (the number of nodes) of the service.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: Yes

### serviceName

The name for the container service.

The name that you specify for your container service will make up part of its default domain. The default domain of a container service is typically `https://<ServiceName>.<RandomGUID>.<AWSRegion>.cs.amazonlightsail.com`. If the name of your container service is `container-service-1`, and it's located in the US East (Ohio) AWS Region (`us-east-2`), then the domain for your container service will be like the following example: `https://container-service-1.ur4EXAMPLE2uq.us-east-2.cs.amazonlightsail.com`

The following are the requirements for container service names:

- Must be unique within each AWS Region in your Lightsail account.
- Must contain 1 to 63 characters.
- Must contain only alphanumeric characters and hyphens.
- A hyphen (-) can separate words but cannot be at the start or end of the name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes



## tags

The tag keys and optional values to add to the container service during create.

Use the TagResource action to tag a resource after it's created.

For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "containerService": {
    "arn": "string",
    "containerServiceName": "string",
    "createdAt": number,
    "currentDeployment": {
      "containers": {
        "string" : {
          "command": [ "string" ],
          "environment": {
            "string" : "string"
          },
          "image": "string",
          "ports": {
            "string" : "string"
          }
        }
      },
    },
    "createdAt": number,
    "publicEndpoint": {
      "containerName": "string",
      "containerPort": number,
      "healthCheck": {
        "healthyThreshold": number,
        "intervalSeconds": number,
        "path": "string",
        "successCodes": "string",
        "timeoutSeconds": number,
        "unhealthyThreshold": number
      }
    }
  }
}
```

```
    }
  },
  "state": "string",
  "version": number
},
"isDisabled": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"nextDeployment": {
  "containers": {
    "string" : {
      "command": [ "string" ],
      "environment": {
        "string" : "string"
      },
      "image": "string",
      "ports": {
        "string" : "string"
      }
    }
  }
},
"createdAt": number,
"publicEndpoint": {
  "containerName": "string",
  "containerPort": number,
  "healthCheck": {
    "healthyThreshold": number,
    "intervalSeconds": number,
    "path": "string",
    "successCodes": "string",
    "timeoutSeconds": number,
    "unhealthyThreshold": number
  }
},
"state": "string",
"version": number
},
"power": "string",
"powerId": "string",
"principalArn": "string",
"privateDomainName": "string",
"privateRegistryAccess": {
```

```
    "ecrImagePullerRole": {
      "isActive": boolean,
      "principalArn": "string"
    }
  },
  "publicDomainNames": {
    "string" : [ "string" ]
  },
  "resourceType": "string",
  "scale": number,
  "state": "string",
  "stateDetail": {
    "code": "string",
    "message": "string"
  },
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### containerService

An object that describes a container service.

Type: [ContainerService](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *AWS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [AWS Command Line Interface \(AWS CLI\)](#) or one of the [AWS SDKs](#) to make requests to AWS, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

## Create container service

The following example creates a new container service named `container-service-1` in the `us-west-2` AWS Region. It also specifies the `example.com`, `applications.example.com`, `www.example.com`, and `containers.example.com` public domains of the `example-com` SSL/TLS certificate.

### Sample Request

```
POST / HTTP/1.1
Host: lightsail.us-west-2.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: Lightsail_20161128.CreateContainerService
Content-Type: application/x-amz-json-1.1
User-Agent: AGENT
X-Amz-Date: 20201022T175000Z
Authorization: AUTHPARAMS
Content-Length: 195
```

```
{
  "serviceName": "container-service-1",
  "power": "nano",
  "scale": 1,
  "publicDomainNames": {
    "example-com": [
      "example.com",
      "applications.example.com",
      "www.example.com",
      "containers.example.com"
    ]
  }
}
```

### Sample Response

```
HTTP/1.1 200 OK
```

```
Server: Server
Date: Thu, 22 Oct 2020 17:50:03 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 689
x-amzn-RequestId: 0459d37f-f6a7-4786-bc26-9EXAMPLEEa99
Connection: keep-alive
```

```
{
  "containerService": {
    "arn": "arn:aws:lightsail:us-west-2:111122223333:ContainerService/9059c34a-
f681-482f-b41d-0EXAMPLEc85e",
    "containerServiceName": "container-service-1",
    "createdAt": 1.603389001E9,
    "isDisabled": false,
    "location": {
      "availabilityZone": "all",
      "regionName": "us-west-2"
    },
    "power": "nano",
    "powerId": "nano-1",
    "principalArn": "",
    "privateDomainName": "container-service-1.service.local",
    "publicDomainNames": {
      "example-com": [
        "example.com",
        "applications.example.com",
        "www.example.com",
        "containers.example.com"
      ]
    },
    "resourceType": "ContainerService",
    "scale": 1,
    "state": "PENDING",
    "tags": [],
    "url": "https://container-service-1.ur1EXAMPLE2uq.us-
west-2.cs.amazonlightsail.com/"
  }
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateContainerServiceDeployment

Creates a deployment for your Amazon Lightsail container service.

A deployment specifies the containers that will be launched on the container service and their settings, such as the ports to open, the environment variables to apply, and the launch command to run. It also specifies the container that will serve as the public endpoint of the deployment and its settings, such as the HTTP or HTTPS port to use, and the health check configuration.

You can deploy containers to your container service using container images from a public registry such as Amazon ECR Public, or from your local machine. For more information, see [Creating container images for your Amazon Lightsail container services](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "containers": {
    "string": {
      "command": [ "string" ],
      "environment": {
        "string": "string"
      },
      "image": "string",
      "ports": {
        "string": "string"
      }
    }
  },
  "publicEndpoint": {
    "containerName": "string",
    "containerPort": number,
    "healthCheck": {
      "healthyThreshold": number,
      "intervalSeconds": number,
      "path": "string",
      "successCodes": "string",
      "timeoutSeconds": number,
      "unhealthyThreshold": number
    }
  },
  "serviceName": "string"
}
```



```
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### containers

An object that describes the settings of the containers that will be launched on the container service.

Type: String to [Container](#) object map

Key Length Constraints: Minimum length of 1. Maximum length of 53.

Key Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: No

### publicEndpoint

An object that describes the settings of the public endpoint for the container service.

Type: [EndpointRequest](#) object

Required: No

### serviceName

The name of the container service for which to create the deployment.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Syntax

```
{  
  "containerService": {
```

```
"arn": "string",
"containerServiceName": "string",
"createdAt": number,
"currentDeployment": {
  "containers": {
    "string": {
      "command": [ "string" ],
      "environment": {
        "string": "string"
      },
      "image": "string",
      "ports": {
        "string": "string"
      }
    }
  },
  "createdAt": number,
  "publicEndpoint": {
    "containerName": "string",
    "containerPort": number,
    "healthCheck": {
      "healthyThreshold": number,
      "intervalSeconds": number,
      "path": "string",
      "successCodes": "string",
      "timeoutSeconds": number,
      "unhealthyThreshold": number
    }
  },
  "state": "string",
  "version": number
},
"isDisabled": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"nextDeployment": {
  "containers": {
    "string": {
      "command": [ "string" ],
      "environment": {
        "string": "string"
      }
    }
  },

```

```
        "image": "string",
        "ports": {
            "string" : "string"
        }
    },
    "createdAt": number,
    "publicEndpoint": {
        "containerName": "string",
        "containerPort": number,
        "healthCheck": {
            "healthyThreshold": number,
            "intervalSeconds": number,
            "path": "string",
            "successCodes": "string",
            "timeoutSeconds": number,
            "unhealthyThreshold": number
        }
    },
    "state": "string",
    "version": number
},
"power": "string",
"powerId": "string",
"principalArn": "string",
"privateDomainName": "string",
"privateRegistryAccess": {
    "ecrImagePullerRole": {
        "isActive": boolean,
        "principalArn": "string"
    }
},
"publicDomainNames": {
    "string" : [ "string" ]
},
"resourceType": "string",
"scale": number,
"state": "string",
"stateDetail": {
    "code": "string",
    "message": "string"
},
"tags": [
    {
```

```
        "key": "string",
        "value": "string"
    },
    ],
    "url": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### containerService

An object that describes a container service.

Type: [ContainerService](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateContainerServiceRegistryLogin

Creates a temporary set of log in credentials that you can use to log in to the Docker process on your local machine. After you're logged in, you can use the native Docker commands to push your local container images to the container image registry of your Amazon Lightsail account so that you can use them with your Lightsail container service. The log in credentials expire 12 hours after they are created, at which point you will need to create a new set of log in credentials.

## Note

You can only push container images to the container service registry of your Lightsail account. You cannot pull container images or perform any other container image management actions on the container service registry.

After you push your container images to the container image registry of your Lightsail account, use the `RegisterContainerImage` action to register the pushed images to a specific Lightsail container service.

## Note

This action is not required if you install and use the Lightsail Control (`lightsailctl`) plugin to push container images to your Lightsail container service. For more information, see [Pushing and managing container images on your Amazon Lightsail container services](#) in the *Amazon Lightsail Developer Guide*.

## Response Syntax

```
{
  "registryLogin": {
    "expiresAt": number,
    "password": "string",
    "registry": "string",
    "username": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [registryLogin](#)

An object that describes the log in information for the container service registry of your Lightsail account.

Type: [ContainerServiceRegistryLogin](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# CreateDisk

Creates a block storage disk that can be attached to an Amazon Lightsail instance in the same Availability Zone (us-east-2a).

The `create disk` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "addOns": [
    {
      "addOnType": "string",
      "autoSnapshotAddOnRequest": {
        "snapshotTimeOfDay": "string"
      },
      "stopInstanceOnIdleRequest": {
        "duration": "string",
        "threshold": "string"
      }
    }
  ],
  "availabilityZone": "string",
  "diskName": "string",
  "sizeInGb": number,
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

## addOns

An array of objects that represent the add-ons to enable for the new disk.

Type: Array of [AddOnRequest](#) objects

Required: No

## availabilityZone

The Availability Zone where you want to create the disk (us-east-2a). Use the same Availability Zone as the Lightsail instance to which you want to attach the disk.

Use the `get_regions` operation to list the Availability Zones where Lightsail is currently available.

Type: String

Pattern: `.*\S.*`

Required: Yes

## diskName

The unique Lightsail disk name (my-disk).

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

## sizeInGb

The size of the disk in GB (32).

Type: Integer

Required: Yes

## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateDiskFromSnapshot

Creates a block storage disk from a manual or automatic snapshot of a disk. The resulting disk can be attached to an Amazon Lightsail instance in the same Availability Zone (us-east-2a).

The `create disk from snapshot` operation supports tag-based access control via request tags and resource tags applied to the resource identified by `disk snapshot name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "addOns": [
    {
      "addOnType": "string",
      "autoSnapshotAddOnRequest": {
        "snapshotTimeOfDay": "string"
      },
      "stopInstanceOnIdleRequest": {
        "duration": "string",
        "threshold": "string"
      }
    }
  ],
  "availabilityZone": "string",
  "diskName": "string",
  "diskSnapshotName": "string",
  "restoreDate": "string",
  "sizeInGb": number,
  "sourceDiskName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "useLatestRestorableAutoSnapshot": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### addOns

An array of objects that represent the add-ons to enable for the new disk.

Type: Array of [AddOnRequest](#) objects

Required: No

### availabilityZone

The Availability Zone where you want to create the disk (us-east-2a). Choose the same Availability Zone as the Lightsail instance where you want to create the disk.

Use the `GetRegions` operation to list the Availability Zones where Lightsail is currently available.

Type: String

Pattern: `.*\S.*`

Required: Yes

### diskName

The unique Lightsail disk name (my-disk).

Type: String

Pattern: `\w[\w\-*]\w`

Required: Yes

### diskSnapshotName

The name of the disk snapshot (my-snapshot) from which to create the new storage disk.

Constraint:

- This parameter cannot be defined together with the `source disk name` parameter. The `disk snapshot name` and `source disk name` parameters are mutually exclusive.

Type: String

Pattern: `\w[\w\-*]\w`

Required: No

### restoreDate

The date of the automatic snapshot to use for the new disk. Use the `get auto snapshots` operation to identify the dates of the available automatic snapshots.

Constraints:

- Must be specified in YYYY-MM-DD format.
- This parameter cannot be defined together with the `use latest restorable auto snapshot` parameter. The `restore date` and `use latest restorable auto snapshot` parameters are mutually exclusive.
- Define this parameter only when creating a new disk from an automatic snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

### sizeInGb

The size of the disk in GB (32).

Type: Integer

Required: Yes

### sourceDiskName

The name of the source disk from which the source automatic snapshot was created.

Constraints:

- This parameter cannot be defined together with the `disk snapshot name` parameter. The `source disk name` and `disk snapshot name` parameters are mutually exclusive.
- Define this parameter only when creating a new disk from an automatic snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No



## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## useLatestRestorableAutoSnapshot

A Boolean value to indicate whether to use the latest available automatic snapshot.

Constraints:

- This parameter cannot be defined together with the restore\_date parameter. The use\_latest\_restorable\_auto\_snapshot and restore\_date parameters are mutually exclusive.
- Define this parameter only when creating a new disk from an automatic snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
    }
  ]
}
```

```
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateDiskSnapshot

Creates a snapshot of a block storage disk. You can use snapshots for backups, to make copies of disks, and to save data before shutting down a Lightsail instance.

You can take a snapshot of an attached disk that is in use; however, snapshots only capture data that has been written to your disk at the time the snapshot command is issued. This may exclude any data that has been cached by any applications or the operating system. If you can pause any file systems on the disk long enough to take a snapshot, your snapshot should be complete. Nevertheless, if you cannot pause all file writes to the disk, you should unmount the disk from within the Lightsail instance, issue the create disk snapshot command, and then remount the disk to ensure a consistent and complete snapshot. You may remount and use your disk while the snapshot status is pending.

You can also use this operation to create a snapshot of an instance's system volume. You might want to do this, for example, to recover data from the system volume of a botched instance or to create a backup of the system volume like you would for a block storage disk. To create a snapshot of a system volume, just define the `instanceName` parameter when issuing the snapshot command, and a snapshot of the defined instance's system volume will be created. After the snapshot is available, you can create a block storage disk from the snapshot and attach it to a running instance to access the data on the disk.

The `create disk snapshot` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "diskName": "string",
  "diskSnapshotName": "string",
  "instanceName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### diskName

The unique name of the source disk (Disk-Virginia-1).

#### **Note**

This parameter cannot be defined together with the `instance_name` parameter. The `disk_name` and `instance_name` parameters are mutually exclusive.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### diskSnapshotName

The name of the destination disk snapshot (my-disk-snapshot) based on the source disk.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### instanceName

The unique name of the source instance (Amazon\_Linux-512MB-Virginia-1). When this is defined, a snapshot of the instance's system volume is created.

#### **Note**

This parameter cannot be defined together with the `disk_name` parameter. The `instance_name` and `disk_name` parameters are mutually exclusive.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.



HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateDistribution

Creates an Amazon Lightsail content delivery network (CDN) distribution.

A distribution is a globally distributed network of caching servers that improve the performance of your website or web application hosted on a Lightsail instance. For more information, see [Content delivery networks in Amazon Lightsail](#).

## Request Syntax

```
{
  "bundleId": "string",
  "cacheBehaviors": [
    {
      "behavior": "string",
      "path": "string"
    }
  ],
  "cacheBehaviorSettings": {
    "allowedHTTPMethods": "string",
    "cachedHTTPMethods": "string",
    "defaultTTL": number,
    "forwardedCookies": {
      "cookiesAllowList": [ "string" ],
      "option": "string"
    },
    "forwardedHeaders": {
      "headersAllowList": [ "string" ],
      "option": "string"
    },
    "forwardedQueryStrings": {
      "option": boolean,
      "queryStringsAllowList": [ "string" ]
    },
    "maximumTTL": number,
    "minimumTTL": number
  },
  "certificateName": "string",
  "defaultCacheBehavior": {
    "behavior": "string"
  },
  "distributionName": "string",
  "ipAddressType": "string",
```

```
"origin": {
  "name": "string",
  "protocolPolicy": "string",
  "regionName": "string",
  "responseTimeout": number
},
"tags": [
  {
    "key": "string",
    "value": "string"
  }
],
"viewerMinimumTlsProtocolVersion": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### bundleId

The bundle ID to use for the distribution.

A distribution bundle describes the specifications of your distribution, such as the monthly cost and monthly network transfer quota.

Use the `GetDistributionBundles` action to get a list of distribution bundle IDs that you can specify.

Type: String

Required: Yes

### cacheBehaviors

An array of objects that describe the per-path cache behavior for the distribution.

Type: Array of [CacheBehaviorPerPath](#) objects

Required: No

### cacheBehaviorSettings

An object that describes the cache behavior settings for the distribution.

Type: [CacheSettings](#) object

Required: No

### [certificateName](#)

The name of the SSL/TLS certificate that you want to attach to the distribution.

Use the [GetCertificates](#) action to get a list of certificate names that you can specify.

Type: String

Pattern: `\w[\w\-]*\w`

Required: No

### [defaultCacheBehavior](#)

An object that describes the default cache behavior for the distribution.

Type: [CacheBehavior](#) object

Required: Yes

### [distributionName](#)

The name for the distribution.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

### [ipAddressType](#)

The IP address type for the distribution.

The possible values are `ipv4` for IPv4 only, and `dualstack` for IPv4 and IPv6.

The default value is `dualstack`.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

## origin

An object that describes the origin resource for the distribution, such as a Lightsail instance, bucket, or load balancer.

The distribution pulls, caches, and serves content from the origin.

Type: [InputOrigin](#) object

Required: Yes

## tags

The tag keys and optional values to add to the distribution during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## viewerMinimumTlsProtocolVersion

The minimum TLS protocol version for the SSL/TLS certificate.

Type: String

Valid Values: TLSv1.1\_2016 | TLSv1.2\_2018 | TLSv1.2\_2019 | TLSv1.2\_2021

Required: No

## Response Syntax

```
{
  "distribution": {
    "ableToUpdateBundle": boolean,
    "alternativeDomainNames": [ "string" ],
    "arn": "string",
    "bundleId": "string",
    "cacheBehaviors": [
      {
        "behavior": "string",
        "path": "string"
      }
    ],
  },
}
```

```
"cacheBehaviorSettings": {
  "allowedHTTPMethods": "string",
  "cachedHTTPMethods": "string",
  "defaultTTL": number,
  "forwardedCookies": {
    "cookiesAllowList": [ "string" ],
    "option": "string"
  },
  "forwardedHeaders": {
    "headersAllowList": [ "string" ],
    "option": "string"
  },
  "forwardedQueryStrings": {
    "option": boolean,
    "queryStringsAllowList": [ "string" ]
  },
  "maximumTTL": number,
  "minimumTTL": number
},
"certificateName": "string",
"createdAt": number,
"defaultCacheBehavior": {
  "behavior": "string"
},
"domainName": "string",
"ipAddressType": "string",
"isEnabled": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"name": "string",
"origin": {
  "name": "string",
  "protocolPolicy": "string",
  "regionName": "string",
  "resourceType": "string",
  "responseTimeout": number
},
"originPublicDNS": "string",
"resourceType": "string",
"status": "string",
"supportCode": "string",
"tags": [
```

```
    {
      "key": "string",
      "value": "string"
    }
  ],
  "viewerMinimumTlsProtocolVersion": "string"
},
"operation": {
  "createdAt": number,
  "errorCode": "string",
  "errorDetails": "string",
  "id": "string",
  "isTerminal": boolean,
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "operationDetails": "string",
  "operationType": "string",
  "resourceName": "string",
  "resourceType": "string",
  "status": "string",
  "statusChangedAt": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### distribution

An object that describes the distribution created.

Type: [LightsailDistribution](#) object

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

### UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.



HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateDomain

Creates a domain resource for the specified domain (example.com).

The `create domain` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "domainName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### domainName

The domain name to manage (example.com).

Type: String

Required: Yes

### tags

The tag keys and optional values to add to the resource during create.

Use the `TagResource` action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateDomainEntry

Creates one of the following domain name system (DNS) records in a domain DNS zone: Address (A), canonical name (CNAME), mail exchanger (MX), name server (NS), start of authority (SOA), service locator (SRV), or text (TXT).

The `create domain entry` operation supports tag-based access control via resource tags applied to the resource identified by `domain name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "domainEntry": {
    "id": "string",
    "isAlias": boolean,
    "name": "string",
    "options": {
      "string" : "string"
    },
    "target": "string",
    "type": "string"
  },
  "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [domainEntry](#)

An array of key-value pairs containing information about the domain entry request.

Type: [DomainEntry](#) object

Required: Yes

### [domainName](#)

The domain name (example.com) for which you want to create the domain entry.

Type: String

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.



HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateGUISessionAccessDetails

Creates two URLs that are used to access a virtual computer's graphical user interface (GUI) session. The primary URL initiates a web-based Amazon DCV session to the virtual computer's application. The secondary URL initiates a web-based Amazon DCV session to the virtual computer's operating session.

Use `StartGUISession` to open the session.

## Request Syntax

```
{
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceName

The resource name.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "failureReason": "string",
  "percentageComplete": number,
  "resourceName": "string",
  "sessions": [
    {
```

```
        "isPrimary": boolean,
        "name": "string",
        "url": "string"
    }
],
"status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### failureReason

The reason the operation failed.

Type: String

### percentageComplete

The percentage of completion for the operation.

Type: Integer

### resourceName

The resource name.

Type: String

Pattern: `\w[\w\-\-]*\w`

### sessions

Returns information about the specified Amazon DCV GUI session.

Type: Array of [Session](#) objects

### status

The status of the operation.

Type: String

Valid Values: `startExpired` | `notStarted` | `started` | `starting` | `stopped` | `stopping` | `settingUpInstance` | `failedInstanceCreation` | `failedStartingGUISession` | `failedStoppingGUISession`

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

### UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateInstances

Creates one or more Amazon Lightsail instances.

The `create_instances` operation supports tag-based access control via request tags. For more information, see the [Lightsail Developer Guide](#).

## Request Syntax

```
{
  "addOns": [
    {
      "addOnType": "string",
      "autoSnapshotAddOnRequest": {
        "snapshotTimeOfDay": "string"
      },
      "stopInstanceOnIdleRequest": {
        "duration": "string",
        "threshold": "string"
      }
    }
  ],
  "availabilityZone": "string",
  "blueprintId": "string",
  "bundleId": "string",
  "customImageName": "string",
  "instanceNames": [ "string" ],
  "ipAddressType": "string",
  "keyPairName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "userData": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### addOns

An array of objects representing the add-ons to enable for the new instance.

Type: Array of [AddOnRequest](#) objects

Required: No

### availabilityZone

The Availability Zone in which to create your instance. Use the following format: `us-east-2a` (case sensitive). You can get a list of Availability Zones by using the [get regions](#) operation. Be sure to add the `include Availability Zones` parameter to your request.

Type: String

Required: Yes

### blueprintId

The ID for a virtual private server image (`app_wordpress_x_x` or `app_lamp_x_x`). Use the `get blueprints` operation to return a list of available images (or *blueprints*).

#### **Note**

Use active blueprints when creating new instances. Inactive blueprints are listed to support customers with existing instances and are not necessarily available to create new instances. Blueprints are marked inactive when they become outdated due to operating system updates or new application releases.

Type: String

Pattern: `.*\S.*`

Required: Yes

### bundleId

The bundle of specification information for your virtual private server (or *instance*), including the pricing plan (`medium_x_x`).

Type: String

Pattern: `.*\S.*`

Required: Yes

### customImageName

*This parameter has been deprecated.*

(Discontinued) The name for your custom image.

#### Note

In releases prior to June 12, 2017, this parameter was ignored by the API. It is now discontinued.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### instanceNames

The names to use for your new Lightsail instances. Separate multiple values using quotation marks and commas, for example: `["MyFirstInstance", "MySecondInstance"]`

Type: Array of strings

Required: Yes

### ipAddressType

The IP address type for the instance.

The possible values are `ipv4` for IPv4 only, `ipv6` for IPv6 only, and `dualstack` for IPv4 and IPv6.

The default value is `dualstack`.

Type: String



Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

### keyPairName

The name of your key pair.

Type: String

Pattern: `\w[\w\-*]\w`

Required: No

### tags

The tag keys and optional values to add to the resource during create.

Use the `TagResource` action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

### userData

A launch script you can create that configures a server with additional user data. For example, you might want to run `apt-get -y update`.

#### **Note**

Depending on the machine image you choose, the command to get software on your instance varies. Amazon Linux and CentOS use `yum`, Debian and Ubuntu use `apt-get`, and FreeBSD uses `pkg`. For a complete list, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateInstancesFromSnapshot

Creates one or more new instances from a manual or automatic snapshot of an instance.

The `create instances from snapshot` operation supports tag-based access control via request tags and resource tags applied to the resource identified by `instance snapshot name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "addOns": [
    {
      "addOnType": "string",
      "autoSnapshotAddOnRequest": {
        "snapshotTimeOfDay": "string"
      },
      "stopInstanceOnIdleRequest": {
        "duration": "string",
        "threshold": "string"
      }
    }
  ],
  "attachedDiskMapping": {
    "string" : [
      {
        "newDiskName": "string",
        "originalDiskPath": "string"
      }
    ]
  },
  "availabilityZone": "string",
  "bundleId": "string",
  "instanceNames": [ "string" ],
  "instanceSnapshotName": "string",
  "ipAddressType": "string",
  "keyPairName": "string",
  "restoreDate": "string",
  "sourceInstanceName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

```
    }  
  ],  
  "useLatestRestorableAutoSnapshot": boolean,  
  "userData": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [addOns](#)

An array of objects representing the add-ons to enable for the new instance.

Type: Array of [AddOnRequest](#) objects

Required: No

### [attachedDiskMapping](#)

An object containing information about one or more disk mappings.

Type: String to array of [DiskMap](#) objects map

Key Pattern: `\w[\w\ -]*\w`

Required: No

### [availabilityZone](#)

The Availability Zone where you want to create your instances. Use the following formatting: `us-east-2a` (case sensitive). You can get a list of Availability Zones by using the [get regions](#) operation. Be sure to add the `include Availability Zones` parameter to your request.

Type: String

Required: Yes

### [bundleId](#)

The bundle of specification information for your virtual private server (or *instance*), including the pricing plan (`micro_x_x`).

Type: String

Pattern: `.*\S.*`

Required: Yes

### instanceNames

The names for your new instances.

Type: Array of strings

Required: Yes

### instanceSnapshotName

The name of the instance snapshot on which you are basing your new instances. Use the `get instance snapshots` operation to return information about your existing snapshots.

Constraint:

- This parameter cannot be defined together with the `source instance name` parameter. The `instance snapshot name` and `source instance name` parameters are mutually exclusive.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### ipAddressType

The IP address type for the instance.

The possible values are `ipv4` for IPv4 only, `ipv6` for IPv6 only, and `dualstack` for IPv4 and IPv6.

The default value is `dualstack`.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

### keyPairName

The name for your key pair.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### restoreDate

The date of the automatic snapshot to use for the new instance. Use the `get auto snapshots` operation to identify the dates of the available automatic snapshots.

Constraints:

- Must be specified in YYYY-MM-DD format.
- This parameter cannot be defined together with the `use latest restorable auto snapshot` parameter. The `restore date` and `use latest restorable auto snapshot` parameters are mutually exclusive.
- Define this parameter only when creating a new instance from an automatic snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

### sourceInstanceName

The name of the source instance from which the source automatic snapshot was created.

Constraints:

- This parameter cannot be defined together with the `instance snapshot name` parameter. The `source instance name` and `instance snapshot name` parameters are mutually exclusive.
- Define this parameter only when creating a new instance from an automatic snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

### tags

The tag keys and optional values to add to the resource during create.



Use the `TagResource` action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

### [useLatestRestorableAutoSnapshot](#)

A Boolean value to indicate whether to use the latest available automatic snapshot.

Constraints:

- This parameter cannot be defined together with the `restore_date` parameter. The `use_latest_restorable_auto_snapshot` and `restore_date` parameters are mutually exclusive.
- Define this parameter only when creating a new instance from an automatic snapshot. For more information, see the [Amazon Lightsail Developer Guide](#).

Type: Boolean

Required: No

### [userData](#)

You can create a launch script that configures a server with additional user data. For example, `apt-get -y update`.

#### Note

Depending on the machine image you choose, the command to get software on your instance varies. Amazon Linux and CentOS use `yum`, Debian and Ubuntu use `apt-get`, and FreeBSD uses `pkg`. For a complete list, see the [Amazon Lightsail Developer Guide](#).

Type: String

Required: No

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateInstanceSnapshot

Creates a snapshot of a specific virtual private server, or *instance*. You can use a snapshot to create a new instance that is based on that snapshot.

The `create instance snapshot` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceName": "string",
  "instanceSnapshotName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The Lightsail instance on which to base your snapshot.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### instanceSnapshotName

The name for your new snapshot.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# CreateKeyPair

Creates a custom SSH key pair that you can use with an Amazon Lightsail instance.

## Note

Use the [DownloadDefaultKeyPair](#) action to create a Lightsail default key pair in an AWS Region where a default key pair does not currently exist.

The `create key pair` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "keyPairName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [keyPairName](#)

The name for your new key pair.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "keyPair": {
    "arn": "string",
    "createdAt": number,
    "fingerprint": "string",
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "resourceType": "string",
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
```

```
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  },
  "privateKeyBase64": "string",
  "publicKeyBase64": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### keyPair

An array of key-value pairs containing information about the new key pair you just created.

Type: [KeyPair](#) object

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

### privateKeyBase64

A base64-encoded RSA private key.

Type: String

### publicKeyBase64

A base64-encoded public key of the ssh-rsa type.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateLoadBalancer

Creates a Lightsail load balancer. To learn more about deciding whether to load balance your application, see [Configure your Lightsail instances for load balancing](#). You can create up to 5 load balancers per AWS Region in your account.

When you create a load balancer, you can specify a unique name and port settings. To change additional load balancer settings, use the `UpdateLoadBalancerAttribute` operation.

The `create load balancer` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "certificateAlternativeNames": [ "string" ],
  "certificateDomainName": "string",
  "certificateName": "string",
  "healthCheckPath": "string",
  "instancePort": number,
  "ipAddressType": "string",
  "loadBalancerName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "tlsPolicyName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [certificateAlternativeNames](#)

The optional alternative domains and subdomains to use with your SSL/TLS certificate (`www.example.com`, `example.com`, `m.example.com`, `blog.example.com`).

Type: Array of strings

Required: No

### certificateDomainName

The domain name with which your certificate is associated (example.com).

If you specify `certificateDomainName`, then `certificateName` is required (and vice-versa).

Type: String

Required: No

### certificateName

The name of the SSL/TLS certificate.

If you specify `certificateName`, then `certificateDomainName` is required (and vice-versa).

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

### healthCheckPath

The path you provided to perform the load balancer health check. If you didn't specify a health check path, Lightsail uses the root path of your website ("/").

You may want to specify a custom health check path other than the root of your application if your home page loads slowly or has a lot of media or scripting on it.

Type: String

Required: No

### instancePort

The instance port where you're creating your load balancer.

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: Yes

### ipAddressType

The IP address type for the load balancer.

The possible values are `ipv4` for IPv4 only, `ipv6` for IPv6 only, and `dualstack` for IPv4 and IPv6.

The default value is `dualstack`.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

### loadBalancerName

The name of your load balancer.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### tags

The tag keys and optional values to add to the resource during create.

Use the `TagResource` action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

### tlsPolicyName

The name of the TLS policy to apply to the load balancer.

Use the [GetLoadBalancerTlsPolicies](#) action to get a list of TLS policy names that you can specify.



For more information about load balancer TLS policies, see [Configuring TLS security policies on your Amazon Lightsail load balancers](#) in the *Amazon Lightsail Developer Guide*.

Type: String

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateLoadBalancerTlsCertificate

Creates an SSL/TLS certificate for an Amazon Lightsail load balancer.

TLS is just an updated, more secure version of Secure Socket Layer (SSL).

The CreateLoadBalancerTlsCertificate operation supports tag-based access control via resource tags applied to the resource identified by `load_balancer_name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "certificateAlternativeNames": [ "string" ],
  "certificateDomainName": "string",
  "certificateName": "string",
  "loadBalancerName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateAlternativeNames

An array of strings listing alternative domains and subdomains for your SSL/TLS certificate. Lightsail will de-dupe the names for you. You can have a maximum of 9 alternative names (in addition to the 1 primary domain). We do not support wildcards (\*.example.com).

Type: Array of strings

Required: No

### certificateDomainName

The domain name (example.com) for your SSL/TLS certificate.

Type: String

Required: Yes

### certificateName

The SSL/TLS certificate name.

You can have up to 10 certificates in your account at one time. Each Lightsail load balancer can have up to 2 certificates associated with it at one time. There is also an overall limit to the number of certificates that can be issue in a 365-day period. For more information, see [Limits](#).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### loadBalancerName

The load balancer name where you want to create the SSL/TLS certificate.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### tags

The tag keys and optional values to add to the resource during create.

Use the `TagResource` action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# CreateRelationalDatabase

Creates a new database in Amazon Lightsail.

The `create relational database` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "availabilityZone": "string",
  "masterDatabaseName": "string",
  "masterUsername": "string",
  "masterUserPassword": "string",
  "preferredBackupWindow": "string",
  "preferredMaintenanceWindow": "string",
  "publiclyAccessible": boolean,
  "relationalDatabaseBlueprintId": "string",
  "relationalDatabaseBundleId": "string",
  "relationalDatabaseName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### availabilityZone

The Availability Zone in which to create your new database. Use the `us-east-2a` case-sensitive format.

You can get a list of Availability Zones by using the `get regions` operation. Be sure to add the `include relational database Availability Zones` parameter to your request.

Type: String

Required: No

### masterDatabaseName

The meaning of this parameter differs according to the database engine you use.

#### **MySQL**

The name of the database to create when the Lightsail database resource is created. If this parameter isn't specified, no database is created in the database resource.

Constraints:

- Must contain 1 to 64 letters or numbers.
- Must begin with a letter. Subsequent characters can be letters, underscores, or digits (0- 9).
- Can't be a word reserved by the specified database engine.

For more information about reserved words in MySQL, see the Keywords and Reserved Words articles for [MySQL 5.6](#), [MySQL 5.7](#), and [MySQL 8.0](#).

#### **PostgreSQL**

The name of the database to create when the Lightsail database resource is created. If this parameter isn't specified, a database named `postgres` is created in the database resource.

Constraints:

- Must contain 1 to 63 letters or numbers.
- Must begin with a letter. Subsequent characters can be letters, underscores, or digits (0- 9).
- Can't be a word reserved by the specified database engine.

For more information about reserved words in PostgreSQL, see the SQL Key Words articles for [PostgreSQL 9.6](#), [PostgreSQL 10](#), [PostgreSQL 11](#), and [PostgreSQL 12](#).

Type: String

Required: Yes

### masterUsername

The name for the master user.

## MySQL

### Constraints:

- Required for MySQL.
- Must be 1 to 16 letters or numbers. Can contain underscores.
- First character must be a letter.
- Can't be a reserved word for the chosen database engine.

For more information about reserved words in MySQL 5.6 or 5.7, see the [Keywords and Reserved Words](#) articles for [MySQL 5.6](#), [MySQL 5.7](#), or [MySQL 8.0](#).

## PostgreSQL

### Constraints:

- Required for PostgreSQL.
- Must be 1 to 63 letters or numbers. Can contain underscores.
- First character must be a letter.
- Can't be a reserved word for the chosen database engine.

For more information about reserved words in MySQL 5.6 or 5.7, see the [Keywords and Reserved Words](#) articles for [PostgreSQL 9.6](#), [PostgreSQL 10](#), [PostgreSQL 11](#), and [PostgreSQL 12](#).

Type: String

Required: Yes

## masterUserPassword

The password for the master user. The password can include any printable ASCII character except "/", "", or "@". It cannot contain spaces.

## MySQL

Constraints: Must contain from 8 to 41 characters.

## PostgreSQL

Constraints: Must contain from 8 to 128 characters.

Type: String

Required: No

### preferredBackupWindow

The daily time range during which automated backups are created for your new database if automated backups are enabled.

The default is a 30-minute window selected at random from an 8-hour block of time for each AWS Region. For more information about the preferred backup window time blocks for each region, see the [Working With Backups](#) guide in the Amazon Relational Database Service documentation.

Constraints:

- Must be in the hh24:mi-hh24:mi format.

Example: 16:00-16:30

- Specified in Coordinated Universal Time (UTC).
- Must not conflict with the preferred maintenance window.
- Must be at least 30 minutes.

Type: String

Required: No

### preferredMaintenanceWindow

The weekly time range during which system maintenance can occur on your new database.

The default is a 30-minute window selected at random from an 8-hour block of time for each AWS Region, occurring on a random day of the week.

Constraints:

- Must be in the ddd:hh24:mi-ddd:hh24:mi format.
- Valid days: Mon, Tue, Wed, Thu, Fri, Sat, Sun.
- Must be at least 30 minutes.
- Specified in Coordinated Universal Time (UTC).
- Example: Tue:17:00-Tue:17:30

Type: String

Required: No

### publiclyAccessible

Specifies the accessibility options for your new database. A value of `true` specifies a database that is available to resources outside of your Lightsail account. A value of `false` specifies a database that is available only to your Lightsail resources in the same region as your database.

Type: Boolean

Required: No

### relationalDatabaseBlueprintId

The blueprint ID for your new database. A blueprint describes the major engine version of a database.

You can get a list of database blueprints IDs by using the `get relational database blueprints` operation.

Type: String

Required: Yes

### relationalDatabaseBundleId

The bundle ID for your new database. A bundle describes the performance specifications for your database.

You can get a list of database bundle IDs by using the `get relational database bundles` operation.

Type: String

Required: Yes

### relationalDatabaseName

The name to use for your new Lightsail database resource.

Constraints:

- Must contain from 2 to 255 alphanumeric characters, or hyphens.
- The first and last character must be a letter or number.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# CreateRelationalDatabaseFromSnapshot

Creates a new database from an existing database snapshot in Amazon Lightsail.

You can create a new database from a snapshot in if something goes wrong with your original database, or to change it to a different plan, such as a high availability or standard plan.

The `create relational database from snapshot` operation supports tag-based access control via request tags and resource tags applied to the resource identified by `relationalDatabaseSnapshotName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "availabilityZone": "string",
  "publiclyAccessible": boolean,
  "relationalDatabaseBundleId": "string",
  "relationalDatabaseName": "string",
  "relationalDatabaseSnapshotName": "string",
  "restoreTime": number,
  "sourceRelationalDatabaseName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "useLatestRestorableTime": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### availabilityZone

The Availability Zone in which to create your new database. Use the `us-east-2a` case-sensitive format.

You can get a list of Availability Zones by using the `get_regions` operation. Be sure to add the `include_relational_database_Availability_Zones` parameter to your request.

Type: String

Required: No

### publiclyAccessible

Specifies the accessibility options for your new database. A value of `true` specifies a database that is available to resources outside of your Lightsail account. A value of `false` specifies a database that is available only to your Lightsail resources in the same region as your database.

Type: Boolean

Required: No

### relationalDatabaseBundleId

The bundle ID for your new database. A bundle describes the performance specifications for your database.

You can get a list of database bundle IDs by using the `get_relational_database_bundles` operation.

When creating a new database from a snapshot, you cannot choose a bundle that is smaller than the bundle of the source database.

Type: String

Required: No

### relationalDatabaseName

The name to use for your new Lightsail database resource.

Constraints:

- Must contain from 2 to 255 alphanumeric characters, or hyphens.
- The first and last character must be a letter or number.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### relationalDatabaseSnapshotName

The name of the database snapshot from which to create your new database.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### restoreTime

The date and time to restore your database from.

Constraints:

- Must be before the latest restorable time for the database.
- Cannot be specified if the `use latest restorable time` parameter is `true`.
- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use a restore time of October 1, 2018, at 8 PM UTC, then you input `1538424000` as the restore time.

Type: Timestamp

Required: No

### sourceRelationalDatabaseName

The name of the source database.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### tags

The tag keys and optional values to add to the resource during create.

Use the `TagResource` action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

### useLatestRestorableTime

Specifies whether your database is restored from the latest backup time. A value of `true` restores from the latest backup time.

Default: `false`

Constraints: Cannot be specified if the `restore_time` parameter is provided.

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# CreateRelationalDatabaseSnapshot

Creates a snapshot of your database in Amazon Lightsail. You can use snapshots for backups, to make copies of a database, and to save data before deleting a database.

The `create relational database snapshot` operation supports tag-based access control via request tags. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "relationalDatabaseName": "string",
  "relationalDatabaseSnapshotName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseName

The name of the database on which to base your new snapshot.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### relationalDatabaseSnapshotName

The name for your new database snapshot.

Constraints:

- Must contain from 2 to 255 alphanumeric characters, or hyphens.
- The first and last character must be a letter or number.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## tags

The tag keys and optional values to add to the resource during create.

Use the TagResource action to tag a resource after it's created.

Type: Array of [Tag](#) objects

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```



## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteAlarm

Deletes an alarm.

An alarm is used to monitor a single metric for one of your resources. When a metric condition is met, the alarm can notify you by email, SMS text message, and a banner displayed on the Amazon Lightsail console. For more information, see [Alarms in Amazon Lightsail](#).

## Request Syntax

```
{
  "alarmName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### alarmName

The name of the alarm to delete.

Type: String

Pattern: `\w[\w\-*]\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,

```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteAutoSnapshot

Deletes an automatic snapshot of an instance or disk. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "date": "string",
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### date

The date of the automatic snapshot to delete in YYYY-MM-DD format. Use the `get auto snapshots` operation to get the available automatic snapshots for a resource.

Type: String

Pattern: `^[0-9]{4}-[0-9]{2}-[0-9]{2}$`

Required: Yes

### resourceName

The name of the source instance or disk from which to delete the automatic snapshot.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException


Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.



HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteBucket

Deletes a Amazon Lightsail bucket.

## Note

When you delete your bucket, the bucket name is released and can be reused for a new bucket in your account or another AWS account.

## Request Syntax

```
{
  "bucketName": "string",
  "forceDelete": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### bucketName

The name of the bucket to delete.

Use the [GetBuckets](#) action to get a list of bucket names that you can specify.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

### forceDelete

A Boolean value that indicates whether to force delete the bucket.

You must force delete the bucket if it has one of the following conditions:

- The bucket is the origin of a distribution.
- The bucket has instances that were granted access to it using the [SetResourceAccessForBucket](#) action.
- The bucket has objects.
- The bucket has access keys.

### Important

Force deleting a bucket might impact other resources that rely on the bucket, such as instances, distributions, or software that use the issued access keys.

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteBucketAccessKey

Deletes an access key for the specified Amazon Lightsail bucket.

We recommend that you delete an access key if the secret access key is compromised.

For more information about access keys, see [Creating access keys for a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "accessKeyId": "string",
  "bucketName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [accessKeyId](#)

The ID of the access key to delete.

Use the [GetBucketAccessKeys](#) action to get a list of access key IDs that you can specify.

Type: String

Pattern: `.*\S.*`

Required: Yes

### [bucketName](#)

The name of the bucket that the access key belongs to.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).



## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteCertificate

Deletes an SSL/TLS certificate for your Amazon Lightsail content delivery network (CDN) distribution.

Certificates that are currently attached to a distribution cannot be deleted. Use the `DetachCertificateFromDistribution` action to detach a certificate from a distribution.

## Request Syntax

```
{
  "certificateName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateName

The name of the certificate to delete.

Use the `GetCertificates` action to get a list of certificate names that you can specify.

Type: String

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,

```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# DeleteContactMethod

Deletes a contact method.

A contact method is used to send you notifications about your Amazon Lightsail resources. You can add one email address and one mobile phone number contact method in each AWS Region. However, SMS text messaging is not supported in some AWS Regions, and SMS text messages cannot be sent to some countries/regions. For more information, see [Notifications in Amazon Lightsail](#).

## Request Syntax

```
{  
  "protocol": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### protocol

The protocol that will be deleted, such as Email or SMS (text messaging).

#### Note

To delete an Email and an SMS contact method if you added both, you must run separate DeleteContactMethod actions to delete each protocol.

Type: String

Valid Values: Email | SMS

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).



## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteContainerImage

Deletes a container image that is registered to your Amazon Lightsail container service.

## Request Syntax

```
{  
  "image": "string",  
  "serviceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### image

The name of the container image to delete from the container service.

Use the `GetContainerImages` action to get the name of the container images that are registered to a container service.

#### Note

Container images sourced from your Lightsail container service, that are registered and stored on your service, start with a colon (:). For example, `:container-service-1.mystaticwebsite.1`. Container images sourced from a public registry like Docker Hub don't start with a colon. For example, `nginx:latest` or `nginx`.

Type: String

Required: Yes

### serviceName

The name of the container service for which to delete a registered container image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteContainerService

Deletes your Amazon Lightsail container service.

## Request Syntax

```
{  
  "serviceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### serviceName

The name of the container service to delete.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Elements

If the action is successful, the service sends back an HTTP 200 response with an empty HTTP body.

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)

- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DeleteDisk

Deletes the specified block storage disk. The disk must be in the `available` state (not attached to a Lightsail instance).

## Note

The disk may remain in the `deleting` state for several minutes.

The `delete disk` operation supports tag-based access control via resource tags applied to the resource identified by `disk name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "diskName": "string",
  "forceDeleteAddOns": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### diskName

The unique name of the disk you want to delete (`my-disk`).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### forceDeleteAddOns

A Boolean value to indicate whether to delete all add-ons for the disk.

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteDiskSnapshot

Deletes the specified disk snapshot.

When you make periodic snapshots of a disk, the snapshots are incremental, and only the blocks on the device that have changed since your last snapshot are saved in the new snapshot. When you delete a snapshot, only the data not needed for any other snapshot is removed. So regardless of which prior snapshots have been deleted, all active snapshots will have access to all the information needed to restore the disk.

The `delete disk snapshot` operation supports tag-based access control via resource tags applied to the resource identified by `disk snapshot name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{  
  "diskSnapshotName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### diskSnapshotName

The name of the disk snapshot you want to delete (`my-disk-snapshot`).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DeleteDistribution

Deletes your Amazon Lightsail content delivery network (CDN) distribution.

## Request Syntax

```
{  
  "distributionName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### distributionName

The name of the distribution to delete.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## Response Syntax

```
{  
  "operation": {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
  },  
}
```

```
"operationType": "string",  
"resourceName": "string",  
"resourceType": "string",  
"status": "string",  
"statusChangedAt": number  
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An object that describes the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteDomain

Deletes the specified domain recordset and all of its domain records.

The `delete domain` operation supports tag-based access control via resource tags applied to the resource identified by `domain name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### domainName

The specific domain name to delete.

Type: String

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    }
  },
}
```

```
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteDomainEntry

Deletes a specific domain entry.

The `delete domain entry` operation supports tag-based access control via resource tags applied to the resource identified by `domain name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "domainEntry": {
    "id": "string",
    "isAlias": boolean,
    "name": "string",
    "options": {
      "string" : "string"
    },
    "target": "string",
    "type": "string"
  },
  "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [domainEntry](#)

An array of key-value pairs containing information about your domain entries.

Type: [DomainEntry](#) object

Required: Yes

### [domainName](#)

The name of the domain entry to delete.

Type: String



Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteInstance

Deletes an Amazon Lightsail instance.

The `delete instance` operation supports tag-based access control via resource tags applied to the resource identified by `instance name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{  
  "forceDeleteAddOns": boolean,  
  "instanceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [forceDeleteAddOns](#)

A Boolean value to indicate whether to delete all add-ons for the instance.

Type: Boolean

Required: No

### [instanceName](#)

The name of the instance to delete.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteInstanceSnapshot

Deletes a specific snapshot of a virtual private server (or *instance*).

The `delete instance snapshot` operation supports tag-based access control via resource tags applied to the resource identified by `instance snapshot name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceSnapshotName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceSnapshotName

The name of the snapshot to delete.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
    }
  ]
}
```



```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteKeyPair

Deletes the specified key pair by removing the public key from Amazon Lightsail.

You can delete key pairs that were created using the [ImportKeyPair](#) and [CreateKeyPair](#) actions, as well as the Lightsail default key pair. A new default key pair will not be created unless you launch an instance without specifying a custom key pair, or you call the [DownloadDefaultKeyPair](#) API.

The delete key pair operation supports tag-based access control via resource tags applied to the resource identified by key pair name. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "expectedFingerprint": "string",
  "keyPairName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [expectedFingerprint](#)

The RSA fingerprint of the Lightsail default key pair to delete.

#### Note

The `expectedFingerprint` parameter is required only when specifying to delete a Lightsail default key pair.

Type: String

Required: No

### [keyPairName](#)

The name of the key pair to delete.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteKnownHostKeys

Deletes the known host key or certificate used by the Amazon Lightsail browser-based SSH or RDP clients to authenticate an instance. This operation enables the Lightsail browser-based SSH or RDP clients to connect to the instance after a host key mismatch.

## Important

Perform this operation only if you were expecting the host key or certificate mismatch or if you are familiar with the new host key or certificate on the instance. For more information, see [Troubleshooting connection issues when using the Amazon Lightsail browser-based SSH or RDP client](#).

## Request Syntax

```
{
  "instanceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [instanceName](#)

The name of the instance for which you want to reset the host key or certificate.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```



```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteLoadBalancer

Deletes a Lightsail load balancer and all its associated SSL/TLS certificates. Once the load balancer is deleted, you will need to create a new load balancer, create a new certificate, and verify domain ownership again.

The delete load balancer operation supports tag-based access control via resource tags applied to the resource identified by load balancer name. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### loadBalancerName

The name of the load balancer you want to delete.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
    }
  ]
}
```

```
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteLoadBalancerTlsCertificate

Deletes an SSL/TLS certificate associated with a Lightsail load balancer.

The `DeleteLoadBalancerTlsCertificate` operation supports tag-based access control via resource tags applied to the resource identified by `load_balancer_name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "certificateName": "string",
  "force": boolean,
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateName

The SSL/TLS certificate name.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### force

When `true`, forces the deletion of an SSL/TLS certificate.

There can be two certificates associated with a Lightsail load balancer: the primary and the backup. The `force` parameter is required when the primary SSL/TLS certificate is in use by an instance attached to the load balancer.

Type: Boolean



Required: No

### loadBalancerName

The load balancer name.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DeleteRelationalDatabase

Deletes a database in Amazon Lightsail.

The `delete relational database` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "finalRelationalDatabaseSnapshotName": "string",
  "relationalDatabaseName": "string",
  "skipFinalSnapshot": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### finalRelationalDatabaseSnapshotName

The name of the database snapshot created if `skip final snapshot` is `false`, which is the default value for that parameter.

#### Note

Specifying this parameter and also specifying the `skip final snapshot` parameter to `true` results in an error.

Constraints:

- Must contain from 2 to 255 alphanumeric characters, or hyphens.
- The first and last character must be a letter or number.

Type: String

Pattern: `\w[\w\-*]\w`

Required: No

### relationalDatabaseName

The name of the database that you are deleting.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

### skipFinalSnapshot

Determines whether a final database snapshot is created before your database is deleted. If `true` is specified, no database snapshot is created. If `false` is specified, a database snapshot is created before your database is deleted.

You must specify the `final relational database snapshot name` parameter if the `skip final snapshot` parameter is `false`.

Default: `false`

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
    }
  ]
}
```

```
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DeleteRelationalDatabaseSnapshot

Deletes a database snapshot in Amazon Lightsail.

The `delete relational database snapshot` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "relationalDatabaseSnapshotName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseSnapshotName

The name of the database snapshot that you are deleting.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,

```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DetachCertificateFromDistribution

Detaches an SSL/TLS certificate from your Amazon Lightsail content delivery network (CDN) distribution.

After the certificate is detached, your distribution stops accepting traffic for all of the domains that are associated with the certificate.

## Request Syntax

```
{
  "distributionName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### distributionName

The name of the distribution from which to detach the certificate.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
  }
}
```

```
"isTerminal": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"operationDetails": "string",
"operationType": "string",
"resourceName": "string",
"resourceType": "string",
"status": "string",
"statusChangedAt": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An object that describes the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DetachDisk

Detaches a stopped block storage disk from a Lightsail instance. Make sure to unmount any file systems on the device within your operating system before stopping the instance and detaching the disk.

The `detach disk` operation supports tag-based access control via resource tags applied to the resource identified by `disk name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "diskName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### diskName

The unique name of the disk you want to detach from your instance (`my-disk`).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
    }
  ]
}
```

```
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DetachInstancesFromLoadBalancer

Detaches the specified instances from a Lightsail load balancer.

This operation waits until the instances are no longer needed before they are detached from the load balancer.

The `detach instances from load balancer` operation supports tag-based access control via resource tags applied to the resource identified by `load balancer name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceNames": [ "string" ],
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceNames

An array of strings containing the names of the instances you want to detach from the load balancer.

Type: Array of strings

Pattern: `\w[\w\ -]*\w`

Required: Yes

### loadBalancerName

The name of the Lightsail load balancer.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DetachStaticIp

Detaches a static IP from the Amazon Lightsail instance to which it is attached.

## Request Syntax

```
{
  "staticIpName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### staticIpName

The name of the static IP to detach from the instance.

Type: String

Pattern: `\w[\w\-*]\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
    }
  ]
}
```

```
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# DisableAddOn

Disables an add-on for an Amazon Lightsail resource. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "addOnType": "string",
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### addOnType

The add-on type to disable.

Type: String

Valid Values: AutoSnapshot | StopInstanceOnIdle

Required: Yes

### resourceName

The name of the source resource for which to disable the add-on.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```

```
"operations": [  
  {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",  
    "isTerminal": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "operationDetails": "string",  
    "operationType": "string",  
    "resourceName": "string",  
    "resourceType": "string",  
    "status": "string",  
    "statusChangedAt": number  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# DownloadDefaultKeyPair

Downloads the regional Amazon Lightsail default key pair.

This action also creates a Lightsail default key pair if a default key pair does not currently exist in the AWS Region.

## Response Syntax

```
{
  "createdAt": number,
  "privateKeyBase64": "string",
  "publicKeyBase64": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createdAt

The timestamp when the default key pair was created.

Type: Timestamp

### privateKeyBase64

A base64-encoded RSA private key.

Type: String

### publicKeyBase64

A base64-encoded public key of the ssh-`rsa` type.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# EnableAddOn

Enables or modifies an add-on for an Amazon Lightsail resource. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "addOnRequest": {
    "addOnType": "string",
    "autoSnapshotAddOnRequest": {
      "snapshotTimeOfDay": "string"
    },
    "stopInstanceOnIdleRequest": {
      "duration": "string",
      "threshold": "string"
    }
  },
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### addOnRequest

An array of strings representing the add-on to enable or modify.

Type: [AddOnRequest](#) object

Required: Yes

### resourceName

The name of the source resource for which to enable or modify the add-on.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ExportSnapshot

Exports an Amazon Lightsail instance or block storage disk snapshot to Amazon Elastic Compute Cloud (Amazon EC2). This operation results in an export snapshot record that can be used with the `create cloud formation stack` operation to create new Amazon EC2 instances.

Exported instance snapshots appear in Amazon EC2 as Amazon Machine Images (AMIs), and the instance system disk appears as an Amazon Elastic Block Store (Amazon EBS) volume. Exported disk snapshots appear in Amazon EC2 as Amazon EBS volumes. Snapshots are exported to the same Amazon Web Services Region in Amazon EC2 as the source Lightsail snapshot.

The `export snapshot` operation supports tag-based access control via resource tags applied to the resource identified by `source snapshot name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Note

Use the `get instance snapshots` or `get disk snapshots` operations to get a list of snapshots that you can export to Amazon EC2.

## Request Syntax

```
{  
  "sourceSnapshotName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [sourceSnapshotName](#)

The name of the instance or disk snapshot to be exported to Amazon EC2.

Type: String



Pattern: `\w[\w\-\ ]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetActiveNames

Returns the names of all active (not deleted) resources.

## Request Syntax

```
{  
  "pageToken": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetActiveNames request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{  
  "activeNames": [ "string" ],  
  "nextPageToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## activeNames

The list of active names returned by the get active names request.

Type: Array of strings

## nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetActiveNames` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetAlarms

Returns information about the configured alarms. Specify an alarm name in your request to return information about a specific alarm, or specify a monitored resource name to return information about all alarms for a specific resource.

An alarm is used to monitor a single metric for one of your resources. When a metric condition is met, the alarm can notify you by email, SMS text message, and a banner displayed on the Amazon Lightsail console. For more information, see [Alarms in Amazon Lightsail](#).

## Request Syntax

```
{
  "alarmName": "string",
  "monitoredResourceName": "string",
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### alarmName

The name of the alarm.

Specify an alarm name to return information about a specific alarm.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### monitoredResourceName

The name of the Lightsail resource being monitored by the alarm.

Specify a monitored resource name to return information about all alarms for a specific resource.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetAlarms` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "alarms": [
    {
      "arn": "string",
      "comparisonOperator": "string",
      "contactProtocols": [ "string" ],
      "createdAt": number,
      "datapointsToAlarm": number,
      "evaluationPeriods": number,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "metricName": "string",
      "monitoredResourceInfo": {
        "arn": "string",
        "name": "string",
        "resourceType": "string"
      },
      "name": "string",
      "notificationEnabled": boolean,
      "notificationTriggers": [ "string" ],
      "period": number,
```



```
    "resourceType": "string",
    "state": "string",
    "statistic": "string",
    "supportCode": "string",
    "threshold": number,
    "treatMissingData": "string",
    "unit": "string"
  }
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### alarms

An array of objects that describe the alarms.

Type: Array of [Alarm](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetAlarms` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetAutoSnapshots

Returns the available automatic snapshots for an instance or disk. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceName

The name of the source instance or disk from which to get automatic snapshot information.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "autoSnapshots": [
    {
      "createdAt": number,
      "date": "string",
      "fromAttachedDisks": [
        {
          "path": "string",
          "sizeInGb": number
        }
      ],
      "status": "string"
    }
  ]
}
```

```
    }  
  ],  
  "resourceName": "string",  
  "resourceType": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### autoSnapshots

An array of objects that describe the automatic snapshots that are available for the specified source instance or disk.

Type: Array of [AutoSnapshotDetails](#) objects

### resourceName

The name of the source instance or disk for the automatic snapshots.

Type: String

Pattern: `\w[\w\-\]*\w`

### resourceType

The resource type of the automatic snapshot. The possible values are Instance, and Disk.

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetBlueprints

Returns the list of available instance images, or *blueprints*. You can use a blueprint to create a new instance already running a specific operating system, as well as a preinstalled app or development stack. The software each instance is running depends on the blueprint image you choose.

## Note

Use active blueprints when creating new instances. Inactive blueprints are listed to support customers with existing instances and are not necessarily available to create new instances. Blueprints are marked inactive when they become outdated due to operating system updates or new application releases.

## Request Syntax

```
{
  "appCategory": "string",
  "includeInactive": boolean,
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [appCategory](#)

Returns a list of blueprints that are specific to Lightsail for Research.

## Important

You must use this parameter to view Lightsail for Research blueprints.

Type: String

Valid Values: L fR



Required: No

### includeInactive

A Boolean value that indicates whether to include inactive (unavailable) blueprints in the response of your request.

Type: Boolean

Required: No

### pageToken

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetBlueprints` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "blueprints": [
    {
      "appCategory": "string",
      "blueprintId": "string",
      "description": "string",
      "group": "string",
      "isActive": boolean,
      "licenseUrl": "string",
      "minPower": number,
      "name": "string",
      "platform": "string",
      "productUrl": "string",
      "type": "string",
      "version": "string",
      "versionCode": "string"
    }
  ],
}
```

```
"nextPageToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### blueprints

An array of key-value pairs that contains information about the available blueprints.

Type: Array of [Blueprint](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetBlueprints` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetBucketAccessKeys

Returns the existing access key IDs for the specified Amazon Lightsail bucket.

## Important

This action does not return the secret access key value of an access key. You can get a secret access key only when you create it from the response of the [CreateBucketAccessKey](#) action. If you lose the secret access key, you must create a new access key.

## Request Syntax

```
{  
  "bucketName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [bucketName](#)

The name of the bucket for which to return access keys.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
```

```
"accessKeys": [  
  {  
    "accessKeyId": "string",  
    "createdAt": number,  
    "lastUsed": {  
      "lastUsedDate": number,  
      "region": "string",  
      "serviceName": "string"  
    },  
    "secretAccessKey": "string",  
    "status": "string"  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### accessKeys

An object that describes the access keys for the specified bucket.

Type: Array of [AccessKey](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**Examples**

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *AWS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [AWS Command Line Interface \(AWS CLI\)](#) or one of the [AWS SDKs](#) to make requests to AWS, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

**Get bucket access keys**

The following example returns the access keys for the bucket named amzn-s3-demo-bucket. The example response shows that the bucket has one access key (i.e., AKIAZEXAMPLE12345PKWV).

## Sample Request

```
POST / HTTP/1.1
Host: lightsail.us-west-2.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: Lightsail_20161128.GetBucketAccessKeys
Content-Type: application/x-amz-json-1.1
User-Agent: AGENT
X-Amz-Date: 20210616T143306Z
Authorization: AUTHPARAMS
Content-Length: 49
```

```
{"bucketName": "amzn-s3-demo-bucket"}
```

## Sample Response

```
HTTP/1.1 200 OK
Server: Server
Date: Wed, 16 Jun 2021 14:33:07 GMT
Content-Type: application/x-amz-json-1.1
Content-Length: 99
x-amzn-RequestId: faebc873-b9cd-4dd1-bd6d-caac46bd5a19
Connection: keep-alive
```

```
{
  "accessKeys": [
    {
      "accessKeyId": "AKIAZEXAMPLE12345PKWV",
      "createdAt": 1.619209369E9,
      "status": "Active"
    }
  ]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)



- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetBucketBundles

Returns the bundles that you can apply to a Amazon Lightsail bucket.

The bucket bundle specifies the monthly cost, storage quota, and data transfer quota for a bucket.

Use the [UpdateBucketBundle](#) action to update the bundle for a bucket.

## Request Syntax

```
{
  "includeInactive": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [includeInactive](#)

A Boolean value that indicates whether to include inactive (unavailable) bundles in the response of your request.

Type: Boolean

Required: No

## Response Syntax

```
{
  "bundles": [
    {
      "bundleId": "string",
      "isActive": boolean,
      "name": "string",
      "price": number,
      "storagePerMonthInGb": number,
      "transferPerMonthInGb": number
    }
  ]
}
```

```
    }  
  ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### bundles

An object that describes bucket bundles.

Type: Array of [BucketBundle](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetBucketMetricData

Returns the data points of a specific metric for an Amazon Lightsail bucket.

Metrics report the utilization of a bucket. View and collect metric data regularly to monitor the number of objects stored in a bucket (including object versions) and the storage space used by those objects.

## Request Syntax

```
{
  "bucketName": "string",
  "endTime": number,
  "metricName": "string",
  "period": number,
  "startTime": number,
  "statistics": [ "string" ],
  "unit": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### bucketName

The name of the bucket for which to get metric data.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

### endTime

The timestamp indicating the latest data to be returned.

Type: Timestamp

Required: Yes

### metricName

The metric for which you want to return information.

Valid bucket metric names are listed below, along with the most useful statistics to include in your request, and the published unit value.

#### Note

These bucket metrics are reported once per day.

- **BucketSizeBytes** - The amount of data in bytes stored in a bucket. This value is calculated by summing the size of all objects in the bucket (including object versions), including the size of all parts for all incomplete multipart uploads to the bucket.

Statistics: The most useful statistic is Maximum.

Unit: The published unit is Bytes.

- **NumberOfObjects** - The total number of objects stored in a bucket. This value is calculated by counting all objects in the bucket (including object versions) and the total number of parts for all incomplete multipart uploads to the bucket.

Statistics: The most useful statistic is Average.

Unit: The published unit is Count.

Type: String

Valid Values: BucketSizeBytes | NumberOfObjects

Required: Yes

### period

The granularity, in seconds, of the returned data points.

**Note**

Bucket storage metrics are reported once per day. Therefore, you should specify a period of 86400 seconds, which is the number of seconds in a day.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: Yes

**startTime**

The timestamp indicating the earliest data to be returned.

Type: Timestamp

Required: Yes

**statistics**

The statistic for the metric.

The following statistics are available:

- **Minimum** - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- **Maximum** - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.
- **Sum** - The sum of all values submitted for the matching metric. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of `Sum / SampleCount` during the specified period. By comparing this statistic with the `Minimum` and `Maximum` values, you can determine the full scope of a metric and how close the average use is to the `Minimum` and `Maximum` values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: Array of strings

Valid Values: `Minimum` | `Maximum` | `Sum` | `Average` | `SampleCount`

Required: Yes

## unit

The unit for the metric data request.

Valid units depend on the metric data being requested. For the valid units with each available metric, see the `metricName` parameter.

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: Yes

## Response Syntax

```
{
  "metricData": [
    {
      "average": number,
      "maximum": number,
      "minimum": number,
      "sampleCount": number,
      "sum": number,
      "timestamp": number,
      "unit": "string"
    }
  ],
  "metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.



## metricData

An array of objects that describe the metric data returned.

Type: Array of [MetricDatapoint](#) objects

## metricName

The name of the metric returned.

Type: String

Valid Values: BucketSizeBytes | NumberOfObjects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetBuckets

Returns information about one or more Amazon Lightsail buckets. The information returned includes the synchronization status of the Amazon Simple Storage Service (Amazon S3) account-level block public access feature for your Lightsail buckets.

For more information about buckets, see [Buckets in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "bucketName": "string",
  "includeConnectedResources": boolean,
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### bucketName

The name of the bucket for which to return information.

When omitted, the response includes all of your buckets in the AWS Region where the request is made.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: No

### includeConnectedResources

A Boolean value that indicates whether to include Lightsail instances that were given access to the bucket using the [SetResourceAccessForBucket](#) action.

Type: Boolean

Required: No

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetBuckets request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "accountLevelBpaSync": {
    "bpaImpactsLightsail": boolean,
    "lastSyncedAt": number,
    "message": "string",
    "status": "string"
  },
  "buckets": [
    {
      "ableToUpdateBundle": boolean,
      "accessLogConfig": {
        "destination": "string",
        "enabled": boolean,
        "prefix": "string"
      },
      "accessRules": {
        "allowPublicOverrides": boolean,
        "getObject": "string"
      },
      "arn": "string",
      "bundleId": "string",
      "createdAt": number,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      }
    }
  ]
}
```

```
    },
    "name": "string",
    "objectVersioning": "string",
    "readonlyAccessAccounts": [ "string" ],
    "resourcesReceivingAccess": [
      {
        "name": "string",
        "resourceType": "string"
      }
    ],
    "resourceType": "string",
    "state": {
      "code": "string",
      "message": "string"
    },
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "url": "string"
  }
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [accountLevelBpaSync](#)

An object that describes the synchronization status of the Amazon S3 account-level block public access feature for your Lightsail buckets.

For more information about this feature and how it affects Lightsail buckets, see [Block public access for buckets in Amazon Lightsail](#).

Type: [AccountLevelBpaSync](#) object

## [buckets](#)

An array of objects that describe buckets.

Type: Array of [Bucket](#) objects

## [nextPageToken](#)

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetBuckets` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetBundles

Returns the bundles that you can apply to an Amazon Lightsail instance when you create it.

A bundle describes the specifications of an instance, such as the monthly cost, amount of memory, the number of vCPUs, amount of storage space, and monthly network data transfer quota.

## Note

Bundles are referred to as *instance plans* in the Lightsail console.

## Request Syntax

```
{
  "appCategory": "string",
  "includeInactive": boolean,
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [appCategory](#)

Returns a list of bundles that are specific to Lightsail for Research.

## Important

You must use this parameter to view Lightsail for Research bundles.

Type: String

Valid Values: L fR

Required: No



## includeInactive

A Boolean value that indicates whether to include inactive (unavailable) bundles in the response of your request.

Type: Boolean

Required: No

## pageToken

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetBundles` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "bundles": [
    {
      "bundleId": "string",
      "cpuCount": number,
      "diskSizeInGb": number,
      "instanceType": "string",
      "isActive": boolean,
      "name": "string",
      "power": number,
      "price": number,
      "publicIpv4AddressCount": number,
      "ramSizeInGb": number,
      "supportedAppCategories": [ "string" ],
      "supportedPlatforms": [ "string" ],
      "transferPerMonthInGb": number
    }
  ],
  "nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### bundles

An array of key-value pairs that contains information about the available bundles.

Type: Array of [Bundle](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetBundles` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetCertificates

Returns information about one or more Amazon Lightsail SSL/TLS certificates.

## Note

To get a summary of a certificate, omit `includeCertificateDetails` from your request. The response will include only the certificate Amazon Resource Name (ARN), certificate name, domain name, and tags.

## Request Syntax

```
{
  "certificateName": "string",
  "certificateStatuses": [ "string" ],
  "includeCertificateDetails": boolean,
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateName

The name for the certificate for which to return information.

When omitted, the response includes all of your certificates in the AWS Region where the request is made.

Type: String

Required: No

### certificateStatuses

The status of the certificates for which to return information.

For example, specify ISSUED to return only certificates with an ISSUED status.

When omitted, the response includes all of your certificates in the AWS Region where the request is made, regardless of their current status.

Type: Array of strings

Valid Values: PENDING\_VALIDATION | ISSUED | INACTIVE | EXPIRED | VALIDATION\_TIMED\_OUT | REVOKED | FAILED

Required: No

### includeCertificateDetails

Indicates whether to include detailed information about the certificates in the response.

When omitted, the response includes only the certificate names, Amazon Resource Names (ARNs), domain names, and tags.

Type: Boolean

Required: No

### pageToken

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetCertificates` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "certificates": [
    {
      "certificateArn": "string",
      "certificateDetail": {
        "arn": "string",
        "createdAt": number,
        "domainName": "string",
        "domainValidationRecords": [
```

```
{
  "dnsRecordCreationState": {
    "code": "string",
    "message": "string"
  },
  "domainName": "string",
  "resourceRecord": {
    "name": "string",
    "type": "string",
    "value": "string"
  },
  "validationStatus": "string"
}
],
"eligibleToRenew": "string",
"inUseResourceCount": number,
"issuedAt": number,
"issuerCA": "string",
"keyAlgorithm": "string",
"name": "string",
"notAfter": number,
"notBefore": number,
"renewalSummary": {
  "domainValidationRecords": [
    {
      "dnsRecordCreationState": {
        "code": "string",
        "message": "string"
      },
      "domainName": "string",
      "resourceRecord": {
        "name": "string",
        "type": "string",
        "value": "string"
      },
      "validationStatus": "string"
    }
  ],
  "renewalStatus": "string",
  "renewalStatusReason": "string",
  "updatedAt": number
},
"requestFailureReason": "string",
"revocationReason": "string",
```

```
    "revokedAt": number,
    "serialNumber": "string",
    "status": "string",
    "subjectAlternativeNames": [ "string" ],
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "certificateName": "string",
  "domainName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### certificates

An object that describes certificates.

Type: Array of [CertificateSummary](#) objects

### nextPageToken

If NextPageToken is returned there are more results available. The value of NextPageToken is a unique pagination token for each page. Make the call again using the returned token to retrieve the next page. Keep all other arguments unchanged.

Type: String



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

### UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetCloudFormationStackRecords

Returns the CloudFormation stack record created as a result of the `create cloud formation stack` operation.

An AWS CloudFormation stack is used to create a new Amazon EC2 instance from an exported Lightsail snapshot.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetClouFormationStackRecords` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "cloudFormationStackRecords": [
    {
      "arn": "string",
      "createdAt": number,

```

```
    "destinationInfo": {
      "id": "string",
      "service": "string"
    },
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "resourceType": "string",
    "sourceInfo": [
      {
        "arn": "string",
        "name": "string",
        "resourceType": "string"
      }
    ],
    "state": "string"
  }
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### cloudFormationStackRecords

A list of objects describing the CloudFormation stack records.

Type: Array of [CloudFormationStackRecord](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetCloudFormationStackRecords` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContactMethods

Returns information about the configured contact methods. Specify a protocol in your request to return information about a specific contact method.

A contact method is used to send you notifications about your Amazon Lightsail resources. You can add one email address and one mobile phone number contact method in each AWS Region. However, SMS text messaging is not supported in some AWS Regions, and SMS text messages cannot be sent to some countries/regions. For more information, see [Notifications in Amazon Lightsail](#).

## Request Syntax

```
{
  "protocols": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### protocols

The protocols used to send notifications, such as Email, or SMS (text messaging).

Specify a protocol in your request to return information about a specific contact method protocol.

Type: Array of strings

Valid Values: Email | SMS

Required: No

## Response Syntax

```
{
  "contactMethods": [
    {
```

```
    "arn": "string",
    "contactEndpoint": "string",
    "createdAt": number,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "protocol": "string",
    "resourceType": "string",
    "status": "string",
    "supportCode": "string"
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### contactMethods

An array of objects that describe the contact methods.

Type: Array of [ContactMethod](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.



**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContainerAPIMetadata

Returns information about Amazon Lightsail containers, such as the current version of the Lightsail Control (lightsailctl) plugin.

## Response Syntax

```
{
  "metadata": [
    {
      "string" : "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metadata

Metadata about Lightsail containers, such as the current version of the Lightsail Control (lightsailctl) plugin.

Type: Array of string to string maps

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContainerImages

Returns the container images that are registered to your Amazon Lightsail container service.

## Note

If you created a deployment on your Lightsail container service that uses container images from a public registry like Docker Hub, those images are not returned as part of this action. Those images are not registered to your Lightsail container service.

## Request Syntax

```
{
  "serviceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### serviceName

The name of the container service for which to return registered container images.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
  "containerImages": [
```

```
{
  "createdAt": number,
  "digest": "string",
  "image": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### containerImages

An array of objects that describe container images that are registered to the container service.

Type: Array of [ContainerImage](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContainerLog

Returns the log events of a container of your Amazon Lightsail container service.

If your container service has more than one node (i.e., a scale greater than 1), then the log events that are returned for the specified container are merged from all nodes on your container service.

## Note

Container logs are retained for a certain amount of time. For more information, see [Amazon Lightsail endpoints and quotas](#) in the *AWS General Reference*.

## Request Syntax

```
{
  "containerName": "string",
  "endTime": number,
  "filterPattern": "string",
  "pageToken": "string",
  "serviceName": "string",
  "startTime": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### containerName

The name of the container that is either running or previously ran on the container service for which to return a log.

Type: String

Required: Yes

### endTime

The end of the time interval for which to get log data.



**Constraints:**

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use an end time of October 1, 2018, at 9 PM UTC, specify 1538427600 as the end time.

You can convert a human-friendly time to Unix time format using a converter like [Epoch converter](#).

Type: Timestamp

Required: No

**[filterPattern](#)**

The pattern to use to filter the returned log events to a specific term.

The following are a few examples of filter patterns that you can specify:

- To return all log events, specify a filter pattern of "".
- To exclude log events that contain the ERROR term, and return all other log events, specify a filter pattern of "-ERROR".
- To return log events that contain the ERROR term, specify a filter pattern of "ERROR".
- To return log events that contain both the ERROR and Exception terms, specify a filter pattern of "ERROR Exception".
- To return log events that contain the ERROR *or* the Exception term, specify a filter pattern of "?ERROR ?Exception".

Type: String

Required: No

**[pageToken](#)**

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetContainerLog` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

### serviceName

The name of the container service for which to get a container log.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

### startTime

The start of the time interval for which to get log data.

Constraints:

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use a start time of October 1, 2018, at 8 PM UTC, specify `1538424000` as the start time.

You can convert a human-friendly time to Unix time format using a converter like [Epoch converter](#).

Type: Timestamp

Required: No

## Response Syntax

```
{
  "logEvents": [
    {
      "createdAt": number,
      "message": "string"
    }
  ]
}
```

```
  ],  
  "nextPageToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### logEvents

An array of objects that describe the log events of a container.

Type: Array of [ContainerServiceLogEvent](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetContainerLog` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# GetContainerServiceDeployments

Returns the deployments for your Amazon Lightsail container service

A deployment specifies the settings, such as the ports and launch command, of containers that are deployed to your container service.

The deployments are ordered by version in ascending order. The newest version is listed at the top of the response.

## Note

A set number of deployments are kept before the oldest one is replaced with the newest one. For more information, see [Amazon Lightsail endpoints and quotas](#) in the *AWS General Reference*.

## Request Syntax

```
{
  "serviceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### serviceName

The name of the container service for which to return deployments.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
  "deployments": [
    {
      "containers": {
        "string": {
          "command": [ "string" ],
          "environment": {
            "string": "string"
          },
          "image": "string",
          "ports": {
            "string": "string"
          }
        }
      },
      "createdAt": number,
      "publicEndpoint": {
        "containerName": "string",
        "containerPort": number,
        "healthCheck": {
          "healthyThreshold": number,
          "intervalSeconds": number,
          "path": "string",
          "successCodes": "string",
          "timeoutSeconds": number,
          "unhealthyThreshold": number
        }
      },
      "state": "string",
      "version": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [deployments](#)

An array of objects that describe deployments for a container service.

Type: Array of [ContainerServiceDeployment](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500



## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContainerServiceMetricData

Returns the data points of a specific metric of your Amazon Lightsail container service.

Metrics report the utilization of your resources. Monitor and collect metric data regularly to maintain the reliability, availability, and performance of your resources.

## Request Syntax

```
{
  "endTime": number,
  "metricName": "string",
  "period": number,
  "serviceName": "string",
  "startTime": number,
  "statistics": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### endTime

The end time of the time period.

Type: Timestamp

Required: Yes

### metricName

The metric for which you want to return information.

Valid container service metric names are listed below, along with the most useful statistics to include in your request, and the published unit value.

- **CPUUtilization** - The average percentage of compute units that are currently in use across all nodes of the container service. This metric identifies the processing power required to run containers on each node of the container service.

Statistics: The most useful statistics are Maximum and Average.

Unit: The published unit is Percent.

- `MemoryUtilization` - The average percentage of available memory that is currently in use across all nodes of the container service. This metric identifies the memory required to run containers on each node of the container service.

Statistics: The most useful statistics are Maximum and Average.

Unit: The published unit is Percent.

Type: String

Valid Values: `CPUUtilization` | `MemoryUtilization`

Required: Yes

### period

The granularity, in seconds, of the returned data points.

All container service metric data is available in 5-minute (300 seconds) granularity.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: Yes

### serviceName

The name of the container service for which to get metric data.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

### startTime

The start time of the time period.

Type: Timestamp

Required: Yes

## statistics

The statistic for the metric.

The following statistics are available:

- **Minimum** - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- **Maximum** - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.
- **Sum** - All values submitted for the matching metric added together. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of `Sum / SampleCount` during the specified period. By comparing this statistic with the `Minimum` and `Maximum` values, you can determine the full scope of a metric and how close the average use is to the `Minimum` and `Maximum` values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: Array of strings

Valid Values: `Minimum` | `Maximum` | `Sum` | `Average` | `SampleCount`

Required: Yes

## Response Syntax

```
{
  "metricData": [
    {
      "average": number,
      "maximum": number,
      "minimum": number,
      "sampleCount": number,
      "sum": number,
      "timestamp": number,
      "unit": "string"
    }
  ],
  "metricName": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricData

An array of objects that describe the metric data returned.

Type: Array of [MetricDatapoint](#) objects

### metricName

The name of the metric returned.

Type: String

Valid Values: CPUUtilization | MemoryUtilization

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContainerServicePowers

Returns the list of powers that can be specified for your Amazon Lightsail container services.

The power specifies the amount of memory, the number of vCPUs, and the base price of the container service.

## Response Syntax

```
{
  "powers": [
    {
      "cpuCount": number,
      "isActive": boolean,
      "name": "string",
      "powerId": "string",
      "price": number,
      "ramSizeInGb": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### powers

An array of objects that describe the powers that can be specified for a container service.

Type: Array of [ContainerServicePower](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)



- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetContainerServices

Returns information about one or more of your Amazon Lightsail container services.

## Request Syntax

```
{
  "serviceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### serviceName

The name of the container service for which to return information.

When omitted, the response includes all of your container services in the AWS Region where the request is made.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: No

## Response Syntax

```
{
  "containerServices": [
    {
      "arn": "string",
      "containerServiceName": "string",
      "createdAt": number,
      "currentDeployment": {
        "containers": {
          "string": {
```

```
        "command": [ "string" ],
        "environment": {
            "string" : "string"
        },
        "image": "string",
        "ports": {
            "string" : "string"
        }
    }
},
"createdAt": number,
"publicEndpoint": {
    "containerName": "string",
    "containerPort": number,
    "healthCheck": {
        "healthyThreshold": number,
        "intervalSeconds": number,
        "path": "string",
        "successCodes": "string",
        "timeoutSeconds": number,
        "unhealthyThreshold": number
    }
},
"state": "string",
"version": number
},
"isDisabled": boolean,
"location": {
    "availabilityZone": "string",
    "regionName": "string"
},
"nextDeployment": {
    "containers": {
        "string" : {
            "command": [ "string" ],
            "environment": {
                "string" : "string"
            },
            "image": "string",
            "ports": {
                "string" : "string"
            }
        }
    }
},
},
```

```
    "createdAt": number,
    "publicEndpoint": {
      "containerName": "string",
      "containerPort": number,
      "healthCheck": {
        "healthyThreshold": number,
        "intervalSeconds": number,
        "path": "string",
        "successCodes": "string",
        "timeoutSeconds": number,
        "unhealthyThreshold": number
      }
    },
    "state": "string",
    "version": number
  },
  "power": "string",
  "powerId": "string",
  "principalArn": "string",
  "privateDomainName": "string",
  "privateRegistryAccess": {
    "ecrImagePullerRole": {
      "isActive": boolean,
      "principalArn": "string"
    }
  },
  "publicDomainNames": {
    "string" : [ "string" ]
  },
  "resourceType": "string",
  "scale": number,
  "state": "string",
  "stateDetail": {
    "code": "string",
    "message": "string"
  },
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
}
```

```
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [containerServices](#)

An array of objects that describe one or more container services.

Type: Array of [ContainerService](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetCostEstimate

Retrieves information about the cost estimate for a specified resource. A cost estimate will not generate for a resource that has been deleted.

## Request Syntax

```
{
  "endTime": number,
  "resourceName": "string",
  "startTime": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### endTime

The cost estimate end time.

Constraints:

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you want to use an end time of October 1, 2018, at 9 PM UTC, specify 1538427600 as the end time.

You can convert a human-friendly time to Unix time format using a converter like [Epoch converter](#).

Type: Timestamp

Required: Yes

### resourceName

The resource name.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## startTime

The cost estimate start time.

Constraints:

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you want to use a start time of October 1, 2018, at 8 PM UTC, specify `1538424000` as the start time.

You can convert a human-friendly time to Unix time format using a converter like [Epoch converter](#).

Type: Timestamp

Required: Yes

## Response Syntax

```
{
  "resourcesBudgetEstimate": [
    {
      "costEstimates": [
        {
          "resultsByTime": [
            {
              "currency": "string",
              "pricingUnit": "string",
              "timePeriod": {
                "end": number,
                "start": number
              },
              "unit": number,
              "usageCost": number
            }
          ],
          "usageType": "string"
        }
      ]
    }
  ]
}
```



```
    ],  
    "endTime": number,  
    "resourceName": "string",  
    "resourceType": "string",  
    "startTime": number  
  }  
]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### resourcesBudgetEstimate

Returns the estimate's forecasted cost or usage.

Type: Array of [ResourceBudgetEstimate](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDisk

Returns information about a specific block storage disk.

## Request Syntax

```
{  
  "diskName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### diskName

The name of the disk (my-disk).

Type: String

Pattern: `\w[\w\-*]\w`

Required: Yes

## Response Syntax

```
{  
  "disk": {  
    "addOns": [  
      {  
        "duration": "string",  
        "name": "string",  
        "nextSnapshotTimeOfDay": "string",  
        "snapshotTimeOfDay": "string",  
        "status": "string",  
        "threshold": "string"  
      }  
    ],  
    "arn": "string",
```

```
"attachedTo": "string",
"attachmentState": "string",
"autoMountStatus": "string",
"createdAt": number,
"gbInUse": number,
"iops": number,
"isAttached": boolean,
"isSystemDisk": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"name": "string",
"path": "string",
"resourceType": "string",
"sizeInGb": number,
"state": "string",
"supportCode": "string",
"tags": [
  {
    "key": "string",
    "value": "string"
  }
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### disk

An object containing information about the disk.

Type: [Disk](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDisks

Returns information about all block storage disks in your AWS account and region.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetDisks request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "disks": [
    {
      "addOns": [
        {
          "duration": "string",
          "name": "string",
          "nextSnapshotTimeOfDay": "string",
          "snapshotTimeOfDay": "string",
          "status": "string",
          "threshold": "string"
        }
      ]
    }
  ]
}
```

```
    }
  ],
  "arn": "string",
  "attachedTo": "string",
  "attachmentState": "string",
  "autoMountStatus": "string",
  "createdAt": number,
  "gbInUse": number,
  "iops": number,
  "isAttached": boolean,
  "isSystemDisk": boolean,
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "name": "string",
  "path": "string",
  "resourceType": "string",
  "sizeInGb": number,
  "state": "string",
  "supportCode": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### disks

An array of objects containing information about all block storage disks.

Type: Array of [Disk](#) objects



## nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetDisks` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDiskSnapshot

Returns information about a specific block storage disk snapshot.

## Request Syntax

```
{  
  "diskSnapshotName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### diskSnapshotName

The name of the disk snapshot (my-disk-snapshot).

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{  
  "diskSnapshot": {  
    "arn": "string",  
    "createdAt": number,  
    "fromDiskArn": "string",  
    "fromDiskName": "string",  
    "fromInstanceArn": "string",  
    "fromInstanceName": "string",  
    "isFromAutoSnapshot": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
  },  
}
```

```
"name": "string",
"progress": "string",
"resourceType": "string",
"sizeInGb": number,
"state": "string",
"supportCode": "string",
"tags": [
  {
    "key": "string",
    "value": "string"
  }
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### diskSnapshot

An object containing information about the disk snapshot.

Type: [DiskSnapshot](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDiskSnapshots

Returns information about all block storage disk snapshots in your AWS account and region.

## Request Syntax

```
{  
  "pageToken": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetDiskSnapshots request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{  
  "diskSnapshots": [  
    {  
      "arn": "string",  
      "createdAt": number,  
      "fromDiskArn": "string",  
      "fromDiskName": "string",  
      "fromInstanceArn": "string",  
      "fromInstanceName": "string",  
      "isFromAutoSnapshot": boolean,  
    }  
  ]  
}
```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "progress": "string",
    "resourceType": "string",
    "sizeInGb": number,
    "state": "string",
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### diskSnapshots

An array of objects containing information about all block storage disk snapshots.

Type: Array of [DiskSnapshot](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetDiskSnapshots` request and specify the next page token using the `pageToken` parameter.

Type: String



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDistributionBundles

Returns the bundles that can be applied to your Amazon Lightsail content delivery network (CDN) distributions.

A distribution bundle specifies the monthly network transfer quota and monthly cost of your distribution.

## Response Syntax

```
{
  "bundles": [
    {
      "bundleId": "string",
      "isActive": boolean,
      "name": "string",
      "price": number,
      "transferPerMonthInGb": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### bundles

An object that describes a distribution bundle.

Type: Array of [DistributionBundle](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDistributionLatestCacheReset

Returns the timestamp and status of the last cache reset of a specific Amazon Lightsail content delivery network (CDN) distribution.

## Request Syntax

```
{  
  "distributionName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### distributionName

The name of the distribution for which to return the timestamp of the last cache reset.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

When omitted, the response includes the latest cache reset timestamp of all your distributions.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## Response Syntax

```
{  
  "createTime": number,  
  "status": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createTime

The timestamp of the last cache reset (1479734909.17) in Unix time format.

Type: Timestamp

### status

The status of the last cache reset.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetDistributionMetricData

Returns the data points of a specific metric for an Amazon Lightsail content delivery network (CDN) distribution.

Metrics report the utilization of your resources, and the error counts generated by them. Monitor and collect metric data regularly to maintain the reliability, availability, and performance of your resources.

## Request Syntax

```
{
  "distributionName": "string",
  "endTime": number,
  "metricName": "string",
  "period": number,
  "startTime": number,
  "statistics": [ "string" ],
  "unit": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### distributionName

The name of the distribution for which to get metric data.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### endTime

The end of the time interval for which to get metric data.

**Constraints:**

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use an end time of October 1, 2018, at 9 PM UTC, specify 1538427600 as the end time.

You can convert a human-friendly time to Unix time format using a converter like [Epoch converter](#).

Type: Timestamp

Required: Yes

**metricName**

The metric for which you want to return information.

Valid distribution metric names are listed below, along with the most useful statistics to include in your request, and the published unit value.

- **Requests** - The total number of viewer requests received by your Lightsail distribution, for all HTTP methods, and for both HTTP and HTTPS requests.

Statistics: The most useful statistic is Sum.

Unit: The published unit is None.

- **BytesDownloaded** - The number of bytes downloaded by viewers for GET, HEAD, and OPTIONS requests.

Statistics: The most useful statistic is Sum.

Unit: The published unit is None.

- **BytesUploaded** - The number of bytes uploaded to your origin by your Lightsail distribution, using POST and PUT requests.

Statistics: The most useful statistic is Sum.

Unit: The published unit is None.

- **TotalErrorRate** - The percentage of all viewer requests for which the response's HTTP status code was 4xx or 5xx.

**Statistics:** The most useful statistic is Average.

**Unit:** The published unit is Percent.

- **4xxErrorRate** - The percentage of all viewer requests for which the response's HTTP status code was 4xx. In these cases, the client or client viewer may have made an error. For example, a status code of 404 (Not Found) means that the client requested an object that could not be found.

**Statistics:** The most useful statistic is Average.

**Unit:** The published unit is Percent.

- **5xxErrorRate** - The percentage of all viewer requests for which the response's HTTP status code was 5xx. In these cases, the origin server did not satisfy the requests. For example, a status code of 503 (Service Unavailable) means that the origin server is currently unavailable.

**Statistics:** The most useful statistic is Average.

**Unit:** The published unit is Percent.

**Type:** String

**Valid Values:** Requests | BytesDownloaded | BytesUploaded | TotalErrorRate | Http4xxErrorRate | Http5xxErrorRate

**Required:** Yes

### period

The granularity, in seconds, for the metric data points that will be returned.

**Type:** Integer

**Valid Range:** Minimum value of 60. Maximum value of 86400.

**Required:** Yes

### startTime

The start of the time interval for which to get metric data.

**Constraints:**

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use a start time of October 1, 2018, at 8 PM UTC, specify `1538424000` as the start time.

You can convert a human-friendly time to Unix time format using a converter like [Epoch converter](#).

Type: Timestamp

Required: Yes

## statistics

The statistic for the metric.

The following statistics are available:

- **Minimum** - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- **Maximum** - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.
- **Sum** - All values submitted for the matching metric added together. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of `Sum / SampleCount` during the specified period. By comparing this statistic with the **Minimum** and **Maximum** values, you can determine the full scope of a metric and how close the average use is to the **Minimum** and **Maximum** values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: Array of strings

Valid Values: `Minimum` | `Maximum` | `Sum` | `Average` | `SampleCount`

Required: Yes

## unit

The unit for the metric data request.

Valid units depend on the metric data being requested. For the valid units with each available metric, see the `metricName` parameter.

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: Yes

## Response Syntax

```
{
  "metricData": [
    {
      "average": number,
      "maximum": number,
      "minimum": number,
      "sampleCount": number,
      "sum": number,
      "timestamp": number,
      "unit": "string"
    }
  ],
  "metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricData

An array of objects that describe the metric data returned.

Type: Array of [MetricDatapoint](#) objects

### metricName

The name of the metric returned.

Type: String

Valid Values: Requests | BytesDownloaded | BytesUploaded | TotalErrorRate | Http4xxErrorRate | Http5xxErrorRate

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDistributions

Returns information about one or more of your Amazon Lightsail content delivery network (CDN) distributions.

## Request Syntax

```
{
  "distributionName": "string",
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### distributionName

The name of the distribution for which to return information.

When omitted, the response includes all of your distributions in the AWS Region where the request is made.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### pageToken

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetDistributions` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No



## Response Syntax

```
{
  "distributions": [
    {
      "ableToUpdateBundle": boolean,
      "alternativeDomainNames": [ "string" ],
      "arn": "string",
      "bundleId": "string",
      "cacheBehaviors": [
        {
          "behavior": "string",
          "path": "string"
        }
      ],
      "cacheBehaviorSettings": {
        "allowedHTTPMethods": "string",
        "cachedHTTPMethods": "string",
        "defaultTTL": number,
        "forwardedCookies": {
          "cookiesAllowList": [ "string" ],
          "option": "string"
        },
        "forwardedHeaders": {
          "headersAllowList": [ "string" ],
          "option": "string"
        },
        "forwardedQueryStrings": {
          "option": boolean,
          "queryStringsAllowList": [ "string" ]
        },
        "maximumTTL": number,
        "minimumTTL": number
      },
      "certificateName": "string",
      "createdAt": number,
      "defaultCacheBehavior": {
        "behavior": "string"
      },
      "domainName": "string",
      "ipAddressType": "string",
      "isEnabled": boolean,
      "location": {
```

```
    "availabilityZone": "string",
    "regionName": "string"
  },
  "name": "string",
  "origin": {
    "name": "string",
    "protocolPolicy": "string",
    "regionName": "string",
    "resourceType": "string",
    "responseTimeout": number
  },
  "originPublicDNS": "string",
  "resourceType": "string",
  "status": "string",
  "supportCode": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "viewerMinimumTlsProtocolVersion": "string"
}
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### distributions

An array of objects that describe your distributions.

Type: Array of [LightsailDistribution](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetDistributions` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to `us-east-1` to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetDomain

Returns information about a specific domain recordset.

## Request Syntax

```
{
  "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### domainName

The domain name for which you want to return information about.

Type: String

Required: Yes

## Response Syntax

```
{
  "domain": {
    "arn": "string",
    "createdAt": number,
    "domainEntries": [
      {
        "id": "string",
        "isAlias": boolean,
        "name": "string",
        "options": {
          "string": "string"
        },
        "target": "string",
        "type": "string"
      }
    ]
  }
}
```

```
    ],
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "registeredDomainDelegationInfo": {
      "nameServersUpdateState": {
        "code": "string",
        "message": "string"
      },
      "r53HostedZoneDeletionState": {
        "code": "string",
        "message": "string"
      }
    },
    "resourceType": "string",
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### domain

An array of key-value pairs containing information about your get domain request.

Type: [Domain](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetDomains

Returns a list of all domains in the user's account.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetDomains` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "domains": [
    {
      "arn": "string",
      "createdAt": number,
      "domainEntries": [
        {
          "id": "string",
          "isAlias": boolean,

```

```
    "name": "string",
    "options": {
      "string": "string"
    },
    "target": "string",
    "type": "string"
  }
],
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"name": "string",
"registeredDomainDelegationInfo": {
  "nameServersUpdateState": {
    "code": "string",
    "message": "string"
  },
  "r53HostedZoneDeletionState": {
    "code": "string",
    "message": "string"
  }
},
"resourceType": "string",
"supportCode": "string",
"tags": [
  {
    "key": "string",
    "value": "string"
  }
]
}
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## domains

An array of key-value pairs containing information about each of the domain entries in the user's account.

Type: Array of [Domain](#) objects

## nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetDomains` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetExportSnapshotRecords

Returns all export snapshot records created as a result of the `export` snapshot operation.

An export snapshot record can be used to create a new Amazon EC2 instance and its related resources with the [CreateCloudFormationStack](#) action.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetExportSnapshotRecords` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "exportSnapshotRecords": [
    {
      "arn": "string",
      "createdAt": number,
      "destinationInfo": {
```

```

    "id": "string",
    "service": "string"
  },
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "name": "string",
  "resourceType": "string",
  "sourceInfo": {
    "arn": "string",
    "createdAt": number,
    "diskSnapshotInfo": {
      "sizeInGb": number
    },
    "fromResourceArn": "string",
    "fromResourceName": "string",
    "instanceSnapshotInfo": {
      "fromBlueprintId": "string",
      "fromBundleId": "string",
      "fromDiskInfo": [
        {
          "isSystemDisk": boolean,
          "name": "string",
          "path": "string",
          "sizeInGb": number
        }
      ]
    },
    "name": "string",
    "resourceType": "string"
  },
  "state": "string"
}
],
"nextPageToken": "string"
}

```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [exportSnapshotRecords](#)

A list of objects describing the export snapshot records.

Type: Array of [ExportSnapshotRecord](#) objects

## [nextPageToken](#)

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetExportSnapshotRecords` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.



HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstance

Returns information about a specific Amazon Lightsail instance, which is a virtual private server.

## Request Syntax

```
{  
  "instanceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{  
  "instance": {  
    "addOns": [  
      {  
        "duration": "string",  
        "name": "string",  
        "nextSnapshotTimeOfDay": "string",  
        "snapshotTimeOfDay": "string",  
        "status": "string",  
        "threshold": "string"  
      }  
    ],  
    "arn": "string",  
    "blueprintId": "string",
```

```
"blueprintName": "string",
"bundleId": "string",
"createdAt": number,
"hardware": {
  "cpuCount": number,
  "disks": [
    {
      "addOns": [
        {
          "duration": "string",
          "name": "string",
          "nextSnapshotTimeOfDay": "string",
          "snapshotTimeOfDay": "string",
          "status": "string",
          "threshold": "string"
        }
      ],
      "arn": "string",
      "attachedTo": "string",
      "attachmentState": "string",
      "autoMountStatus": "string",
      "createdAt": number,
      "gbInUse": number,
      "iops": number,
      "isAttached": boolean,
      "isSystemDisk": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "name": "string",
      "path": "string",
      "resourceType": "string",
      "sizeInGb": number,
      "state": "string",
      "supportCode": "string",
      "tags": [
        {
          "key": "string",
          "value": "string"
        }
      ]
    }
  ]
}
```

```
    "ramSizeInGb": number
  },
  "ipAddressType": "string",
  "ipv6Addresses": [ "string" ],
  "isStaticIp": boolean,
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "metadataOptions": {
    "httpEndpoint": "string",
    "httpProtocolIpv6": "string",
    "httpPutResponseHopLimit": number,
    "httpTokens": "string",
    "state": "string"
  },
  "name": "string",
  "networking": {
    "monthlyTransfer": {
      "gbPerMonthAllocated": number
    },
    "ports": [
      {
        "accessDirection": "string",
        "accessFrom": "string",
        "accessType": "string",
        "cidrListAliases": [ "string" ],
        "cidrs": [ "string" ],
        "commonName": "string",
        "fromPort": number,
        "ipv6Cidrs": [ "string" ],
        "protocol": "string",
        "toPort": number
      }
    ]
  },
  "privateIpAddress": "string",
  "publicIpAddress": "string",
  "resourceType": "string",
  "sshKeyName": "string",
  "state": {
    "code": number,
    "name": "string"
  },
}
```

```
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "username": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### instance

An array of key-value pairs containing information about the specified instance.

Type: [Instance](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstanceAccessDetails

Returns temporary SSH keys you can use to connect to a specific virtual private server, or *instance*.

The `get instance access details` operation supports tag-based access control via resource tags applied to the resource identified by `instance name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceName": "string",
  "protocol": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance to access.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### protocol

The protocol to use to connect to your instance. Defaults to `ssh`.

Type: String

Valid Values: `ssh` | `rdp`

Required: No



## Response Syntax

```
{
  "accessDetails": {
    "certKey": "string",
    "expiresAt": number,
    "hostKeys": [
      {
        "algorithm": "string",
        "fingerprintSHA1": "string",
        "fingerprintSHA256": "string",
        "notValidAfter": number,
        "notValidBefore": number,
        "publicKey": "string",
        "witnessedAt": number
      }
    ],
    "instanceName": "string",
    "ipAddress": "string",
    "ipv6Addresses": [ "string" ],
    "password": "string",
    "passwordData": {
      "ciphertext": "string",
      "keyPairName": "string"
    },
    "privateKey": "string",
    "protocol": "string",
    "username": "string"
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### accessDetails

An array of key-value pairs containing information about a get instance access request.

Type: [InstanceAccessDetails](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstanceMetricData

Returns the data points for the specified Amazon Lightsail instance metric, given an instance name.

Metrics report the utilization of your resources, and the error counts generated by them. Monitor and collect metric data regularly to maintain the reliability, availability, and performance of your resources.

## Request Syntax

```
{  
  "endTime": number,  
  "instanceName": "string",  
  "metricName": "string",  
  "period": number,  
  "startTime": number,  
  "statistics": [ "string" ],  
  "unit": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### endTime

The end time of the time period.

Type: Timestamp

Required: Yes

### instanceName

The name of the instance for which you want to get metrics data.

Type: String

Pattern: `\w[\w\-\ ]*\w`

Required: Yes

### metricName

The metric for which you want to return information.

Valid instance metric names are listed below, along with the most useful statistics to include in your request, and the published unit value.

- **BurstCapacityPercentage** - The percentage of CPU performance available for your instance to burst above its baseline. Your instance continuously accrues and consumes burst capacity. Burst capacity stops accruing when your instance's `BurstCapacityPercentage` reaches 100%. For more information, see [Viewing instance burst capacity in Amazon Lightsail](#).

Statistics: The most useful statistics are `Maximum` and `Average`.

Unit: The published unit is `Percent`.

- **BurstCapacityTime** - The available amount of time for your instance to burst at 100% CPU utilization. Your instance continuously accrues and consumes burst capacity. Burst capacity time stops accruing when your instance's `BurstCapacityPercentage` metric reaches 100%.

Burst capacity time is consumed at the full rate only when your instance operates at 100% CPU utilization. For example, if your instance operates at 50% CPU utilization in the burstable zone for a 5-minute period, then it consumes CPU burst capacity minutes at a 50% rate in that period. Your instance consumed 2 minutes and 30 seconds of CPU burst capacity minutes in the 5-minute period. For more information, see [Viewing instance burst capacity in Amazon Lightsail](#).

Statistics: The most useful statistics are `Maximum` and `Average`.

Unit: The published unit is `Seconds`.

- **CPUUtilization** - The percentage of allocated compute units that are currently in use on the instance. This metric identifies the processing power to run the applications on the instance. Tools in your operating system can show a lower percentage than Lightsail when the instance is not allocated a full processor core.

Statistics: The most useful statistics are `Maximum` and `Average`.

Unit: The published unit is `Percent`.

- **NetworkIn** - The number of bytes received on all network interfaces by the instance. This metric identifies the volume of incoming network traffic to the instance. The number reported is the number of bytes received during the period. Because this metric is reported in 5-minute intervals, divide the reported number by 300 to find Bytes/second.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Bytes.

- **NetworkOut** - The number of bytes sent out on all network interfaces by the instance. This metric identifies the volume of outgoing network traffic from the instance. The number reported is the number of bytes sent during the period. Because this metric is reported in 5-minute intervals, divide the reported number by 300 to find Bytes/second.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Bytes.

- **StatusCheckFailed** - Reports whether the instance passed or failed both the instance status check and the system status check. This metric can be either 0 (passed) or 1 (failed). This metric data is available in 1-minute (60 seconds) granularity.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Count.

- **StatusCheckFailed\_Instance** - Reports whether the instance passed or failed the instance status check. This metric can be either 0 (passed) or 1 (failed). This metric data is available in 1-minute (60 seconds) granularity.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Count.

- **StatusCheckFailed\_System** - Reports whether the instance passed or failed the system status check. This metric can be either 0 (passed) or 1 (failed). This metric data is available in 1-minute (60 seconds) granularity.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Count.

- **MetadataNoToken** - Reports the number of times that the instance metadata service was successfully accessed without a token. This metric determines if there are any processes

accessing instance metadata by using Instance Metadata Service Version 1, which doesn't use a token. If all requests use token-backed sessions, such as Instance Metadata Service Version 2, then the value is 0.

**Statistics:** The most useful statistic is Sum.

**Unit:** The published unit is Count.

**Type:** String

**Valid Values:** CPUUtilization | NetworkIn | NetworkOut | StatusCheckFailed | StatusCheckFailed\_Instance | StatusCheckFailed\_System | BurstCapacityTime | BurstCapacityPercentage | MetadataNoToken

**Required:** Yes

### period

The granularity, in seconds, of the returned data points.

The StatusCheckFailed, StatusCheckFailed\_Instance, and StatusCheckFailed\_System instance metric data is available in 1-minute (60 seconds) granularity. All other instance metric data is available in 5-minute (300 seconds) granularity.

**Type:** Integer

**Valid Range:** Minimum value of 60. Maximum value of 86400.

**Required:** Yes

### startTime

The start time of the time period.

**Type:** Timestamp

**Required:** Yes

### statistics

The statistic for the metric.

The following statistics are available:

- **Minimum** - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- **Maximum** - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.
- **Sum** - All values submitted for the matching metric added together. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of  $\text{Sum} / \text{SampleCount}$  during the specified period. By comparing this statistic with the Minimum and Maximum values, you can determine the full scope of a metric and how close the average use is to the Minimum and Maximum values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: Array of strings

Valid Values: Minimum | Maximum | Sum | Average | SampleCount

Required: Yes

## unit

The unit for the metric data request. Valid units depend on the metric data being requested. For the valid units to specify with each available metric, see the `metricName` parameter.

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: Yes

## Response Syntax

```
{
  "metricData": [
    {
```



```
    "average": number,
    "maximum": number,
    "minimum": number,
    "sampleCount": number,
    "sum": number,
    "timestamp": number,
    "unit": "string"
  }
],
"metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricData

An array of objects that describe the metric data returned.

Type: Array of [MetricDatapoint](#) objects

### metricName

The name of the metric returned.

Type: String

Valid Values: CPUUtilization | NetworkIn | NetworkOut | StatusCheckFailed | StatusCheckFailed\_Instance | StatusCheckFailed\_System | BurstCapacityTime | BurstCapacityPercentage | MetadataNoToken

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstancePortStates

Returns the firewall port states for a specific Amazon Lightsail instance, the IP addresses allowed to connect to the instance through the ports, and the protocol.

## Request Syntax

```
{  
  "instanceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance for which to return firewall port states.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

## Response Syntax

```
{  
  "portStates": [  
    {  
      "cidrListAliases": [ "string" ],  
      "cidrs": [ "string" ],  
      "fromPort": number,  
      "ipv6Cidrs": [ "string" ],  
      "protocol": "string",  
      "state": "string",  
      "toPort": number  
    }  
  ]  
}
```

```
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### portStates

An array of objects that describe the firewall port states for the specified instance.

Type: Array of [InstancePortState](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstances

Returns information about all Amazon Lightsail virtual private servers, or *instances*.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetInstances request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "instances": [
    {
      "addOns": [
        {
          "duration": "string",
          "name": "string",
          "nextSnapshotTimeOfDay": "string",
          "snapshotTimeOfDay": "string",
          "status": "string",
          "threshold": "string"
        }
      ]
    }
  ]
}
```

```
    }
  ],
  "arn": "string",
  "blueprintId": "string",
  "blueprintName": "string",
  "bundleId": "string",
  "createdAt": number,
  "hardware": {
    "cpuCount": number,
    "disks": [
      {
        "addOns": [
          {
            "duration": "string",
            "name": "string",
            "nextSnapshotTimeOfDay": "string",
            "snapshotTimeOfDay": "string",
            "status": "string",
            "threshold": "string"
          }
        ],
      },
      {
        "arn": "string",
        "attachedTo": "string",
        "attachmentState": "string",
        "autoMountStatus": "string",
        "createdAt": number,
        "gbInUse": number,
        "iops": number,
        "isAttached": boolean,
        "isSystemDisk": boolean,
        "location": {
          "availabilityZone": "string",
          "regionName": "string"
        },
        "name": "string",
        "path": "string",
        "resourceType": "string",
        "sizeInGb": number,
        "state": "string",
        "supportCode": "string",
        "tags": [
          {
            "key": "string",
            "value": "string"
          }
        ]
      }
    ]
  }
}
```



```

        }
      ]
    }
  ],
  "ramSizeInGb": number
},
"ipAddressType": "string",
"ipv6Addresses": [ "string" ],
"isStaticIp": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"metadataOptions": {
  "httpEndpoint": "string",
  "httpProtocolIpv6": "string",
  "httpPutResponseHopLimit": number,
  "httpTokens": "string",
  "state": "string"
},
"name": "string",
"networking": {
  "monthlyTransfer": {
    "gbPerMonthAllocated": number
  },
  "ports": [
    {
      "accessDirection": "string",
      "accessFrom": "string",
      "accessType": "string",
      "cidrListAliases": [ "string" ],
      "cidrs": [ "string" ],
      "commonName": "string",
      "fromPort": number,
      "ipv6Cidrs": [ "string" ],
      "protocol": "string",
      "toPort": number
    }
  ]
},
"privateIpAddress": "string",
"publicIpAddress": "string",
"resourceType": "string",
"sshKeyName": "string",

```

```
    "state": {
      "code": number,
      "name": "string"
    },
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "username": "string"
  }
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### instances

An array of key-value pairs containing information about your instances.

Type: Array of [Instance](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetInstances` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## Examples

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *AWS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [AWS Command Line Interface \(AWS CLI\)](#) or one of the [AWS SDKs](#) to make requests to AWS, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

### Get instances

The following example returns all instances in the us-west-2 AWS Region.

#### Sample Request

```
POST / HTTP/1.1
Host: lightsail.us-west-2.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: Lightsail_20161128.GetInstance
Content-Type: application/x-amz-json-1.1
User-Agent: AGENT
X-Amz-Date: 20201019T144314Z
Authorization: AUTHPARAMS
Signature=AUTHPARAMS
Content-Length: 2

{ }
```

#### Sample Response

```
HTTP/1.1 200 OK
Server: Server
Date: Mon, 22 Apr 2024 14:43:17 GMT
```

```
Content-Type: application/x-amz-json-1.1
Content-Length: 2750
x-amzn-RequestId: aaa1993d-8d60-4a13-899c-bEXAMPLE9bc7
Connection: keep-alive

{
  "instances": [
    {
      "addOns": [
        {
          "name": "AutoSnapshot",
          "snapshotTimeOfDay": "06:00",
          "status": "Enabled"
        }
      ],
      "arn": "arn:aws:lightsail:us-west-2:111122223333:Instance/93d19bc4-
bd2a-4deb-9048-4EXAMPLE4236",
      "blueprintId": "wordpress",
      "blueprintName": "WordPress",
      "bundleId": "micro_3_0",
      "createdAt": 1.590771192493E9,
      "hardware": {
        "cpuCount": 2,
        "disks": [
          {
            "attachedTo": "WordPress-1",
            "attachmentState": "attached",
            "createdAt": 1.590771192493E9,
            "iops": 120,
            "isSystemDisk": true,
            "path": "/dev/xvda",
            "sizeInGb": 40
          }
        ],
        "ramSizeInGb": 1.0
      },
      "isStaticIp": true,
      "location": {
        "availabilityZone": "us-west-2a",
        "regionName": "us-west-2"
      },
      "name": "WordPress-1",
      "networking": {
        "monthlyTransfer": {"gbPerMonthAllocated": 2048},
```

```
    "ports": [
      {
        "accessDirection": "inbound",
        "accessFrom": "Anywhere (0.0.0.0/0)",
        "accessType": "public",
        "cidrListAliases": [],
        "cidrs": ["0.0.0.0/0"],
        "commonName": "",
        "fromPort": 80,
        "protocol": "tcp",
        "toPort": 80
      },
      {
        "accessDirection": "inbound",
        "accessFrom": "Anywhere (0.0.0.0/0)",
        "accessType": "public",
        "cidrListAliases": [],
        "cidrs": ["0.0.0.0/0"],
        "commonName": "",
        "fromPort": 22,
        "protocol": "tcp",
        "toPort": 22
      },
      {
        "accessDirection": "inbound",
        "accessFrom": "Anywhere (0.0.0.0/0)",
        "accessType": "public",
        "cidrListAliases": [],
        "cidrs": ["0.0.0.0/0"],
        "commonName": "",
        "fromPort": 443,
        "protocol": "tcp",
        "toPort": 443
      }
    ]
  },
  "privateIpAddress": "192.0.2.1",
  "publicIpAddress": "192.0.2.2",
  "resourceType": "Instance",
  "sshKeyName": "LightsailDefaultKeyPair",
  "state": {
    "code": 16,
    "name": "running"
  },
},
```

```
    "supportCode": "1234567890/i-0dEXAMPLE1abad00e",
    "tags": [],
    "username": "bitnami"
  },
  {
    "arn": "arn:aws:lightsail:us-west-2:111122223333:Instance/
bd08b156-5c35-4b89-9e90-8EXAMPLEd006",
    "blueprintId": "amazon_linux_2023",
    "blueprintName": "Amazon Linux 2023",
    "bundleId": "nano_3_0",
    "createdAt": 1.591802416964E9,
    "hardware": {
      "cpuCount": 2,
      "disks": [
        {
          "attachedTo": "Amazon_Linux-2023",
          "attachmentState": "attached",
          "createdAt": 1.591802416964E9,
          "iops": 3000,
          "isSystemDisk": true,
          "path": "/dev/xvda",
          "sizeInGb": 20
        }
      ],
      "ramSizeInGb": 0.5
    },
    "isStaticIp": true,
    "location": {
      "availabilityZone": "us-west-2a",
      "regionName": "us-west-2"
    },
    "name": "Amazon_Linux-1",
    "networking": {
      "monthlyTransfer": {"gbPerMonthAllocated": 1024},
      "ports": [
        {
          "accessDirection": "inbound",
          "accessFrom": "Anywhere (0.0.0.0/0)",
          "accessType": "public",
          "cidrListAliases": [],
          "cidrs": ["0.0.0.0/0"],
          "commonName": "",
          "fromPort": 80,
          "protocol": "tcp",
```

```
        "toPort": 80
      },
      {
        "accessDirection": "inbound",
        "accessFrom": "Anywhere (0.0.0.0/0)",
        "accessType": "public",
        "cidrListAliases": [],
        "cidrs": ["0.0.0.0/0"],
        "commonName": "",
        "fromPort": 22,
        "protocol": "tcp",
        "toPort": 22
      }
    ]
  },
  "privateIpAddress": "192.0.2.3",
  "publicIpAddress": "192.0.2.4",
  "resourceType": "Instance",
  "sshKeyName": "LightsailDefaultKeyPair",
  "state": {
    "code": 16,
    "name": "running"
  },
  "supportCode": "1234567890/i-0dEXAMPLE1abad00e",
  "tags": [],
  "username": "ec2-user"
}
]
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)



- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstanceSnapshot

Returns information about a specific instance snapshot.

## Request Syntax

```
{
  "instanceSnapshotName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceSnapshotName

The name of the snapshot for which you are requesting information.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "instanceSnapshot": {
    "arn": "string",
    "createdAt": number,
    "fromAttachedDisks": [
      {
        "addOns": [
          {
            "duration": "string",
            "name": "string",
            "nextSnapshotTimeOfDay": "string",
            "snapshotTimeOfDay": "string",
            "status": "string",
            "threshold": "string"
          }
        ]
      }
    ]
  }
}
```

```
    }
  ],
  "arn": "string",
  "attachedTo": "string",
  "attachmentState": "string",
  "autoMountStatus": "string",
  "createdAt": number,
  "gbInUse": number,
  "iops": number,
  "isAttached": boolean,
  "isSystemDisk": boolean,
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "name": "string",
  "path": "string",
  "resourceType": "string",
  "sizeInGb": number,
  "state": "string",
  "supportCode": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
],
"fromBlueprintId": "string",
"fromBundleId": "string",
"fromInstanceArn": "string",
"fromInstanceName": "string",
"isFromAutoSnapshot": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"name": "string",
"progress": "string",
"resourceType": "string",
"sizeInGb": number,
"state": "string",
"supportCode": "string",
```

```
    "tags": [  
      {  
        "key": "string",  
        "value": "string"  
      }  
    ]  
  }  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### instanceSnapshot

An array of key-value pairs containing information about the results of your get instance snapshot request.

Type: [InstanceSnapshot](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstanceSnapshots

Returns all instance snapshots for the user's account.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetInstanceSnapshots request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "instanceSnapshots": [
    {
      "arn": "string",
      "createdAt": number,
      "fromAttachedDisks": [
        {
          "addOns": [
            {
              "duration": "string",
              "name": "string",

```

```
        "nextSnapshotTimeOfDay": "string",
        "snapshotTimeOfDay": "string",
        "status": "string",
        "threshold": "string"
    }
],
"arn": "string",
"attachedTo": "string",
"attachmentState": "string",
"autoMountStatus": "string",
"createdAt": number,
"gbInUse": number,
"iops": number,
"isAttached": boolean,
"isSystemDisk": boolean,
"location": {
    "availabilityZone": "string",
    "regionName": "string"
},
"name": "string",
"path": "string",
"resourceType": "string",
"sizeInGb": number,
"state": "string",
"supportCode": "string",
"tags": [
    {
        "key": "string",
        "value": "string"
    }
]
}
],
"fromBlueprintId": "string",
"fromBundleId": "string",
"fromInstanceArn": "string",
"fromInstanceName": "string",
"isFromAutoSnapshot": boolean,
"location": {
    "availabilityZone": "string",
    "regionName": "string"
},
"name": "string",
"progress": "string",
```



```
    "resourceType": "string",
    "sizeInGb": number,
    "state": "string",
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  },
  "nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### instanceSnapshots

An array of key-value pairs containing information about the results of your get instance snapshots request.

Type: Array of [InstanceSnapshot](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetInstanceSnapshots` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetInstanceState

Returns the state of a specific instance. Works on one instance at a time.

## Request Syntax

```
{  
  "instanceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance to get state information about.

Type: String

Pattern: `\w[\w\-\ ]*\w`

Required: Yes

## Response Syntax

```
{  
  "state": {  
    "code": number,  
    "name": "string"  
  }  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## state

The state of the instance.

Type: [InstanceState](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetKeyPair

Returns information about a specific key pair.

## Request Syntax

```
{
  "keyPairName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### keyPairName

The name of the key pair for which you are requesting information.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "keyPair": {
    "arn": "string",
    "createdAt": number,
    "fingerprint": "string",
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "resourceType": "string",
    "supportCode": "string",
  }
}
```

```
    "tags": [  
      {  
        "key": "string",  
        "value": "string"  
      }  
    ]  
  }  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### keyPair

An array of key-value pairs containing information about the key pair.

Type: [KeyPair](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.



**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetKeyPairs

Returns information about all key pairs in the user's account.

## Request Syntax

```
{  
  "includeDefaultKeyPair": boolean,  
  "pageToken": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [includeDefaultKeyPair](#)

A Boolean value that indicates whether to include the default key pair in the response of your request.

Type: Boolean

Required: No

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetKeyPairs` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
```

```
"keyPairs": [  
  {  
    "arn": "string",  
    "createdAt": number,  
    "fingerprint": "string",  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "name": "string",  
    "resourceType": "string",  
    "supportCode": "string",  
    "tags": [  
      {  
        "key": "string",  
        "value": "string"  
      }  
    ]  
  }  
],  
"nextPageToken": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### keyPairs

An array of key-value pairs containing information about the key pairs.

Type: Array of [KeyPair](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetKeyPairs` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetLoadBalancer

Returns information about the specified Lightsail load balancer.

## Request Syntax

```
{
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### loadBalancerName

The name of the load balancer.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "loadBalancer": {
    "arn": "string",
    "configurationOptions": {
      "string": "string"
    },
    "createdAt": number,
    "dnsName": "string",
    "healthCheckPath": "string",
    "httpsRedirectionEnabled": boolean,
    "instanceHealthSummary": [
      {
        "instanceHealth": "string",
```

```
        "instanceHealthReason": "string",
        "instanceName": "string"
    }
],
"instancePort": number,
"ipAddressType": "string",
"location": {
    "availabilityZone": "string",
    "regionName": "string"
},
"name": "string",
"protocol": "string",
"publicPorts": [ number ],
"resourceType": "string",
"state": "string",
"supportCode": "string",
"tags": [
    {
        "key": "string",
        "value": "string"
    }
],
"tlsCertificateSummaries": [
    {
        "isAttached": boolean,
        "name": "string"
    }
],
"tlsPolicyName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### loadBalancer

An object containing information about your load balancer.

Type: [LoadBalancer](#) object



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetLoadBalancerMetricData

Returns information about health metrics for your Lightsail load balancer.

Metrics report the utilization of your resources, and the error counts generated by them. Monitor and collect metric data regularly to maintain the reliability, availability, and performance of your resources.

## Request Syntax

```
{
  "endTime": number,
  "loadBalancerName": "string",
  "metricName": "string",
  "period": number,
  "startTime": number,
  "statistics": [ "string" ],
  "unit": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### endTime

The end time of the period.

Type: Timestamp

Required: Yes

### loadBalancerName

The name of the load balancer.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

### metricName

The metric for which you want to return information.

Valid load balancer metric names are listed below, along with the most useful statistics to include in your request, and the published unit value.

- **ClientTLSNegotiationErrorCount** - The number of TLS connections initiated by the client that did not establish a session with the load balancer due to a TLS error generated by the load balancer. Possible causes include a mismatch of ciphers or protocols.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Count.

- **HealthyHostCount** - The number of target instances that are considered healthy.

Statistics: The most useful statistic are Average, Minimum, and Maximum.

Unit: The published unit is Count.

- **HTTPCode\_Instance\_2XX\_Count** - The number of HTTP 2XX response codes generated by the target instances. This does not include any response codes generated by the load balancer.

Statistics: The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

Unit: The published unit is Count.

- **HTTPCode\_Instance\_3XX\_Count** - The number of HTTP 3XX response codes generated by the target instances. This does not include any response codes generated by the load balancer.

Statistics: The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

Unit: The published unit is Count.

- **HTTPCode\_Instance\_4XX\_Count** - The number of HTTP 4XX response codes generated by the target instances. This does not include any response codes generated by the load balancer.

**Statistics:** The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

**Unit:** The published unit is Count.

- **HTTPCode\_Instance\_5XX\_Count** - The number of HTTP 5XX response codes generated by the target instances. This does not include any response codes generated by the load balancer.

**Statistics:** The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

**Unit:** The published unit is Count.

- **HTTPCode\_LB\_4XX\_Count** - The number of HTTP 4XX client error codes that originated from the load balancer. Client errors are generated when requests are malformed or incomplete. These requests were not received by the target instance. This count does not include response codes generated by the target instances.

**Statistics:** The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

**Unit:** The published unit is Count.

- **HTTPCode\_LB\_5XX\_Count** - The number of HTTP 5XX server error codes that originated from the load balancer. This does not include any response codes generated by the target instance. This metric is reported if there are no healthy instances attached to the load balancer, or if the request rate exceeds the capacity of the instances (spillover) or the load balancer.

**Statistics:** The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

**Unit:** The published unit is Count.

- **InstanceResponseTime** - The time elapsed, in seconds, after the request leaves the load balancer until a response from the target instance is received.

**Statistics:** The most useful statistic is Average.

**Unit:** The published unit is Seconds.

- **RejectedConnectionCount** - The number of connections that were rejected because the load balancer had reached its maximum number of connections.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Count.

- **RequestCount** - The number of requests processed over IPv4. This count includes only the requests with a response generated by a target instance of the load balancer.

Statistics: The most useful statistic is Sum. Note that Minimum, Maximum, and Average all return 1.

Unit: The published unit is Count.

- **UnhealthyHostCount** - The number of target instances that are considered unhealthy.

Statistics: The most useful statistic are Average, Minimum, and Maximum.

Unit: The published unit is Count.

Type: String

Valid Values: ClientTLSNegotiationErrorCount | HealthyHostCount | UnhealthyHostCount | HTTPCode\_LB\_4XX\_Count | HTTPCode\_LB\_5XX\_Count | HTTPCode\_Instance\_2XX\_Count | HTTPCode\_Instance\_3XX\_Count | HTTPCode\_Instance\_4XX\_Count | HTTPCode\_Instance\_5XX\_Count | InstanceResponseTime | RejectedConnectionCount | RequestCount

Required: Yes

### period

The granularity, in seconds, of the returned data points.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: Yes

### startTime

The start time of the period.

Type: Timestamp

Required: Yes

### statistics

The statistic for the metric.

The following statistics are available:

- **Minimum** - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- **Maximum** - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.
- **Sum** - All values submitted for the matching metric added together. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of `Sum / SampleCount` during the specified period. By comparing this statistic with the **Minimum** and **Maximum** values, you can determine the full scope of a metric and how close the average use is to the **Minimum** and **Maximum** values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: Array of strings

Valid Values: `Minimum` | `Maximum` | `Sum` | `Average` | `SampleCount`

Required: Yes

### unit

The unit for the metric data request. Valid units depend on the metric data being requested. For the valid units with each available metric, see the `metricName` parameter.

Type: String

Valid Values: `Seconds` | `Microseconds` | `Milliseconds` | `Bytes` | `Kilobytes` | `Megabytes` | `Gigabytes` | `Terabytes` | `Bits` | `Kilobits` | `Megabits` | `Gigabits` | `Terabits` | `Percent` | `Count` | `Bytes/Second` | `Kilobytes/Second` | `Megabytes/Second` | `Gigabytes/Second` | `Terabytes/Second` | `Bits/Second` | `Kilobits/Second` | `Megabits/Second` | `Gigabits/Second` | `Terabits/Second` | `Count/Second` | `None`

Required: Yes

## Response Syntax

```
{
  "metricData": [
    {
      "average": number,
      "maximum": number,
      "minimum": number,
      "sampleCount": number,
      "sum": number,
      "timestamp": number,
      "unit": "string"
    }
  ],
  "metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricData

An array of objects that describe the metric data returned.

Type: Array of [MetricDatapoint](#) objects

### metricName

The name of the metric returned.

Type: String

Valid Values: ClientTLSNegotiationErrorCount | HealthyHostCount | UnhealthyHostCount | HTTPCode\_LB\_4XX\_Count | HTTPCode\_LB\_5XX\_Count | HTTPCode\_Instance\_2XX\_Count | HTTPCode\_Instance\_3XX\_Count | HTTPCode\_Instance\_4XX\_Count | HTTPCode\_Instance\_5XX\_Count | InstanceResponseTime | RejectedConnectionCount | RequestCount



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetLoadBalancers

Returns information about all load balancers in an account.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetLoadBalancers` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "loadBalancers": [
    {
      "arn": "string",
      "configurationOptions": {
        "string" : "string"
      },
      "createdAt": number,
      "dnsName": "string",
      "healthCheckPath": "string",
```

```
"httpsRedirectionEnabled": boolean,
"instanceHealthSummary": [
  {
    "instanceHealth": "string",
    "instanceHealthReason": "string",
    "instanceName": "string"
  }
],
"instancePort": number,
"ipAddressType": "string",
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"name": "string",
"protocol": "string",
"publicPorts": [ number ],
"resourceType": "string",
"state": "string",
"supportCode": "string",
"tags": [
  {
    "key": "string",
    "value": "string"
  }
],
"tlsCertificateSummaries": [
  {
    "isAttached": boolean,
    "name": "string"
  }
],
"tlsPolicyName": "string"
}
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## loadBalancers

An array of LoadBalancer objects describing your load balancers.

Type: Array of [LoadBalancer](#) objects

## nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetLoadBalancers` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to `us-east-1` to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetLoadBalancerTlsCertificates

Returns information about the TLS certificates that are associated with the specified Lightsail load balancer.

TLS is just an updated, more secure version of Secure Socket Layer (SSL).

You can have a maximum of 2 certificates associated with a Lightsail load balancer. One is active and the other is inactive.

## Request Syntax

```
{
  "loadBalancerName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### loadBalancerName

The name of the load balancer you associated with your SSL/TLS certificate.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "tlsCertificates": [
    {
      "arn": "string",
      "createdAt": number,
      "domainName": "string",
      "domainValidationRecords": [
        {
```

```
    "dnsRecordCreationState": {
      "code": "string",
      "message": "string"
    },
    "domainName": "string",
    "name": "string",
    "type": "string",
    "validationStatus": "string",
    "value": "string"
  }
],
"failureReason": "string",
"isAttached": boolean,
"issuedAt": number,
"issuer": "string",
"keyAlgorithm": "string",
"loadBalancerName": "string",
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"name": "string",
"notAfter": number,
"notBefore": number,
"renewalSummary": {
  "domainValidationOptions": [
    {
      "domainName": "string",
      "validationStatus": "string"
    }
  ],
  "renewalStatus": "string"
},
"resourceType": "string",
"revocationReason": "string",
"revokedAt": number,
"serial": "string",
"signatureAlgorithm": "string",
"status": "string",
"subject": "string",
"subjectAlternativeNames": [ "string" ],
"supportCode": "string",
"tags": [
  {
```



```
    "key": "string",  
    "value": "string"  
  }  
]  
}  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### tlsCertificates

An array of `LoadBalancerTlsCertificate` objects describing your SSL/TLS certificates.

Type: Array of [LoadBalancerTlsCertificate](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetLoadBalancerTlsPolicies

Returns a list of TLS security policies that you can apply to Lightsail load balancers.

For more information about load balancer TLS security policies, see [Configuring TLS security policies on your Amazon Lightsail load balancers](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetLoadBalancerTlsPolicies` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "nextPageToken": "string",
  "tlsPolicies": [
    {
      "ciphers": [ "string" ],
      "description": "string",
      "isDefault": boolean,

```

```
    "name": "string",
    "protocols": [ "string" ]
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetLoadBalancerTlsPolicies` request and specify the next page token using the `pageToken` parameter.

Type: String

### tlsPolicies

An array of objects that describe the TLS security policies that are available.

Type: Array of [LoadBalancerTlsPolicy](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)

- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetOperation

Returns information about a specific operation. Operations include events such as when you create an instance, allocate a static IP, attach a static IP, and so on.

## Request Syntax

```
{
  "operationId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### operationId

A GUID used to identify the operation.

Type: String

Pattern: `.*\S.*`

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    }
  },
}
```



```
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetOperations

Returns information about all operations.

Results are returned from oldest to newest, up to a maximum of 200. Results can be paged by making each subsequent call to `GetOperations` use the maximum (last) `statusChangedAt` value from the previous request.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetOperations` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "nextPageToken": "string",
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",

```

```
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetOperations` request and specify the next page token using the `pageToken` parameter.

Type: String

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetOperationsForResource

Gets operations for a specific resource (an instance or a static IP).

## Request Syntax

```
{  
  "pageToken": "string",  
  "resourceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetOperationsForResource` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

### [resourceName](#)

The name of the resource for which you are requesting information.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
```



```
"nextPageCount": "string",
"nextPageToken": "string",
"operations": [
  {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextPageCount

*This parameter has been deprecated.*

(Discontinued) Returns the number of pages of results that remain.

#### Note

In releases prior to June 12, 2017, this parameter returned `null` by the API. It is now discontinued, and the API returns the `nextPageToken` parameter instead.

Type: String

## nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetOperationsForResource` request and specify the next page token using the `pageToken` parameter.

Type: String

## operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRegions

Returns a list of all valid regions for Amazon Lightsail. Use the `includeAvailabilityZones` parameter to also return the Availability Zones in a region.

## Request Syntax

```
{
  "includeAvailabilityZones": boolean,
  "includeRelationalDatabaseAvailabilityZones": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### includeAvailabilityZones

A Boolean value indicating whether to also include Availability Zones in your get regions request. Availability Zones are indicated with a letter: us-east-2a.

Type: Boolean

Required: No

### includeRelationalDatabaseAvailabilityZones

A Boolean value indicating whether to also include Availability Zones for databases in your get regions request. Availability Zones are indicated with a letter (us-east-2a).

Type: Boolean

Required: No

## Response Syntax

```
{
```

```
"regions": [  
  {  
    "availabilityZones": [  
      {  
        "state": "string",  
        "zoneName": "string"  
      }  
    ],  
    "continentCode": "string",  
    "description": "string",  
    "displayName": "string",  
    "name": "string",  
    "relationalDatabaseAvailabilityZones": [  
      {  
        "state": "string",  
        "zoneName": "string"  
      }  
    ]  
  }  
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### regions

An array of key-value pairs containing information about your get regions request.

Type: Array of [Region](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetRelationalDatabase

Returns information about a specific database in Amazon Lightsail.

## Request Syntax

```
{
  "relationalDatabaseName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseName

The name of the database that you are looking up.

Type: String

Pattern: `\w[\\w\\-]*\\w`

Required: Yes

## Response Syntax

```
{
  "relationalDatabase": {
    "arn": "string",
    "backupRetentionEnabled": boolean,
    "caCertificateIdentifier": "string",
    "createdAt": number,
    "engine": "string",
    "engineVersion": "string",
    "hardware": {
      "cpuCount": number,
      "diskSizeInGb": number,
      "ramSizeInGb": number
    },
    "latestRestorableTime": number,
  },
}
```

```
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"masterDatabaseName": "string",
"masterEndpoint": {
  "address": "string",
  "port": number
},
"masterUsername": "string",
"name": "string",
"parameterApplyStatus": "string",
"pendingMaintenanceActions": [
  {
    "action": "string",
    "currentApplyDate": number,
    "description": "string"
  }
],
"pendingModifiedValues": {
  "backupRetentionEnabled": boolean,
  "engineVersion": "string",
  "masterUserPassword": "string"
},
"preferredBackupWindow": "string",
"preferredMaintenanceWindow": "string",
"publiclyAccessible": boolean,
"relationalDatabaseBlueprintId": "string",
"relationalDatabaseBundleId": "string",
"resourceType": "string",
"secondaryAvailabilityZone": "string",
"state": "string",
"supportCode": "string",
"tags": [
  {
    "key": "string",
    "value": "string"
  }
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### relationalDatabase

An object describing the specified database.

Type: [RelationalDatabase](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabaseBlueprints

Returns a list of available database blueprints in Amazon Lightsail. A blueprint describes the major engine version of a database.

You can use a blueprint ID to create a new database that runs a specific database engine.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetRelationalDatabaseBlueprints request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "blueprints": [
    {
      "blueprintId": "string",
      "engine": "string",
      "engineDescription": "string",
      "engineVersion": "string",

```

```
    "engineVersionDescription": "string",
    "isEngineDefault": boolean
  }
],
"nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### blueprints

An object describing the result of your get relational database blueprints request.

Type: Array of [RelationalDatabaseBlueprint](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetRelationalDatabaseBlueprints` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetRelationalDatabaseBundles

Returns the list of bundles that are available in Amazon Lightsail. A bundle describes the performance specifications for a database.

You can use a bundle ID to create a new database with explicit performance specifications.

## Request Syntax

```
{
  "includeInactive": boolean,
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### includeInactive

A Boolean value that indicates whether to include inactive (unavailable) bundles in the response of your request.

Type: Boolean

Required: No

### pageToken

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetRelationalDatabaseBundles` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "bundles": [
    {
      "bundleId": "string",
      "cpuCount": number,
      "diskSizeInGb": number,
      "isActive": boolean,
      "isEncrypted": boolean,
      "name": "string",
      "price": number,
      "ramSizeInGb": number,
      "transferPerMonthInGb": number
    }
  ],
  "nextPageToken": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### bundles

An object describing the result of your get relational database bundles request.

Type: Array of [RelationalDatabaseBundle](#) objects

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetRelationalDatabaseBundles` request and specify the next page token using the `pageToken` parameter.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabaseEvents

Returns a list of events for a specific database in Amazon Lightsail.

## Request Syntax

```
{
  "durationInMinutes": number,
  "pageToken": "string",
  "relationalDatabaseName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [durationInMinutes](#)

The number of minutes in the past from which to retrieve events. For example, to get all events from the past 2 hours, enter 120.

Default: 60

The minimum is 1 and the maximum is 14 days (20160 minutes).

Type: Integer

Required: No

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetRelationalDatabaseEvents` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

### relationalDatabaseName

The name of the database from which to get events.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "nextPageToken": "string",
  "relationalDatabaseEvents": [
    {
      "createdAt": number,
      "eventCategories": [ "string" ],
      "message": "string",
      "resource": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetRelationalDatabaseEvents` request and specify the next page token using the `pageToken` parameter.

Type: String

## relationalDatabaseEvents

An object describing the result of your get relational database events request.

Type: Array of [RelationalDatabaseEvent](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetRelationalDatabaseLogEvents

Returns a list of log events for a database in Amazon Lightsail.

## Request Syntax

```
{
  "endTime": number,
  "logStreamName": "string",
  "pageToken": "string",
  "relationalDatabaseName": "string",
  "startFromHead": boolean,
  "startTime": number
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### endTime

The end of the time interval from which to get log events.

Constraints:

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use an end time of October 1, 2018, at 8 PM UTC, then you input 1538424000 as the end time.

Type: Timestamp

Required: No

### logStreamName

The name of the log stream.

Use the `get relational database log streams` operation to get a list of available log streams.

Type: String

Required: Yes

### pageToken

The token to advance to the next or previous page of results from your request.

To get a page token, perform an initial `GetRelationalDatabaseLogEvents` request. If your results are paginated, the response will return a next forward token and/or next backward token that you can specify as the page token in a subsequent request.

Type: String

Required: No

### relationalDatabaseName

The name of your database for which to get log events.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### startFromHead

Parameter to specify if the log should start from head or tail. If `true` is specified, the log event starts from the head of the log. If `false` is specified, the log event starts from the tail of the log.

#### **Note**

For PostgreSQL, the default value of `false` is the only option available.

Type: Boolean

Required: No

### startTime

The start of the time interval from which to get log events.

**Constraints:**

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use a start time of October 1, 2018, at 8 PM UTC, then you input `1538424000` as the start time.

Type: Timestamp

Required: No

## Response Syntax

```
{
  "nextBackwardToken": "string",
  "nextForwardToken": "string",
  "resourceLogEvents": [
    {
      "createdAt": number,
      "message": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextBackwardToken

A token used for advancing to the previous page of results from your get relational database log events request.

Type: String

### nextForwardToken

A token used for advancing to the next page of results from your get relational database log events request.

Type: String

### [resourceLogEvents](#)

An object describing the result of your get relational database log events request.

Type: Array of [LogEvent](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabaseLogStreams

Returns a list of available log streams for a specific database in Amazon Lightsail.

## Request Syntax

```
{  
  "relationalDatabaseName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseName

The name of your database for which to get log streams.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{  
  "logStreams": [ "string" ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### logStreams

An object describing the result of your get relational database log streams request.

Type: Array of strings

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetRelationalDatabaseMasterUserPassword

Returns the current, previous, or pending versions of the master user password for a Lightsail database.

The `GetRelationalDatabaseMasterUserPassword` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`.

## Request Syntax

```
{
  "passwordVersion": "string",
  "relationalDatabaseName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### passwordVersion

The password version to return.

Specifying `CURRENT` or `PREVIOUS` returns the current or previous passwords respectively. Specifying `PENDING` returns the newest version of the password that will rotate to `CURRENT`. After the `PENDING` password rotates to `CURRENT`, the `PENDING` password is no longer available.

Default: `CURRENT`

Type: String

Valid Values: `CURRENT` | `PREVIOUS` | `PENDING`

Required: No

### relationalDatabaseName

The name of your database for which to get the master user password.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{  
  "createdAt": number,  
  "masterUserPassword": "string"  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createdAt

The timestamp when the specified version of the master user password was created.

Type: Timestamp

### masterUserPassword

The master user password for the password version specified.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabaseMetricData

Returns the data points of the specified metric for a database in Amazon Lightsail.

Metrics report the utilization of your resources, and the error counts generated by them. Monitor and collect metric data regularly to maintain the reliability, availability, and performance of your resources.

## Request Syntax

```
{
  "endTime": number,
  "metricName": "string",
  "period": number,
  "relationalDatabaseName": "string",
  "startTime": number,
  "statistics": [ "string" ],
  "unit": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### endTime

The end of the time interval from which to get metric data.

Constraints:

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use an end time of October 1, 2018, at 8 PM UTC, then you input 1538424000 as the end time.

Type: Timestamp

Required: Yes

## metricName

The metric for which you want to return information.

Valid relational database metric names are listed below, along with the most useful statistics to include in your request, and the published unit value. All relational database metric data is available in 1-minute (60 seconds) granularity.

- **CPUUtilization** - The percentage of CPU utilization currently in use on the database.

Statistics: The most useful statistics are Maximum and Average.

Unit: The published unit is Percent.

- **DatabaseConnections** - The number of database connections in use.

Statistics: The most useful statistics are Maximum and Sum.

Unit: The published unit is Count.

- **DiskQueueDepth** - The number of outstanding IOs (read/write requests) that are waiting to access the disk.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Count.

- **FreeStorageSpace** - The amount of available storage space.

Statistics: The most useful statistic is Sum.

Unit: The published unit is Bytes.

- **NetworkReceiveThroughput** - The incoming (Receive) network traffic on the database, including both customer database traffic and AWS traffic used for monitoring and replication.

Statistics: The most useful statistic is Average.

Unit: The published unit is Bytes/Second.

- **NetworkTransmitThroughput** - The outgoing (Transmit) network traffic on the database, including both customer database traffic and AWS traffic used for monitoring and replication.

Statistics: The most useful statistic is Average.

Unit: The published unit is Bytes/Second.

Type: String

Valid Values: CPUUtilization | DatabaseConnections | DiskQueueDepth | FreeStorageSpace | NetworkReceiveThroughput | NetworkTransmitThroughput

Required: Yes

### period

The granularity, in seconds, of the returned data points.

All relational database metric data is available in 1-minute (60 seconds) granularity.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: Yes

### relationalDatabaseName

The name of your database from which to get metric data.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### startTime

The start of the time interval from which to get metric data.

Constraints:

- Specified in Coordinated Universal Time (UTC).
- Specified in the Unix time format.

For example, if you wish to use a start time of October 1, 2018, at 8 PM UTC, then you input `1538424000` as the start time.

Type: Timestamp

Required: Yes

### statistics

The statistic for the metric.

The following statistics are available:

- **Minimum** - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- **Maximum** - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.
- **Sum** - All values submitted for the matching metric added together. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of  $\text{Sum} / \text{SampleCount}$  during the specified period. By comparing this statistic with the Minimum and Maximum values, you can determine the full scope of a metric and how close the average use is to the Minimum and Maximum values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: Array of strings

Valid Values: Minimum | Maximum | Sum | Average | SampleCount

Required: Yes

## unit

The unit for the metric data request. Valid units depend on the metric data being requested. For the valid units with each available metric, see the `metricName` parameter.

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: Yes

## Response Syntax

```
{  
  "metricData": [  
    ...  
  ]  
}
```



```
{
  "average": number,
  "maximum": number,
  "minimum": number,
  "sampleCount": number,
  "sum": number,
  "timestamp": number,
  "unit": "string"
},
"metricName": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### metricData

An array of objects that describe the metric data returned.

Type: Array of [MetricDatapoint](#) objects

### metricName

The name of the metric returned.

Type: String

Valid Values: CPUUtilization | DatabaseConnections | DiskQueueDepth | FreeStorageSpace | NetworkReceiveThroughput | NetworkTransmitThroughput

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabaseParameters

Returns all of the runtime parameters offered by the underlying database software, or engine, for a specific database in Amazon Lightsail.

In addition to the parameter names and values, this operation returns other information about each parameter. This information includes whether changes require a reboot, whether the parameter is modifiable, the allowed values, and the data types.

## Request Syntax

```
{  
  "pageToken": "string",  
  "relationalDatabaseName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetRelationalDatabaseParameters` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

### [relationalDatabaseName](#)

The name of your database for which to get parameters.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "nextPageToken": "string",
  "parameters": [
    {
      "allowedValues": "string",
      "applyMethod": "string",
      "applyType": "string",
      "dataType": "string",
      "description": "string",
      "isModifiable": boolean,
      "parameterName": "string",
      "parameterValue": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetRelationalDatabaseParameters` request and specify the next page token using the `pageToken` parameter.

Type: String

### parameters

An object describing the result of your get relational database parameters request.

Type: Array of [RelationalDatabaseParameter](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabases

Returns information about all of your databases in Amazon Lightsail.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetRelationalDatabases request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "nextPageToken": "string",
  "relationalDatabases": [
    {
      "arn": "string",
      "backupRetentionEnabled": boolean,
      "caCertificateIdentifier": "string",
      "createdAt": number,
      "engine": "string",
      "engineVersion": "string",
      "hardware": {
```



```
    "cpuCount": number,
    "diskSizeInGb": number,
    "ramSizeInGb": number
  },
  "latestRestorableTime": number,
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "masterDatabaseName": "string",
  "masterEndpoint": {
    "address": "string",
    "port": number
  },
  "masterUsername": "string",
  "name": "string",
  "parameterApplyStatus": "string",
  "pendingMaintenanceActions": [
    {
      "action": "string",
      "currentApplyDate": number,
      "description": "string"
    }
  ],
  "pendingModifiedValues": {
    "backupRetentionEnabled": boolean,
    "engineVersion": "string",
    "masterUserPassword": "string"
  },
  "preferredBackupWindow": "string",
  "preferredMaintenanceWindow": "string",
  "publiclyAccessible": boolean,
  "relationalDatabaseBlueprintId": "string",
  "relationalDatabaseBundleId": "string",
  "resourceType": "string",
  "secondaryAvailabilityZone": "string",
  "state": "string",
  "supportCode": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
]
```

```
    }  
  ]  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextPageToken](#)

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetRelationalDatabases` request and specify the next page token using the `pageToken` parameter.

Type: String

### [relationalDatabases](#)

An object describing the result of your get relational databases request.

Type: Array of [RelationalDatabase](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetRelationalDatabaseSnapshot

Returns information about a specific database snapshot in Amazon Lightsail.

## Request Syntax

```
{
  "relationalDatabaseSnapshotName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseSnapshotName

The name of the database snapshot for which to get information.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "relationalDatabaseSnapshot": {
    "arn": "string",
    "createdAt": number,
    "engine": "string",
    "engineVersion": "string",
    "fromRelationalDatabaseArn": "string",
    "fromRelationalDatabaseBlueprintId": "string",
    "fromRelationalDatabaseBundleId": "string",
    "fromRelationalDatabaseName": "string",
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    }
  }
}
```

```
    },
    "name": "string",
    "resourceType": "string",
    "sizeInGb": number,
    "state": "string",
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### relationalDatabaseSnapshot

An object describing the specified database snapshot.

Type: [RelationalDatabaseSnapshot](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetRelationalDatabaseSnapshots

Returns information about all of your database snapshots in Amazon Lightsail.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetRelationalDatabaseSnapshots request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "nextPageToken": "string",
  "relationalDatabaseSnapshots": [
    {
      "arn": "string",
      "createdAt": number,
      "engine": "string",
      "engineVersion": "string",
      "fromRelationalDatabaseArn": "string",
      "fromRelationalDatabaseBlueprintId": "string",

```

```
    "fromRelationalDatabaseBundleId": "string",
    "fromRelationalDatabaseName": "string",
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "resourceType": "string",
    "sizeInGb": number,
    "state": "string",
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ]
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### nextPageToken

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetRelationalDatabaseSnapshots` request and specify the next page token using the `pageToken` parameter.

Type: String

### relationalDatabaseSnapshots

An object describing the result of your get relational database snapshots request.

Type: Array of [RelationalDatabaseSnapshot](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetSetupHistory

Returns detailed information for five of the most recent SetupInstanceHttps requests that were ran on the target instance.

## Request Syntax

```
{
  "pageToken": "string",
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial GetSetupHistory request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Length Constraints: Minimum length of 24. Maximum length of 40.

Pattern: `^[A-Za-z0-9+/=]+$`

Required: No

### [resourceName](#)

The name of the resource for which you are requesting information.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "nextPageToken": "string",
  "setupHistory": [
    {
      "executionDetails": [
        {
          "command": "string",
          "dateTime": number,
          "name": "string",
          "standardError": "string",
          "standardOutput": "string",
          "status": "string",
          "version": "string"
        }
      ],
      "operationId": "string",
      "request": {
        "certificateProvider": "string",
        "domainNames": [ "string" ],
        "instanceName": "string"
      },
      "resource": {
        "arn": "string",
        "createdAt": number,
        "location": {
          "availabilityZone": "string",
          "regionName": "string"
        },
        "name": "string",
        "resourceType": "string"
      },
      "status": "string"
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [nextPageToken](#)

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetSetupHistory` request and specify the next page token using the `pageToken` parameter.

Type: String

Length Constraints: Minimum length of 24. Maximum length of 40.

Pattern: `^[A-Za-z0-9+/=]+$`

## [setupHistory](#)

The historical information that's returned.

Type: Array of [SetupHistory](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# GetStaticIp

Returns information about an Amazon Lightsail static IP.

## Request Syntax

```
{  
  "staticIpName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### staticIpName

The name of the static IP in Lightsail.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{  
  "staticIp": {  
    "arn": "string",  
    "attachedTo": "string",  
    "createdAt": number,  
    "ipAddress": "string",  
    "isAttached": boolean,  
    "location": {  
      "availabilityZone": "string",  
      "regionName": "string"  
    },  
    "name": "string",  
    "resourceType": "string",  
    "supportCode": "string"  
  }
```

```
}  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [staticIp](#)

An array of key-value pairs containing information about the requested static IP.

Type: [StaticIp](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# GetStaticIps

Returns information about all static IPs in the user's account.

## Request Syntax

```
{
  "pageToken": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [pageToken](#)

The token to advance to the next page of results from your request.

To get a page token, perform an initial `GetStaticIps` request. If your results are paginated, the response will return a next page token that you can specify as the page token in a subsequent request.

Type: String

Required: No

## Response Syntax

```
{
  "nextPageToken": "string",
  "staticIps": [
    {
      "arn": "string",
      "attachedTo": "string",
      "createdAt": number,
      "ipAddress": "string",
      "isAttached": boolean,

```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "resourceType": "string",
    "supportCode": "string"
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [nextPageToken](#)

The token to advance to the next page of results from your request.

A next page token is not returned if there are no more results to display.

To get the next page of results, perform another `GetStaticIps` request and specify the next page token using the `pageToken` parameter.

Type: String

### [staticIps](#)

An array of key-value pairs containing information about your get static IPs request.

Type: Array of [StaticIp](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ImportKeyPair

Imports a public SSH key from a specific key pair.

## Request Syntax

```
{
  "keyPairName": "string",
  "publicKeyBase64": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [keyPairName](#)

The name of the key pair for which you want to import the public key.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### [publicKeyBase64](#)

A base64-encoded public key of the `ssh-rsa` type.

Type: String

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
  }
}
```



```
"id": "string",
"isTerminal": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"operationDetails": "string",
"operationType": "string",
"resourceName": "string",
"resourceType": "string",
"status": "string",
"statusChangedAt": number
}
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# IsVpcPeered

Returns a Boolean value indicating whether your Lightsail VPC is peered.

## Response Syntax

```
{
  "isPeered": boolean
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### isPeered

Returns `true` if the Lightsail VPC is peered; otherwise, `false`.

Type: Boolean

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# OpenInstancePublicPorts

Opens ports for a specific Amazon Lightsail instance, and specifies the IP addresses allowed to connect to the instance through the ports, and the protocol.

The `OpenInstancePublicPorts` action supports tag-based access control via resource tags applied to the resource identified by `instanceName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceName": "string",
  "portInfo": {
    "cidrListAliases": [ "string" ],
    "cidrs": [ "string" ],
    "fromPort": number,
    "ipv6Cidrs": [ "string" ],
    "protocol": "string",
    "toPort": number
  }
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance for which to open ports.

Type: String

Pattern: `\w[\w\-\ ]*\w`

Required: Yes

### portInfo

An object to describe the ports to open for the specified instance.

Type: [PortInfo](#) object

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [operation](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# PeerVpc

Peers the Lightsail VPC with the user's default VPC.

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# PutAlarm

Creates or updates an alarm, and associates it with the specified metric.

An alarm is used to monitor a single metric for one of your resources. When a metric condition is met, the alarm can notify you by email, SMS text message, and a banner displayed on the Amazon Lightsail console. For more information, see [Alarms in Amazon Lightsail](#).

When this action creates an alarm, the alarm state is immediately set to `INSUFFICIENT_DATA`. The alarm is then evaluated and its state is set appropriately. Any actions associated with the new state are then executed.

When you update an existing alarm, its state is left unchanged, but the update completely overwrites the previous configuration of the alarm. The alarm is then evaluated with the updated configuration.

## Request Syntax

```
{
  "alarmName": "string",
  "comparisonOperator": "string",
  "contactProtocols": [ "string" ],
  "datapointsToAlarm": number,
  "evaluationPeriods": number,
  "metricName": "string",
  "monitoredResourceName": "string",
  "notificationEnabled": boolean,
  "notificationTriggers": [ "string" ],
  "threshold": number,
  "treatMissingData": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### alarmName

The name for the alarm. Specify the name of an existing alarm to update, and overwrite the previous configuration of the alarm.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### comparisonOperator

The arithmetic operation to use when comparing the specified statistic to the threshold. The specified statistic value is used as the first operand.

Type: String

Valid Values: `GreaterThanOrEqualToThreshold` | `GreaterThanThreshold` | `LessThanThreshold` | `LessThanOrEqualToThreshold`

Required: Yes

### contactProtocols

The contact protocols to use for the alarm, such as Email, SMS (text messaging), or both.

A notification is sent via the specified contact protocol if notifications are enabled for the alarm, and when the alarm is triggered.

A notification is not sent if a contact protocol is not specified, if the specified contact protocol is not configured in the AWS Region, or if notifications are not enabled for the alarm using the `notificationEnabled` parameter.

Use the `CreateContactMethod` action to configure a contact protocol in an AWS Region.

Type: Array of strings

Valid Values: `Email` | `SMS`

Required: No

### datapointsToAlarm

The number of data points that must be not within the specified threshold to trigger the alarm. If you are setting an "M out of N" alarm, this value (`datapointsToAlarm`) is the M.

Type: Integer

Required: No

## evaluationPeriods

The number of most recent periods over which data is compared to the specified threshold. If you are setting an "M out of N" alarm, this value (evaluationPeriods) is the N.

If you are setting an alarm that requires that a number of consecutive data points be breaching to trigger the alarm, this value specifies the rolling period of time in which data points are evaluated.

Each evaluation period is five minutes long. For example, specify an evaluation period of 24 to evaluate a metric over a rolling period of two hours.

You can specify a minimum valuation period of 1 (5 minutes), and a maximum evaluation period of 288 (24 hours).

Type: Integer

Required: Yes

## metricName

The name of the metric to associate with the alarm.

You can configure up to two alarms per metric.

The following metrics are available for each resource type:

- **Instances:** BurstCapacityPercentage, BurstCapacityTime, CPUUtilization, NetworkIn, NetworkOut, StatusCheckFailed, StatusCheckFailed\_Instance, and StatusCheckFailed\_System.
- **Load balancers:** ClientTLSNegotiationErrorCount, HealthyHostCount, UnhealthyHostCount, HTTPCode\_LB\_4XX\_Count, HTTPCode\_LB\_5XX\_Count, HTTPCode\_Instance\_2XX\_Count, HTTPCode\_Instance\_3XX\_Count, HTTPCode\_Instance\_4XX\_Count, HTTPCode\_Instance\_5XX\_Count, InstanceResponseTime, RejectedConnectionCount, and RequestCount.
- **Relational databases:** CPUUtilization, DatabaseConnections, DiskQueueDepth, FreeStorageSpace, NetworkReceiveThroughput, and NetworkTransmitThroughput.

For more information about these metrics, see [Metrics available in Lightsail](#).

Type: String



Valid Values: CPUUtilization | NetworkIn | NetworkOut | StatusCheckFailed | StatusCheckFailed\_Instance | StatusCheckFailed\_System | ClientTLSNegotiationErrorCount | HealthyHostCount | UnhealthyHostCount | HTTPCode\_LB\_4XX\_Count | HTTPCode\_LB\_5XX\_Count | HTTPCode\_Instance\_2XX\_Count | HTTPCode\_Instance\_3XX\_Count | HTTPCode\_Instance\_4XX\_Count | HTTPCode\_Instance\_5XX\_Count | InstanceResponseTime | RejectedConnectionCount | RequestCount | DatabaseConnections | DiskQueueDepth | FreeStorageSpace | NetworkReceiveThroughput | NetworkTransmitThroughput | BurstCapacityTime | BurstCapacityPercentage

Required: Yes

### monitoredResourceName

The name of the Lightsail resource that will be monitored.

Instances, load balancers, and relational databases are the only Lightsail resources that can currently be monitored by alarms.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### notificationEnabled

Indicates whether the alarm is enabled.

Notifications are enabled by default if you don't specify this parameter.

Type: Boolean

Required: No

### notificationTriggers

The alarm states that trigger a notification.

An alarm has the following possible states:

- ALARM - The metric is outside of the defined threshold.

- `INSUFFICIENT_DATA` - The alarm has just started, the metric is not available, or not enough data is available for the metric to determine the alarm state.
- `OK` - The metric is within the defined threshold.

When you specify a notification trigger, the `ALARM` state must be specified. The `INSUFFICIENT_DATA` and `OK` states can be specified in addition to the `ALARM` state.

- If you specify `OK` as an alarm trigger, a notification is sent when the alarm switches from an `ALARM` or `INSUFFICIENT_DATA` alarm state to an `OK` state. This can be thought of as an *all clear* alarm notification.
- If you specify `INSUFFICIENT_DATA` as the alarm trigger, a notification is sent when the alarm switches from an `OK` or `ALARM` alarm state to an `INSUFFICIENT_DATA` state.

The notification trigger defaults to `ALARM` if you don't specify this parameter.

Type: Array of strings

Valid Values: `OK` | `ALARM` | `INSUFFICIENT_DATA`

Required: No

### threshold

The value against which the specified statistic is compared.

Type: Double

Required: Yes

### treatMissingData

Sets how this alarm will handle missing data points.

An alarm can treat missing data in the following ways:

- `breaching` - Assume the missing data is not within the threshold. Missing data counts towards the number of times the metric is not within the threshold.
- `notBreaching` - Assume the missing data is within the threshold. Missing data does not count towards the number of times the metric is not within the threshold.
- `ignore` - Ignore the missing data. Maintains the current alarm state.
- `missing` - Missing data is treated as missing.

If `treatMissingData` is not specified, the default behavior of `missing` is used.

Type: String

Valid Values: `breaching` | `notBreaching` | `ignore` | `missing`

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# PutInstancePublicPorts

Opens ports for a specific Amazon Lightsail instance, and specifies the IP addresses allowed to connect to the instance through the ports, and the protocol. This action also closes all currently open ports that are not included in the request. Include all of the ports and the protocols you want to open in your PutInstancePublicPortsrequest. Or use the OpenInstancePublicPorts action to open ports without closing currently open ports.

The PutInstancePublicPorts action supports tag-based access control via resource tags applied to the resource identified by instanceName. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceName": "string",
  "portInfos": [
    {
      "cidrListAliases": [ "string" ],
      "cidrs": [ "string" ],
      "fromPort": number,
      "ipv6Cidrs": [ "string" ],
      "protocol": "string",
      "toPort": number
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance for which to open ports.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

### [portInfos](#)

An array of objects to describe the ports to open for the specified instance.

Type: Array of [PortInfo](#) objects

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [operation](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400



## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# RebootInstance

Restarts a specific instance.

The `reboot instance` operation supports tag-based access control via resource tags applied to the resource identified by `instance name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "instanceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### instanceName

The name of the instance to reboot.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
    }
  ]
}
```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)

- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# RebootRelationalDatabase

Restarts a specific database in Amazon Lightsail.

The `reboot relational database` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "relationalDatabaseName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseName

The name of your database to reboot.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,

```

```
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)



- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# RegisterContainerImage

Registers a container image to your Amazon Lightsail container service.

## Note

This action is not required if you install and use the Lightsail Control (lightsailctl) plugin to push container images to your Lightsail container service. For more information, see [Pushing and managing container images on your Amazon Lightsail container services](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "digest": "string",
  "label": "string",
  "serviceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### digest

The digest of the container image to be registered.

Type: String

Required: Yes

### label

The label for the container image when it's registered to the container service.

Use a descriptive label that you can use to track the different versions of your registered container images.

Use the `GetContainerImages` action to return the container images registered to a Lightsail container service. The label is the `<imagelabel>` portion of the following image name example:

- `:container-service-1.<imagelabel>.1`

If the name of your container service is `mycontainerservice`, and the label that you specify is `mystaticwebsite`, then the name of the registered container image will be `:mycontainerservice.mystaticwebsite.1`.

The number at the end of these image name examples represents the version of the registered container image. If you push and register another container image to the same Lightsail container service, with the same label, then the version number for the new registered container image will be 2. If you push and register another container image, the version number will be 3, and so on.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 53.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

### serviceName

The name of the container service for which to register a container image.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
  "containerImage": {
    "createdAt": number,
    "digest": "string",
```

```
    "image": "string"  
  }  
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### containerImage

An object that describes a container image that is registered to a Lightsail container service

Type: [ContainerImage](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ReleaseStaticIp

Deletes a specific static IP from your account.

## Request Syntax

```
{  
  "staticIpName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### staticIpName

The name of the static IP to delete.

Type: String

Pattern: `\w[\\w\\-]*\\w`

Required: Yes

## Response Syntax

```
{  
  "operations": [  
    {  
      "createdAt": number,  
      "errorCode": "string",  
      "errorDetails": "string",  
      "id": "string",  
      "isTerminal": boolean,  
      "location": {  
        "availabilityZone": "string",  
        "regionName": "string"  
      },  
      "operationDetails": "string",
```

```
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)



- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# ResetDistributionCache

Deletes currently cached content from your Amazon Lightsail content delivery network (CDN) distribution.

After resetting the cache, the next time a content request is made, your distribution pulls, serves, and caches it from the origin.

## Request Syntax

```
{  
  "distributionName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### distributionName

The name of the distribution for which to reset cache.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## Response Syntax

```
{  
  "createTime": number,  
  "operation": {  
    "createdAt": number,  
    "errorCode": "string",  
    "errorDetails": "string",  
    "id": "string",
```

```
"isTerminal": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"operationDetails": "string",
"operationType": "string",
"resourceName": "string",
"resourceType": "string",
"status": "string",
"statusChangedAt": number
},
"status": "string"
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### createTime

The timestamp of the reset cache request (1479734909.17) in Unix time format.

Type: Timestamp

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

### status

The status of the reset cache request.

Type: String

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# SendContactMethodVerification

Sends a verification request to an email contact method to ensure it's owned by the requester. SMS contact methods don't need to be verified.

A contact method is used to send you notifications about your Amazon Lightsail resources. You can add one email address and one mobile phone number contact method in each AWS Region. However, SMS text messaging is not supported in some AWS Regions, and SMS text messages cannot be sent to some countries/regions. For more information, see [Notifications in Amazon Lightsail](#).

A verification request is sent to the contact method when you initially create it. Use this action to send another verification request if a previous verification request was deleted, or has expired.

## Important

Notifications are not sent to an email contact method until after it is verified, and confirmed as valid.

## Request Syntax

```
{  
  "protocol": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### protocol

The protocol to verify, such as Email or SMS (text messaging).

Type: String

Valid Values: Email

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400



## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# SetIpAddressType

Sets the IP address type for an Amazon Lightsail resource.

Use this action to enable dual-stack for a resource, which enables IPv4 and IPv6 for the specified resource. Alternately, you can use this action to disable dual-stack, and enable IPv4 only.

## Request Syntax

```
{
  "acceptBundleUpdate": boolean,
  "ipAddressType": "string",
  "resourceName": "string",
  "resourceType": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [acceptBundleUpdate](#)

Required parameter to accept the instance bundle update when changing to, and from, IPv6-only.

#### Note

An instance bundle will change when switching from `dual-stack` or `ipv4`, to `ipv6`. It also changes when switching from `ipv6`, to `dual-stack` or `ipv4`.

You must include this parameter in the command to update the bundle. For example, if you switch from `dual-stack` to `ipv6`, the bundle will be updated, and billing for the IPv6-only instance bundle begins immediately.

Type: Boolean

Required: No

## ipAddressType

The IP address type to set for the specified resource.

The possible values are `ipv4` for IPv4 only, `ipv6` for IPv6 only, and `dualstack` for IPv4 and IPv6.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: Yes

## resourceName

The name of the resource for which to set the IP address type.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

## resourceType

The resource type.

The resource values are `Distribution`, `Instance`, and `LoadBalancer`.

### Note

Distribution-related APIs are available only in the N. Virginia (`us-east-1`) AWS Region. Set your AWS Region configuration to `us-east-1` to create, view, or edit distributions.

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` |

CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# SetResourceAccessForBucket

Sets the Amazon Lightsail resources that can access the specified Lightsail bucket.

Lightsail buckets currently support setting access for Lightsail instances in the same AWS Region.

## Request Syntax

```
{
  "access": "string",
  "bucketName": "string",
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [access](#)

The access setting.

The following access settings are available:

- `allow` - Allows access to the bucket and its objects.
- `deny` - Denies access to the bucket and its objects. Use this setting to remove access for a resource previously set to `allow`.

Type: String

Valid Values: `allow` | `deny`

Required: Yes

### [bucketName](#)

The name of the bucket for which to set access to another Lightsail resource.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

### resourceName

The name of the Lightsail instance for which to set bucket access. The instance must be in a running or stopped state.

Type: String

Pattern: `\w[\w\-*]\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.



The following data is returned in JSON format by the service.

## operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# SetupInstanceHttps

Creates an SSL/TLS certificate that secures traffic for your website. After the certificate is created, it is installed on the specified Lightsail instance.

If you provide more than one domain name in the request, at least one name must be less than or equal to 63 characters in length.

## Request Syntax

```
{
  "certificateProvider": "string",
  "domainNames": [ "string" ],
  "emailAddress": "string",
  "instanceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### certificateProvider

The certificate authority that issues the SSL/TLS certificate.

Type: String

Valid Values: LetsEncrypt

Required: Yes

### domainNames

The name of the domain and subdomains that were specified for the SSL/TLS certificate.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 4. Maximum length of 253.

Pattern: `^[a-zA-Z0-9\-\_]{1,63}(\.[a-zA-Z0-9\-\_]{1,63}){0,8}(\.[a-zA-Z]{2,63})$`

Required: Yes

### emailAddress

The contact method for SSL/TLS certificate renewal alerts. You can enter one email address.

Type: String

Length Constraints: Minimum length of 6. Maximum length of 254.

Pattern: `^[\\w!#$%&.'*+\\/=/?^_\\x60{|}~\\-]{1,64}@[a-zA-Z0-9\\-]{1,63}(\.[a-zA-Z0-9\\-]{1,63}){0,8}(\.[a-zA-Z]{2,63})$`

Required: Yes

### instanceName

The name of the Lightsail instance.

Type: String

Pattern: `\\w[\\w\\-]*\\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
    }
  ]
}
```

```
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### [operations](#)

The available API operations for SetupInstanceHttps.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartGUISession

Initiates a graphical user interface (GUI) session that's used to access a virtual computer's operating system and application. The session will be active for 1 hour. Use this action to resume the session after it expires.

## Request Syntax

```
{
  "resourceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceName

The resource name.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
```

```
        "availabilityZone": "string",
        "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
}
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

The available API operations.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.



**Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

**NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

**ServiceException**

A general service exception.

HTTP Status Code: 500

**UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)

- [AWS SDK for Ruby V3](#)

# StartInstance

Starts a specific Amazon Lightsail instance from a stopped state. To restart an instance, use the `reboot instance` operation.

## Note

When you start a stopped instance, Lightsail assigns a new public IP address to the instance. To use the same IP address after stopping and starting an instance, create a static IP address and attach it to the instance. For more information, see the [Amazon Lightsail Developer Guide](#).

The `start instance` operation supports tag-based access control via resource tags applied to the resource identified by `instance name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{  
  "instanceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [instanceName](#)

The name of the instance (a virtual private server) to start.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StartRelationalDatabase

Starts a specific database from a stopped state in Amazon Lightsail. To restart a database, use the `reboot relational database` operation.

The `start relational database` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "relationalDatabaseName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseName

The name of your database to start.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
    }
  ]
}
```

```
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**


Lightsail throws this exception when an account is still in the setup in progress state.



HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopGUISession

Terminates a web-based Amazon DCV session that's used to access a virtual computer's operating system or application. The session will close and any unsaved data will be lost.

## Request Syntax

```
{  
  "resourceName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceName

The resource name.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

## Response Syntax

```
{  
  "operations": [  
    {  
      "createdAt": number,  
      "errorCode": "string",  
      "errorDetails": "string",  
      "id": "string",  
      "isTerminal": boolean,  
      "location": {  
        "availabilityZone": "string",  
        "regionName": "string"  
      },  
      "operationDetails": "string",
```

```
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

The available API operations.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopInstance

Stops a specific Amazon Lightsail instance that is currently running.

## Note

When you start a stopped instance, Lightsail assigns a new public IP address to the instance. To use the same IP address after stopping and starting an instance, create a static IP address and attach it to the instance. For more information, see the [Amazon Lightsail Developer Guide](#).

The `stop` instance operation supports tag-based access control via resource tags applied to the resource identified by `instance` `name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "force": boolean,
  "instanceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### force

When set to `True`, forces a Lightsail instance that is stuck in a stopping state to stop.

## Important

Only use the `force` parameter if your instance is stuck in the stopping state. In any other state, your instance should stop normally without adding this parameter to your API request.

Type: Boolean

Required: No

### instanceName

The name of the instance (a virtual private server) to stop.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400



## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# StopRelationalDatabase

Stops a specific database that is currently running in Amazon Lightsail.

## Note

If you don't manually start your database instance after it has been stopped for seven consecutive days, Amazon Lightsail automatically starts it for you. This action helps ensure that your database instance doesn't fall behind on any required maintenance updates.

The `stop relational database` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "relationalDatabaseName": "string",
  "relationalDatabaseSnapshotName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### relationalDatabaseName

The name of your database to stop.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### relationalDatabaseSnapshotName

The name of your new database snapshot to be created before stopping your database.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# TagResource

Adds one or more tags to the specified Amazon Lightsail resource. Each resource can have a maximum of 50 tags. Each tag consists of a key and an optional value. Tag keys must be unique per resource. For more information about tags, see the [Amazon Lightsail Developer Guide](#).

The `tag_resource` operation supports tag-based access control via request tags and resource tags applied to the resource identified by `resource_name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "resourceArn": "string",
  "resourceName": "string",
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceArn

The Amazon Resource Name (ARN) of the resource to which you want to add a tag.

Type: String

Pattern: `^arn:(aws[^:]*):([a-zA-Z0-9-]+):([a-z0-9-]+):([0-9]+):([a-zA-Z]+)/([a-zA-Z0-9-]+)$`

Required: No

### resourceName

The name of the resource to which you are adding tags.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

### tags

The tag key and optional value.

Type: Array of [Tag](#) objects

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400



## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# TestAlarm

Tests an alarm by displaying a banner on the Amazon Lightsail console. If a notification trigger is configured for the specified alarm, the test also sends a notification to the notification protocol (Email and/or SMS) configured for the alarm.

An alarm is used to monitor a single metric for one of your resources. When a metric condition is met, the alarm can notify you by email, SMS text message, and a banner displayed on the Amazon Lightsail console. For more information, see [Alarms in Amazon Lightsail](#).

## Request Syntax

```
{
  "alarmName": "string",
  "state": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### alarmName

The name of the alarm to test.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

### state

The alarm state to test.

An alarm has the following possible states that can be tested:

- ALARM - The metric is outside of the defined threshold.
- INSUFFICIENT\_DATA - The alarm has just started, the metric is not available, or not enough data is available for the metric to determine the alarm state.

- OK - The metric is within the defined threshold.

Type: String

Valid Values: OK | ALARM | INSUFFICIENT\_DATA

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UnpeerVpc

Unpeers the Lightsail VPC from the user's default VPC.

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

## AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

## AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

## InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

## NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# UntagResource

Deletes the specified set of tag keys and their values from the specified Amazon Lightsail resource.

The `untag_resource` operation supports tag-based access control via request tags and resource tags applied to the resource identified by `resource_name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "resourceArn": "string",
  "resourceName": "string",
  "tagKeys": [ "string" ]
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### resourceArn

The Amazon Resource Name (ARN) of the resource from which you want to remove a tag.

Type: String

Pattern: `^arn:(aws[^:]*):([a-zA-Z0-9-]+):([a-z0-9-]+):([0-9]+):([a-zA-Z]+)/([a-zA-Z0-9-]+)$`

Required: No

### resourceName

The name of the resource from which you are removing a tag.

Type: String

Pattern: `\w[\w\-*]\w`

Required: Yes

## tagKeys

The tag keys to delete from the specified resource.

Type: Array of strings

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateBucket

Updates an existing Amazon Lightsail bucket.

Use this action to update the configuration of an existing bucket, such as versioning, public accessibility, and the AWS accounts that can access the bucket.

## Request Syntax

```
{
  "accessLogConfig": {
    "destination": "string",
    "enabled": boolean,
    "prefix": "string"
  },
  "accessRules": {
    "allowPublicOverrides": boolean,
    "getObject": "string"
  },
  "bucketName": "string",
  "readonlyAccessAccounts": [ "string" ],
  "versioning": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [accessLogConfig](#)

An object that describes the access log configuration for the bucket.

Type: [BucketAccessLogConfig](#) object

Required: No

### [accessRules](#)

An object that sets the public accessibility of objects in the specified bucket.

Type: [AccessRules](#) object

Required: No

### [bucketName](#)

The name of the bucket to update.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

### [readonlyAccessAccounts](#)

An array of strings to specify the AWS account IDs that can access the bucket.

You can give a maximum of 10 AWS accounts access to a bucket.

Type: Array of strings

Array Members: Maximum number of 10 items.

Pattern: `.*\S.*`

Required: No

### [versioning](#)

Specifies whether to enable or suspend versioning of objects in the bucket.

The following options can be specified:

- `Enabled` - Enables versioning of objects in the specified bucket.
- `Suspended` - Suspends versioning of objects in the specified bucket. Existing object versions are retained.

Type: String

Pattern: `.*\S.*`

Required: No

## Response Syntax

```
{
  "bucket": {
    "ableToUpdateBundle": boolean,
    "accessLogConfig": {
      "destination": "string",
      "enabled": boolean,
      "prefix": "string"
    },
    "accessRules": {
      "allowPublicOverrides": boolean,
      "getObject": "string"
    },
    "arn": "string",
    "bundleId": "string",
    "createdAt": number,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "name": "string",
    "objectVersioning": "string",
    "readonlyAccessAccounts": [ "string" ],
    "resourcesReceivingAccess": [
      {
        "name": "string",
        "resourceType": "string"
      }
    ],
    "resourceType": "string",
    "state": {
      "code": "string",
      "message": "string"
    },
    "supportCode": "string",
    "tags": [
      {
        "key": "string",
        "value": "string"
      }
    ],
    "url": "string"
  }
}
```

```
},
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### bucket

An object that describes the bucket that is updated.

Type: [Bucket](#) object

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

### UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateBucketBundle

Updates the bundle, or storage plan, of an existing Amazon Lightsail bucket.

A bucket bundle specifies the monthly cost, storage space, and data transfer quota for a bucket. You can update a bucket's bundle only one time within a monthly AWS billing cycle. To determine if you can update a bucket's bundle, use the [GetBuckets](#) action. The `ableToUpdateBundle` parameter in the response will indicate whether you can currently update a bucket's bundle.

Update a bucket's bundle if it's consistently going over its storage space or data transfer quota, or if a bucket's usage is consistently in the lower range of its storage space or data transfer quota. Due to the unpredictable usage fluctuations that a bucket might experience, we strongly recommend that you update a bucket's bundle only as a long-term strategy, instead of as a short-term, monthly cost-cutting measure. Choose a bucket bundle that will provide the bucket with ample storage space and data transfer for a long time to come.

## Request Syntax

```
{
  "bucketName": "string",
  "bundleId": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [bucketName](#)

The name of the bucket for which to update the bundle.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: Yes

## bundleId

The ID of the new bundle to apply to the bucket.

Use the [GetBucketBundles](#) action to get a list of bundle IDs that you can specify.

Type: String

Pattern: `.*\S.*`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## [operations](#)

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateContainerService

Updates the configuration of your Amazon Lightsail container service, such as its power, scale, and public domain names.

## Request Syntax

```
{
  "isDisabled": boolean,
  "power": "string",
  "privateRegistryAccess": {
    "ecrImagePullerRole": {
      "isActive": boolean
    }
  },
  "publicDomainNames": {
    "string" : [ "string" ]
  },
  "scale": number,
  "serviceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### isDisabled

A Boolean value to indicate whether the container service is disabled.

Type: Boolean

Required: No

### power

The power for the container service.

The power specifies the amount of memory, vCPUs, and base monthly cost of each node of the container service. The power and scale of a container service makes up its configured capacity.

To determine the monthly price of your container service, multiply the base price of the power with the scale (the number of nodes) of the service.

Use the `GetContainerServicePowers` action to view the specifications of each power option.

Type: String

Valid Values: nano | micro | small | medium | large | xlarge

Required: No

### [privateRegistryAccess](#)

An object to describe the configuration for the container service to access private container image repositories, such as Amazon Elastic Container Registry (Amazon ECR) private repositories.

For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

Type: [PrivateRegistryAccessRequest](#) object

Required: No

### [publicDomainNames](#)

The public domain names to use with the container service, such as `example.com` and `www.example.com`.

You can specify up to four public domain names for a container service. The domain names that you specify are used when you create a deployment with a container configured as the public endpoint of your container service.

If you don't specify public domain names, then you can use the default domain of the container service.

#### **Important**

You must create and validate an SSL/TLS certificate before you can use public domain names with your container service. Use the `CreateCertificate` action to create a certificate for the public domain names you want to use with your container service.



You can specify public domain names using a string to array map as shown in the example later on this page.

Type: String to array of strings map

Required: No

### scale

The scale for the container service.

The scale specifies the allocated compute nodes of the container service. The power and scale of a container service makes up its configured capacity. To determine the monthly price of your container service, multiply the base price of the power with the scale (the number of nodes) of the service.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

### serviceName

The name of the container service to update.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: Yes

## Response Syntax

```
{
  "containerService": {
    "arn": "string",
    "containerServiceName": "string",
    "createdAt": number,
    "currentDeployment": {
      "containers": {
        "string": {
          "command": [ "string" ],

```

```
    "environment": {
      "string": "string"
    },
    "image": "string",
    "ports": {
      "string": "string"
    }
  }
},
"createdAt": number,
"publicEndpoint": {
  "containerName": "string",
  "containerPort": number,
  "healthCheck": {
    "healthyThreshold": number,
    "intervalSeconds": number,
    "path": "string",
    "successCodes": "string",
    "timeoutSeconds": number,
    "unhealthyThreshold": number
  }
},
"state": "string",
"version": number
},
"isDisabled": boolean,
"location": {
  "availabilityZone": "string",
  "regionName": "string"
},
"nextDeployment": {
  "containers": {
    "string": {
      "command": [ "string" ],
      "environment": {
        "string": "string"
      },
      "image": "string",
      "ports": {
        "string": "string"
      }
    }
  }
},
"createdAt": number,
```

```
    "publicEndpoint": {
      "containerName": "string",
      "containerPort": number,
      "healthCheck": {
        "healthyThreshold": number,
        "intervalSeconds": number,
        "path": "string",
        "successCodes": "string",
        "timeoutSeconds": number,
        "unhealthyThreshold": number
      }
    },
    "state": "string",
    "version": number
  },
  "power": "string",
  "powerId": "string",
  "principalArn": "string",
  "privateDomainName": "string",
  "privateRegistryAccess": {
    "ecrImagePullerRole": {
      "isActive": boolean,
      "principalArn": "string"
    }
  },
  "publicDomainNames": {
    "string" : [ "string" ]
  },
  "resourceType": "string",
  "scale": number,
  "state": "string",
  "stateDetail": {
    "code": "string",
    "message": "string"
  },
  "tags": [
    {
      "key": "string",
      "value": "string"
    }
  ],
  "url": "string"
}
```

```
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### containerService

An object that describes a container service.

Type: [ContainerService](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **Examples**

In the following example or examples, the Authorization header contents (AUTHPARAMS) must be replaced with an AWS Signature Version 4 signature. For more information about creating these signatures, see [Signature Version 4 Signing Process](#) in the *AWS General Reference*.

You need to learn how to sign HTTP requests only if you intend to manually create them. When you use the [AWS Command Line Interface \(AWS CLI\)](#) or one of the [AWS SDKs](#) to make requests to AWS, these tools automatically sign the requests for you with the access key that you specify when you configure the tools. When you use these tools, you don't need to learn how to sign requests yourself.

### **Update container service**

The following example updates an existing container service named `container-service-1` in the `us-west-2` AWS Region by adding the `example.com`, `applications.example.com`, `www.example.com`, and `containers.example.com` public domains of the `example-com` SSL/TLS certificate.

### **Sample Request**

```
POST / HTTP/1.1
Host: lightsail.us-west-2.amazonaws.com
Accept-Encoding: identity
X-Amz-Target: Lightsail_20161128.UpdateContainerService
Content-Type: application/x-amz-json-1.1
User-Agent: AGENT
X-Amz-Date: 20201022T203059Z
```

Authorization: AUTHPARAMS

Content-Length: 192

```
{
  "serviceName": "myservice",
  "isDisabled": false,
  "publicDomainNames": {
    "example-com": [
      "example.com",
      "applications.example.com",
      "www.example.com",
      "containers.example.com"
    ]
  }
}
```

## Sample Response

HTTP/1.1 200 OK

Server: Server

Date: Thu, 22 Oct 2020 20:31:00 GMT

Content-Type: application/x-amz-json-1.1

Content-Length: 1178

x-amzn-RequestId: d198e00c-70c7-47e4-afa7-2EXAMPLE6f5a

Connection: keep-alive

```
{
  "containerService": {
    "arn": "arn:aws:lightsail:us-
west-2:111122223333:ContainerService/1724babe-944a-4c49-887a-e7EXAMPLEe34",
    "containerServiceName": "myservice",
    "createdAt": 1.602859922E9,
    "currentDeployment": {
      "containers": {
        "mystaticwebsite": {
          "command": [],
          "environment": {},
          "image": "httpd",
          "ports": {"80": "HTTP"}
        }
      }
    },
    "createdAt": 1.603393327E9,
    "publicEndpoint": {
```

```
        "containerName": "mystaticwebsite",
        "containerPort": 80,
        "healthCheck": {
            "healthyThreshold": 2,
            "intervalSeconds": 5,
            "path": "/",
            "successCodes": "200-499",
            "timeoutSeconds": 2,
            "unhealthyThreshold": 2
        }
    },
    "state": "ACTIVE",
    "version": 5
},
"isDisabled": false,
"location": {
    "availabilityZone": "all",
    "regionName": "us-west-2"
},
"power": "nano",
"powerId": "nano-1",
"principalArn": "arn:aws:iam::111122223333:role/amazon/lightsail/us-west-2/containers/my-service/1blaioEXAMPLEa1td8sgmnhmoEXAMPLE8tetach1pcir6773v4g",
"privateDomainName": "my-service.service.local",
"publicDomainNames": {
    "example-com": [
        "example.com",
        "applications.example.com",
        "www.example.com",
        "containers.example.com"
    ]
},
"resourceType": "ContainerService",
"scale": 1,
"state": "UPDATING",
"tags": [],
"url": "https://my-service.urEXAMPLE1234.us-west-2.cs.amazonlightsail.com/"
}
}
```

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# UpdateDistribution

Updates an existing Amazon Lightsail content delivery network (CDN) distribution.

Use this action to update the configuration of your existing distribution.

## Request Syntax

```
{
  "cacheBehaviors": [
    {
      "behavior": "string",
      "path": "string"
    }
  ],
  "cacheBehaviorSettings": {
    "allowedHTTPMethods": "string",
    "cachedHTTPMethods": "string",
    "defaultTTL": number,
    "forwardedCookies": {
      "cookiesAllowList": [ "string" ],
      "option": "string"
    },
    "forwardedHeaders": {
      "headersAllowList": [ "string" ],
      "option": "string"
    },
    "forwardedQueryStrings": {
      "option": boolean,
      "queryStringsAllowList": [ "string" ]
    },
    "maximumTTL": number,
    "minimumTTL": number
  },
  "certificateName": "string",
  "defaultCacheBehavior": {
    "behavior": "string"
  },
  "distributionName": "string",
  "isEnabled": boolean,
  "origin": {
    "name": "string",
    "protocolPolicy": "string",
```

```
    "regionName": "string",
    "responseTimeout": number
  },
  "useDefaultCertificate": boolean,
  "viewerMinimumTlsProtocolVersion": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [cacheBehaviors](#)

An array of objects that describe the per-path cache behavior for the distribution.

Type: Array of [CacheBehaviorPerPath](#) objects

Required: No

### [cacheBehaviorSettings](#)

An object that describes the cache behavior settings for the distribution.

#### Note

The `cacheBehaviorSettings` specified in your `UpdateDistributionRequest` will replace your distribution's existing settings.

Type: [CacheSettings](#) object

Required: No

### [certificateName](#)

The name of the SSL/TLS certificate that you want to attach to the distribution.

Only certificates with a status of ISSUED can be attached to a distribution.

Use the [GetCertificates](#) action to get a list of certificate names that you can specify.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### defaultCacheBehavior

An object that describes the default cache behavior for the distribution.

Type: [CacheBehavior](#) object

Required: No

### distributionName

The name of the distribution to update.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

### isEnabled

Indicates whether to enable the distribution.

Type: Boolean

Required: No

### origin

An object that describes the origin resource for the distribution, such as a Lightsail instance, bucket, or load balancer.

The distribution pulls, caches, and serves content from the origin.

Type: [InputOrigin](#) object

Required: No

### useDefaultCertificate

Indicates whether the default SSL/TLS certificate is attached to the distribution. The default value is `true`. When `true`, the distribution uses the default domain name such as `d111111abcdef8.cloudfront.net`.

Set this value to `false` to attach a new certificate to the distribution.

Type: Boolean

Required: No

### viewerMinimumTlsProtocolVersion

Use this parameter to update the minimum TLS protocol version for the SSL/TLS certificate that's attached to the distribution.

Type: String

Valid Values: `TLSv1.1_2016` | `TLSv1.2_2018` | `TLSv1.2_2019` | `TLSv1.2_2021`

Required: No

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateDistributionBundle

Updates the bundle of your Amazon Lightsail content delivery network (CDN) distribution.

A distribution bundle specifies the monthly network transfer quota and monthly cost of your distribution.

Update your distribution's bundle if your distribution is going over its monthly network transfer quota and is incurring an overage fee.

You can update your distribution's bundle only one time within your monthly AWS billing cycle. To determine if you can update your distribution's bundle, use the `GetDistributions` action. The `ableToUpdateBundle` parameter in the result will indicate whether you can currently update your distribution's bundle.

## Request Syntax

```
{
  "bundleId": "string",
  "distributionName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### bundleId

The bundle ID of the new bundle to apply to your distribution.

Use the `GetDistributionBundles` action to get a list of distribution bundle IDs that you can specify.

Type: String

Required: No

### distributionName

The name of the distribution for which to update the bundle.

Use the `GetDistributions` action to get a list of distribution names that you can specify.

Type: String

Pattern: `\w[\w\-]*\w`

Required: No

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An object that describes the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object



## Errors

For information about the errors that are common to all actions, see [Common Errors](#).


### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

### UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateDomainEntry

Updates a domain recordset after it is created.

The `update domain entry` operation supports tag-based access control via resource tags applied to the resource identified by `domain name`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "domainEntry": {
    "id": "string",
    "isAlias": boolean,
    "name": "string",
    "options": {
      "string" : "string"
    },
    "target": "string",
    "type": "string"
  },
  "domainName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### domainEntry

An array of key-value pairs containing information about the domain entry.

Type: [DomainEntry](#) object

Required: Yes

### domainName

The name of the domain recordset to update.

Type: String

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### ServiceException

A general service exception.

HTTP Status Code: 500

## **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateInstanceMetadataOptions

Modifies the Amazon Lightsail instance metadata parameters on a running or stopped instance. When you modify the parameters on a running instance, the `GetInstance` or `GetInstances` API operation initially responds with a state of `pending`. After the parameter modifications are successfully applied, the state changes to `applied` in subsequent `GetInstance` or `GetInstances` API calls. For more information, see [Use IMDSv2 with an Amazon Lightsail instance](#) in the *Amazon Lightsail Developer Guide*.

## Request Syntax

```
{
  "httpEndpoint": "string",
  "httpProtocolIpv6": "string",
  "httpPutResponseHopLimit": number,
  "httpTokens": "string",
  "instanceName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [httpEndpoint](#)

Enables or disables the HTTP metadata endpoint on your instances. If this parameter is not specified, the existing state is maintained.

If you specify a value of `disabled`, you cannot access your instance metadata.

Type: String

Valid Values: `disabled` | `enabled`

Required: No

### [httpProtocolIpv6](#)

Enables or disables the IPv6 endpoint for the instance metadata service. This setting applies only when the HTTP metadata endpoint is enabled.

**Note**

This parameter is available only for instances in the Europe (Stockholm) AWS Region (eu-north-1).

Type: String

Valid Values: disabled | enabled

Required: No

**httpPutResponseHopLimit**

The desired HTTP PUT response hop limit for instance metadata requests. A larger number means that the instance metadata requests can travel farther. If no parameter is specified, the existing state is maintained.

Type: Integer

Required: No

**httpTokens**

The state of token usage for your instance metadata requests. If the parameter is not specified in the request, the default state is `optional`.

If the state is `optional`, you can choose whether to retrieve instance metadata with a signed token header on your request. If you retrieve the IAM role credentials without a token, the version 1.0 role credentials are returned. If you retrieve the IAM role credentials by using a valid signed token, the version 2.0 role credentials are returned.

If the state is `required`, you must send a signed token header with all instance metadata retrieval requests. In this state, retrieving the IAM role credential always returns the version 2.0 credentials. The version 1.0 credentials are not available.

Type: String

Valid Values: optional | required

Required: No



## instanceName

The name of the instance for which to update metadata parameters.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operation": {
    "createdAt": number,
    "errorCode": "string",
    "errorDetails": "string",
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operation

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: [Operation](#) object

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### AccountSetupInProgressException

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### InvalidInputException

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### Note

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### NotFoundException

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateLoadBalancerAttribute

Updates the specified attribute for a load balancer. You can only update one attribute at a time.

The update load balancer attribute operation supports tag-based access control via resource tags applied to the resource identified by load balancer name. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{  
  "attributeName": "string",  
  "attributeValue": "string",  
  "loadBalancerName": "string"  
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### attributeName

The name of the attribute you want to update.

Type: String

Valid Values: HealthCheckPath | SessionStickinessEnabled |  
SessionStickiness\_LB\_CookieDurationSeconds | HttpsRedirectionEnabled |  
TlsPolicyName

Required: Yes

### attributeValue

The value that you want to specify for the attribute name.

The following values are supported depending on what you specify for the attributeName request parameter:

- If you specify `HealthCheckPath` for the `attributeName` request parameter, then the `attributeValue` request parameter must be the path to ping on the target (for example, `/weather/us/wa/seattle`).
- If you specify `SessionStickinessEnabled` for the `attributeName` request parameter, then the `attributeValue` request parameter must be `true` to activate session stickiness or `false` to deactivate session stickiness.
- If you specify `SessionStickiness_LB_CookieDurationSeconds` for the `attributeName` request parameter, then the `attributeValue` request parameter must be an interger that represents the cookie duration in seconds.
- If you specify `HttpsRedirectionEnabled` for the `attributeName` request parameter, then the `attributeValue` request parameter must be `true` to activate HTTP to HTTPS redirection or `false` to deactivate HTTP to HTTPS redirection.
- If you specify `TlsPolicyName` for the `attributeName` request parameter, then the `attributeValue` request parameter must be the name of the TLS policy.

Use the [GetLoadBalancerTlsPolicies](#) action to get a list of TLS policy names that you can specify.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.

Required: Yes

### loadBalancerName

The name of the load balancer that you want to modify (`my-load-balancer`).

Type: String

Pattern: `\w[\w\-\]*\w`

Required: Yes

## Response Syntax

```
{  
  "operations": [  
    ...  
  ]  
}
```

```
{
  "createdAt": number,
  "errorCode": "string",
  "errorDetails": "string",
  "id": "string",
  "isTerminal": boolean,
  "location": {
    "availabilityZone": "string",
    "regionName": "string"
  },
  "operationDetails": "string",
  "operationType": "string",
  "resourceName": "string",
  "resourceType": "string",
  "status": "string",
  "statusChangedAt": number
}
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### AccessDeniedException

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)



# UpdateRelationalDatabase

Allows the update of one or more attributes of a database in Amazon Lightsail.

Updates are applied immediately, or in cases where the updates could result in an outage, are applied during the database's predefined maintenance window.

The update `relational` database operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "applyImmediately": boolean,
  "caCertificateIdentifier": "string",
  "disableBackupRetention": boolean,
  "enableBackupRetention": boolean,
  "masterUserPassword": "string",
  "preferredBackupWindow": "string",
  "preferredMaintenanceWindow": "string",
  "publiclyAccessible": boolean,
  "relationalDatabaseBlueprintId": "string",
  "relationalDatabaseName": "string",
  "rotateMasterUserPassword": boolean
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [applyImmediately](#)

When `true`, applies changes immediately. When `false`, applies changes during the preferred maintenance window. Some changes may cause an outage.

Default: `false`

Type: Boolean

Required: No

### [caCertificateIdentifier](#)

Indicates the certificate that needs to be associated with the database.

Type: String

Required: No

### [disableBackupRetention](#)

When `true`, disables automated backup retention for your database.

Disabling backup retention deletes all automated database backups. Before disabling this, you may want to create a snapshot of your database using the `create relational database snapshot` operation.

Updates are applied during the next maintenance window because this can result in an outage.

Type: Boolean

Required: No

### [enableBackupRetention](#)

When `true`, enables automated backup retention for your database.

Updates are applied during the next maintenance window because this can result in an outage.

Type: Boolean

Required: No

### [masterUserPassword](#)

The password for the master user. The password can include any printable ASCII character except `/`, `''`, or `@`.

#### **MySQL**

Constraints: Must contain from 8 to 41 characters.

#### **PostgreSQL**

Constraints: Must contain from 8 to 128 characters.

Type: String

Required: No

### preferredBackupWindow

The daily time range during which automated backups are created for your database if automated backups are enabled.

Constraints:

- Must be in the `hh24:mi-hh24:mi` format.

Example: `16:00-16:30`

- Specified in Coordinated Universal Time (UTC).
- Must not conflict with the preferred maintenance window.
- Must be at least 30 minutes.

Type: String

Required: No

### preferredMaintenanceWindow

The weekly time range during which system maintenance can occur on your database.

The default is a 30-minute window selected at random from an 8-hour block of time for each AWS Region, occurring on a random day of the week.

Constraints:

- Must be in the `ddd:hh24:mi-ddd:hh24:mi` format.
- Valid days: Mon, Tue, Wed, Thu, Fri, Sat, Sun.
- Must be at least 30 minutes.
- Specified in Coordinated Universal Time (UTC).
- Example: `Tue:17:00-Tue:17:30`

Type: String

Required: No

### publiclyAccessible

Specifies the accessibility options for your database. A value of `true` specifies a database that is available to resources outside of your Lightsail account. A value of `false` specifies a database that is available only to your Lightsail resources in the same region as your database.

Type: Boolean

Required: No

### relationalDatabaseBlueprintId

This parameter is used to update the major version of the database. Enter the `blueprintId` for the major version that you want to update to.

Use the [GetRelationalDatabaseBlueprints](#) action to get a list of available blueprint IDs.

Type: String

Required: No

### relationalDatabaseName

The name of your Lightsail database resource to update.

Type: String

Pattern: `\w[\w\-]*\w`

Required: Yes

### rotateMasterUserPassword

When `true`, the master user password is changed to a new strong password generated by Lightsail.

Use the `get relational database master user password` operation to get the new password.

Type: Boolean

Required: No

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
```

```
    "id": "string",
    "isTerminal": boolean,
    "location": {
      "availabilityZone": "string",
      "regionName": "string"
    },
    "operationDetails": "string",
    "operationType": "string",
    "resourceName": "string",
    "resourceType": "string",
    "status": "string",
    "statusChangedAt": number
  }
]
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

### operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400


### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

 **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

### **OperationFailureException**

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

### **ServiceException**

A general service exception.

HTTP Status Code: 500

### **UnauthenticatedException**

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# UpdateRelationalDatabaseParameters

Allows the update of one or more parameters of a database in Amazon Lightsail.

Parameter updates don't cause outages; therefore, their application is not subject to the preferred maintenance window. However, there are two ways in which parameter updates are applied: `dynamic` or `pending-reboot`. Parameters marked with a `dynamic` apply type are applied immediately. Parameters marked with a `pending-reboot` apply type are applied only after the database is rebooted using the `reboot relational database` operation.

The `update relational database parameters` operation supports tag-based access control via resource tags applied to the resource identified by `relationalDatabaseName`. For more information, see the [Amazon Lightsail Developer Guide](#).

## Request Syntax

```
{
  "parameters": [
    {
      "allowedValues": "string",
      "applyMethod": "string",
      "applyType": "string",
      "dataType": "string",
      "description": "string",
      "isModifiable": boolean,
      "parameterName": "string",
      "parameterValue": "string"
    }
  ],
  "relationalDatabaseName": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#).

The request accepts the following data in JSON format.

### [parameters](#)

The database parameters to update.



Type: Array of [RelationalDatabaseParameter](#) objects

Required: Yes

### [relationalDatabaseName](#)

The name of your database for which to update parameters.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: Yes

## Response Syntax

```
{
  "operations": [
    {
      "createdAt": number,
      "errorCode": "string",
      "errorDetails": "string",
      "id": "string",
      "isTerminal": boolean,
      "location": {
        "availabilityZone": "string",
        "regionName": "string"
      },
      "operationDetails": "string",
      "operationType": "string",
      "resourceName": "string",
      "resourceType": "string",
      "status": "string",
      "statusChangedAt": number
    }
  ]
}
```

## Response Elements

If the action is successful, the service sends back an HTTP 200 response.

The following data is returned in JSON format by the service.

## operations

An array of objects that describe the result of the action, such as the status of the request, the timestamp of the request, and the resources affected by the request.

Type: Array of [Operation](#) objects

## Errors

For information about the errors that are common to all actions, see [Common Errors](#).

### **AccessDeniedException**

Lightsail throws this exception when the user cannot be authenticated or uses invalid credentials to access a resource.

HTTP Status Code: 400

### **AccountSetupInProgressException**

Lightsail throws this exception when an account is still in the setup in progress state.

HTTP Status Code: 400

### **InvalidInputException**

Lightsail throws this exception when user input does not conform to the validation rules of an input field.

#### **Note**

Domain and distribution APIs are only available in the N. Virginia (us-east-1) AWS Region. Please set your AWS Region configuration to us-east-1 to create, view, or edit these resources.

HTTP Status Code: 400

### **NotFoundException**

Lightsail throws this exception when it cannot find a resource.

HTTP Status Code: 400

## OperationFailureException

Lightsail throws this exception when an operation fails to execute.

HTTP Status Code: 400

## ServiceException

A general service exception.

HTTP Status Code: 500

## UnauthenticatedException

Lightsail throws this exception when the user has not been authenticated.

HTTP Status Code: 400

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS Command Line Interface](#)
- [AWS SDK for .NET](#)
- [AWS SDK for C++](#)
- [AWS SDK for Go v2](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript V3](#)
- [AWS SDK for PHP V3](#)
- [AWS SDK for Python](#)
- [AWS SDK for Ruby V3](#)

# Data Types

The Amazon Lightsail API contains several data types that various actions use. This section describes each data type in detail.

## Note

The order of each element in a data type structure is not guaranteed. Applications should not assume a particular order.

The following data types are supported:

- [AccessKey](#)
- [AccessKeyLastUsed](#)
- [AccessRules](#)
- [AccountLevelBpaSync](#)
- [AddOn](#)
- [AddOnRequest](#)
- [Alarm](#)
- [AttachedDisk](#)
- [AutoSnapshotAddOnRequest](#)
- [AutoSnapshotDetails](#)
- [AvailabilityZone](#)
- [Blueprint](#)
- [Bucket](#)
- [BucketAccessLogConfig](#)
- [BucketBundle](#)
- [BucketState](#)
- [Bundle](#)
- [CacheBehavior](#)
- [CacheBehaviorPerPath](#)
- [CacheSettings](#)

- [Certificate](#)
- [CertificateSummary](#)
- [CloudFormationStackRecord](#)
- [CloudFormationStackRecordSourceInfo](#)
- [ContactMethod](#)
- [Container](#)
- [ContainerImage](#)
- [ContainerService](#)
- [ContainerServiceDeployment](#)
- [ContainerServiceDeploymentRequest](#)
- [ContainerServiceECRIImagePullerRole](#)
- [ContainerServiceECRIImagePullerRoleRequest](#)
- [ContainerServiceEndpoint](#)
- [ContainerServiceHealthCheckConfig](#)
- [ContainerServiceLogEvent](#)
- [ContainerServicePower](#)
- [ContainerServiceRegistryLogin](#)
- [ContainerServiceStateDetail](#)
- [CookieObject](#)
- [CostEstimate](#)
- [DestinationInfo](#)
- [Disk](#)
- [DiskInfo](#)
- [DiskMap](#)
- [DiskSnapshot](#)
- [DiskSnapshotInfo](#)
- [DistributionBundle](#)
- [DnsRecordCreationState](#)
- [Domain](#)
- [DomainEntry](#)

- [DomainValidationRecord](#)
- [EndpointRequest](#)
- [EstimateByTime](#)
- [ExportSnapshotRecord](#)
- [ExportSnapshotRecordSourceInfo](#)
- [HeaderObject](#)
- [HostKeyAttributes](#)
- [InputOrigin](#)
- [Instance](#)
- [InstanceAccessDetails](#)
- [InstanceEntry](#)
- [InstanceHardware](#)
- [InstanceHealthSummary](#)
- [InstanceMetadataOptions](#)
- [InstanceNetworking](#)
- [InstancePortInfo](#)
- [InstancePortState](#)
- [InstanceSnapshot](#)
- [InstanceSnapshotInfo](#)
- [InstanceState](#)
- [KeyPair](#)
- [LightsailDistribution](#)
- [LoadBalancer](#)
- [LoadBalancerTlsCertificate](#)
- [LoadBalancerTlsCertificateDnsRecordCreationState](#)
- [LoadBalancerTlsCertificateDomainValidationOption](#)
- [LoadBalancerTlsCertificateDomainValidationRecord](#)
- [LoadBalancerTlsCertificateRenewalSummary](#)
- [LoadBalancerTlsCertificateSummary](#)
- [LoadBalancerTlsPolicy](#)

- [LogEvent](#)
- [MetricDatapoint](#)
- [MonitoredResourceInfo](#)
- [MonthlyTransfer](#)
- [NameServersUpdateState](#)
- [Operation](#)
- [Origin](#)
- [PasswordData](#)
- [PendingMaintenanceAction](#)
- [PendingModifiedRelationalDatabaseValues](#)
- [PortInfo](#)
- [PrivateRegistryAccess](#)
- [PrivateRegistryAccessRequest](#)
- [QueryStringObject](#)
- [R53HostedZoneDeletionState](#)
- [Region](#)
- [RegisteredDomainDelegationInfo](#)
- [RelationalDatabase](#)
- [RelationalDatabaseBlueprint](#)
- [RelationalDatabaseBundle](#)
- [RelationalDatabaseEndpoint](#)
- [RelationalDatabaseEvent](#)
- [RelationalDatabaseHardware](#)
- [RelationalDatabaseParameter](#)
- [RelationalDatabaseSnapshot](#)
- [RenewalSummary](#)
- [ResourceBudgetEstimate](#)
- [ResourceLocation](#)
- [ResourceReceivingAccess](#)
- [ResourceRecord](#)

- [Session](#)
- [SetupExecutionDetails](#)
- [SetupHistory](#)
- [SetupHistoryResource](#)
- [SetupRequest](#)
- [StaticIp](#)
- [StopInstanceOnIdleRequest](#)
- [Tag](#)
- [TimePeriod](#)



# AccessKey

Describes an access key for an Amazon Lightsail bucket.

Access keys grant full programmatic access to the specified bucket and its objects. You can have a maximum of two access keys per bucket. Use the [CreateBucketAccessKey](#) action to create an access key for a specific bucket. For more information about access keys, see [Creating access keys for a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Important

The `secretAccessKey` value is returned only in response to the `CreateBucketAccessKey` action. You can get a secret access key only when you first create an access key; you cannot get the secret access key later. If you lose the secret access key, you must create a new access key.

## Contents

### `accessKeyId`

The ID of the access key.

Type: String

Length Constraints: Fixed length of 20.

Pattern: `^[A-Z0-9]{20}$`

Required: No

### `createdAt`

The timestamp when the access key was created.

Type: Timestamp

Required: No

### `lastUsed`

An object that describes the last time the access key was used.

**Note**

This object does not include data in the response of a [CreateBucketAccessKey](#) action. If the access key has not been used, the `region` and `serviceName` values are N/A, and the `lastUsedDate` value is null.

Type: [AccessKeyLastUsed](#) object

Required: No

**secretAccessKey**

The secret access key used to sign requests.

You should store the secret access key in a safe location. We recommend that you delete the access key if the secret access key is compromised.

Type: String

Pattern: `.*\S.*`

Required: No

**status**

The status of the access key.

A status of `Active` means that the key is valid, while `Inactive` means it is not.

Type: String

Valid Values: `Active` | `Inactive`

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AccessKeyLastUsed

Describes the last time an access key was used.

## Note

This object does not include data in the response of a [CreateBucketAccessKey](#) action.

## Contents

### lastUsedDate

The date and time when the access key was most recently used.

This value is null if the access key has not been used.

Type: Timestamp

Required: No

### region

The AWS Region where this access key was most recently used.

This value is N/A if the access key has not been used.

Type: String

Required: No

### serviceName

The name of the AWS service with which this access key was most recently used.

This value is N/A if the access key has not been used.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AccessRules

Describes the anonymous access permissions for an Amazon Lightsail bucket and its objects.

For more information about bucket access permissions, see [Understanding bucket permissions in Amazon Lightsail](#) in the

*Amazon Lightsail Developer Guide*.

## Contents

### **allowPublicOverrides**

A Boolean value that indicates whether the access control list (ACL) permissions that are applied to individual objects override the `getObject` option that is currently specified.

When this is true, you can use the [PutObjectAcl](#) Amazon S3 API action to set individual objects to public (read-only) using the `public-read` ACL, or to private using the `private` ACL.

Type: Boolean

Required: No

### **getObject**

Specifies the anonymous access to all objects in a bucket.

The following options can be specified:

- `public` - Sets all objects in the bucket to public (read-only), making them readable by anyone in the world.

If the `getObject` value is set to `public`, then all objects in the bucket default to public regardless of the `allowPublicOverrides` value.

- `private` - Sets all objects in the bucket to private, making them readable only by you or anyone you give access to.

If the `getObject` value is set to `private`, and the `allowPublicOverrides` value is set to `true`, then all objects in the bucket default to private unless they are configured with a `public-read` ACL. Individual objects with a `public-read` ACL are readable by anyone in the world.

Type: String

Valid Values: `public` | `private`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AccountLevelBpaSync

Describes the synchronization status of the Amazon Simple Storage Service (Amazon S3) account-level block public access (BPA) feature for your Lightsail buckets.

The account-level BPA feature of Amazon S3 provides centralized controls to limit public access to all Amazon S3 buckets in an account. BPA can make all Amazon S3 buckets in an AWS account private regardless of the individual bucket and object permissions that are configured. Lightsail buckets take into account the Amazon S3 account-level BPA configuration when allowing or denying public access. To do this, Lightsail periodically fetches the account-level BPA configuration from Amazon S3. When the account-level BPA status is `InSync`, the Amazon S3 account-level BPA configuration is synchronized and it applies to your Lightsail buckets. For more information about Amazon Simple Storage Service account-level BPA and how it affects Lightsail buckets, see [Block public access for buckets in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### `bpaImpactsLightsail`

A Boolean value that indicates whether account-level block public access is affecting your Lightsail buckets.

Type: Boolean

Required: No

### `lastSyncedAt`

The timestamp of when the account-level BPA configuration was last synchronized. This value is null when the account-level BPA configuration has not been synchronized.

Type: Timestamp

Required: No

### `message`

A message that provides a reason for a `Failed` or `Defaulted` synchronization status.

The following messages are possible:



- `SYNC_ON_HOLD` - The synchronization has not yet happened. This status message occurs immediately after you create your first Lightsail bucket. This status message should change after the first synchronization happens, approximately 1 hour after the first bucket is created.
- `DEFAULTED_FOR_SLR_MISSING` - The synchronization failed because the required service-linked role is missing from your AWS account. The account-level BPA configuration for your Lightsail buckets is defaulted to *active* until the synchronization can occur. This means that all your buckets are private and not publicly accessible. For more information about how to create the required service-linked role to allow synchronization, see [Using Service-Linked Roles for Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- `DEFAULTED_FOR_SLR_MISSING_ON_HOLD` - The synchronization failed because the required service-linked role is missing from your AWS account. Account-level BPA is not yet configured for your Lightsail buckets. Therefore, only the bucket access permissions and individual object access permissions apply to your Lightsail buckets. For more information about how to create the required service-linked role to allow synchronization, see [Using Service-Linked Roles for Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- `Unknown` - The reason that synchronization failed is unknown. Contact AWS Support for more information.

Type: String

Valid Values: `DEFAULTED_FOR_SLR_MISSING` | `SYNC_ON_HOLD` | `DEFAULTED_FOR_SLR_MISSING_ON_HOLD` | `Unknown`

Required: No

## status

The status of the account-level BPA synchronization.

The following statuses are possible:

- `InSync` - Account-level BPA is synchronized. The Amazon S3 account-level BPA configuration applies to your Lightsail buckets.
- `NeverSynced` - Synchronization has not yet happened. The Amazon S3 account-level BPA configuration does not apply to your Lightsail buckets.
- `Failed` - Synchronization failed. The Amazon S3 account-level BPA configuration does not apply to your Lightsail buckets.
- `Defaulted` - Synchronization failed and account-level BPA for your Lightsail buckets is defaulted to *active*.

**Note**

You might need to complete further actions if the status is `Failed` or `Defaulted`. The message parameter provides more information for those statuses.

Type: String

Valid Values: `InSync` | `Failed` | `NeverSynced` | `Defaulted`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AddOn

Describes an add-on that is enabled for an Amazon Lightsail resource.

## Contents

### duration

The amount of idle time in minutes after which your virtual computer will automatically stop.

 **Important**

This add-on only applies to Lightsail for Research resources.

Type: String

Required: No

### name

The name of the add-on.

Type: String

Required: No

### nextSnapshotTimeOfDay

The next daily time an automatic snapshot will be created.

The time shown is in HH:00 format, and in Coordinated Universal Time (UTC).

The snapshot is automatically created between the time shown and up to 45 minutes after.

Type: String

Pattern: `^(0[0-9]|1[0-9]|2[0-3]):[0-5][0-9]$`

Required: No

### snapshotTimeOfDay

The daily time when an automatic snapshot is created.

The time shown is in HH:00 format, and in Coordinated Universal Time (UTC).

The snapshot is automatically created between the time shown and up to 45 minutes after.

Type: String

Pattern: `^(0[0-9]|1[0-9]|2[0-3]):[0-5][0-9]$`

Required: No

### status

The status of the add-on.

Type: String

Required: No

### threshold

The trigger threshold of the action.

#### Important

This add-on only applies to Lightsail for Research resources.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AddOnRequest

Describes a request to enable, modify, or disable an add-on for an Amazon Lightsail resource.

## Note

An additional cost may be associated with enabling add-ons. For more information, see the [Lightsail pricing page](#).

## Contents

### addOnType

The add-on type.

Type: String

Valid Values: AutoSnapshot | StopInstanceOnIdle

Required: Yes

### autoSnapshotAddOnRequest

An object that represents additional parameters when enabling or modifying the automatic snapshot add-on.

Type: [AutoSnapshotAddOnRequest](#) object

Required: No

### stopInstanceOnIdleRequest

An object that represents additional parameters when enabling or modifying the StopInstanceOnIdle add-on.

## Important

This object only applies to Lightsail for Research resources.

Type: [StopInstanceOnIdleRequest](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Alarm

Describes an alarm.

An alarm is a way to monitor your Lightsail resource metrics. For more information, see [Alarms in Amazon Lightsail](#).

## Contents

### **arn**

The Amazon Resource Name (ARN) of the alarm.

Type: String

Pattern: `.*\S.*`

Required: No

### **comparisonOperator**

The arithmetic operation used when comparing the specified statistic and threshold.

Type: String

Valid Values: `GreaterThanOrEqualToThreshold` | `GreaterThanThreshold` | `LessThanThreshold` | `LessThanOrEqualToThreshold`

Required: No

### **contactProtocols**

The contact protocols for the alarm, such as `Email`, `SMS` (text messaging), or both.

Type: Array of strings

Valid Values: `Email` | `SMS`

Required: No

### **createdAt**

The timestamp when the alarm was created.

Type: Timestamp

Required: No

### **datapointsToAlarm**

The number of data points that must not within the specified threshold to trigger the alarm.

Type: Integer

Required: No

### **evaluationPeriods**

The number of periods over which data is compared to the specified threshold.

Type: Integer

Required: No

### **location**

An object that lists information about the location of the alarm.

Type: [ResourceLocation](#) object

Required: No

### **metricName**

The name of the metric associated with the alarm.

Type: String

Valid Values: CPUUtilization | NetworkIn | NetworkOut | StatusCheckFailed | StatusCheckFailed\_Instance | StatusCheckFailed\_System | ClientTLSNegotiationErrorCount | HealthyHostCount | UnhealthyHostCount | HTTPCode\_LB\_4XX\_Count | HTTPCode\_LB\_5XX\_Count | HTTPCode\_Instance\_2XX\_Count | HTTPCode\_Instance\_3XX\_Count | HTTPCode\_Instance\_4XX\_Count | HTTPCode\_Instance\_5XX\_Count | InstanceResponseTime | RejectedConnectionCount | RequestCount | DatabaseConnections | DiskQueueDepth | FreeStorageSpace | NetworkReceiveThroughput | NetworkTransmitThroughput | BurstCapacityTime | BurstCapacityPercentage

Required: No



## **monitoredResourceInfo**

An object that lists information about the resource monitored by the alarm.

Type: [MonitoredResourceInfo](#) object

Required: No

### **name**

The name of the alarm.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **notificationEnabled**

Indicates whether the alarm is enabled.

Type: Boolean

Required: No

### **notificationTriggers**

The alarm states that trigger a notification.

Type: Array of strings

Valid Values: OK | ALARM | INSUFFICIENT\_DATA

Required: No

### **period**

The period, in seconds, over which the statistic is applied.

Type: Integer

Valid Range: Minimum value of 60. Maximum value of 86400.

Required: No

## resourceType

The Lightsail resource type of the alarm.

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

## state

The current state of the alarm.

An alarm has the following possible states:

- ALARM - The metric is outside of the defined threshold.
- INSUFFICIENT\_DATA - The alarm has just started, the metric is not available, or not enough data is available for the metric to determine the alarm state.
- OK - The metric is within the defined threshold.

Type: String

Valid Values: OK | ALARM | INSUFFICIENT\_DATA

Required: No

## statistic

The statistic for the metric associated with the alarm.

The following statistics are available:

- Minimum - The lowest value observed during the specified period. Use this value to determine low volumes of activity for your application.
- Maximum - The highest value observed during the specified period. Use this value to determine high volumes of activity for your application.

- **Sum** - All values submitted for the matching metric added together. You can use this statistic to determine the total volume of a metric.
- **Average** - The value of  $\text{Sum} / \text{SampleCount}$  during the specified period. By comparing this statistic with the **Minimum** and **Maximum** values, you can determine the full scope of a metric and how close the average use is to the **Minimum** and **Maximum** values. This comparison helps you to know when to increase or decrease your resources.
- **SampleCount** - The count, or number, of data points used for the statistical calculation.

Type: String

Valid Values: `Minimum` | `Maximum` | `Sum` | `Average` | `SampleCount`

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about your Lightsail alarm. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **threshold**

The value against which the specified statistic is compared.

Type: Double

Required: No

### **treatMissingData**

Specifies how the alarm handles missing data points.

An alarm can treat missing data in the following ways:

- `breaching` - Assume the missing data is not within the threshold. Missing data counts towards the number of times the metric is not within the threshold.
- `notBreaching` - Assume the missing data is within the threshold. Missing data does not count towards the number of times the metric is not within the threshold.
- `ignore` - Ignore the missing data. Maintains the current alarm state.

- `missing` - Missing data is treated as missing.

Type: String

Valid Values: `breaching` | `notBreaching` | `ignore` | `missing`

Required: No

## **unit**

The unit of the metric associated with the alarm.

Type: String

Valid Values: `Seconds` | `Microseconds` | `Milliseconds` | `Bytes` | `Kilobytes` | `Megabytes` | `Gigabytes` | `Terabytes` | `Bits` | `Kilobits` | `Megabits` | `Gigabits` | `Terabits` | `Percent` | `Count` | `Bytes/Second` | `Kilobytes/Second` | `Megabytes/Second` | `Gigabytes/Second` | `Terabytes/Second` | `Bits/Second` | `Kilobits/Second` | `Megabits/Second` | `Gigabits/Second` | `Terabits/Second` | `Count/Second` | `None`

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AttachedDisk

Describes a block storage disk that is attached to an instance, and is included in an automatic snapshot.

## Contents

### path

The path of the disk (/dev/xvdf).

Type: String

Required: No

### sizeInGb

The size of the disk in GB.

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AutoSnapshotAddOnRequest

Describes a request to enable or modify the automatic snapshot add-on for an Amazon Lightsail instance or disk.

When you modify the automatic snapshot time for a resource, it is typically effective immediately except under the following conditions:

- If an automatic snapshot has been created for the current day, and you change the snapshot time to a later time of day, then the new snapshot time will be effective the following day. This ensures that two snapshots are not created for the current day.
- If an automatic snapshot has not yet been created for the current day, and you change the snapshot time to an earlier time of day, then the new snapshot time will be effective the following day and a snapshot is automatically created at the previously set time for the current day. This ensures that a snapshot is created for the current day.
- If an automatic snapshot has not yet been created for the current day, and you change the snapshot time to a time that is within 30 minutes from your current time, then the new snapshot time will be effective the following day and a snapshot is automatically created at the previously set time for the current day. This ensures that a snapshot is created for the current day, because 30 minutes is required between your current time and the new snapshot time that you specify.
- If an automatic snapshot is scheduled to be created within 30 minutes from your current time and you change the snapshot time, then the new snapshot time will be effective the following day and a snapshot is automatically created at the previously set time for the current day. This ensures that a snapshot is created for the current day, because 30 minutes is required between your current time and the new snapshot time that you specify.

## Contents

### `snapshotTimeOfDay`

The daily time when an automatic snapshot will be created.

Constraints:

- Must be in `HH:00` format, and in an hourly increment.
- Specified in Coordinated Universal Time (UTC).
- The snapshot will be automatically created between the time specified and up to 45 minutes after.

Type: String

Pattern: `^(0[0-9]|1[0-9]|2[0-3]):[0-5][0-9]$`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AutoSnapshotDetails

Describes an automatic snapshot.

## Contents

### createdAt

The timestamp when the automatic snapshot was created.

Type: Timestamp

Required: No

### date

The date of the automatic snapshot in YYYY-MM-DD format.

Type: String

Required: No

### fromAttachedDisks

An array of objects that describe the block storage disks attached to the instance when the automatic snapshot was created.

Type: Array of [AttachedDisk](#) objects

Required: No

### status

The status of the automatic snapshot.

Type: String

Valid Values: Success | Failed | InProgress | NotFound

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:



- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# AvailabilityZone

Describes an Availability Zone. This is returned only as part of a `GetRegions` request.

## Contents

### **state**

The state of the Availability Zone.

Type: String

Pattern: `.*\S.*`

Required: No

### **zoneName**

The name of the Availability Zone. The format is `us-east-2a` (case-sensitive).

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Blueprint

Describes a blueprint (a virtual private server image).

## Contents

### **appCategory**

Virtual computer blueprints that are supported by Lightsail for Research.

 **Important**

This parameter only applies to Lightsail for Research resources.

Type: String

Valid Values: LfR

Required: No

### **blueprintId**

The ID for the virtual private server image (app\_wordpress\_x\_x or app\_lamp\_x\_x).

Type: String

Pattern: .\*\\S.\*

Required: No

### **description**

The description of the blueprint.

Type: String

Required: No

### **group**

The group name of the blueprint (amazon-linux).

Type: String

Pattern: `.*\S.*`

Required: No

### **isActive**

A Boolean value indicating whether the blueprint is active. Inactive blueprints are listed to support customers with existing instances but are not necessarily available for launch of new instances. Blueprints are marked inactive when they become outdated due to operating system updates or new application releases.

Type: Boolean

Required: No

### **licenseUrl**

The end-user license agreement URL for the image or blueprint.

Type: String

Required: No

### **minPower**

The minimum bundle power required to run this blueprint. For example, you need a bundle with a power value of 500 or more to create an instance that uses a blueprint with a minimum power value of 500. 0 indicates that the blueprint runs on all instance sizes.

Type: Integer

Required: No

### **name**

The friendly name of the blueprint (Amazon Linux).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **platform**

The operating system platform (either Linux/Unix-based or Windows Server-based) of the blueprint.

Type: String

Valid Values: LINUX\_UNIX | WINDOWS

Required: No

### **productUrl**

The product URL to learn more about the image or blueprint.

Type: String

Required: No

### **type**

The type of the blueprint (os or app).

Type: String

Valid Values: os | app

Required: No

### **version**

The version number of the operating system, application, or stack ( 2016 . 03 . 0 ).

Type: String

Required: No

### **versionCode**

The version code.

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Bucket

Describes an Amazon Lightsail bucket.

## Contents

### **ableToUpdateBundle**

Indicates whether the bundle that is currently applied to a bucket can be changed to another bundle.

You can update a bucket's bundle only one time within a monthly AWS billing cycle.

Use the [UpdateBucketBundle](#) action to change a bucket's bundle.

Type: Boolean

Required: No

### **accessLogConfig**

An object that describes the access log configuration for the bucket.

Type: [BucketAccessLogConfig](#) object

Required: No

### **accessRules**

An object that describes the access rules of the bucket.

Type: [AccessRules](#) object

Required: No

### **arn**

The Amazon Resource Name (ARN) of the bucket.

Type: String

Pattern: `.*\S.*`

Required: No

## **bundleId**

The ID of the bundle currently applied to the bucket.

A bucket bundle specifies the monthly cost, storage space, and data transfer quota for a bucket.

Use the [UpdateBucketBundle](#) action to change the bundle of a bucket.

Type: String

Pattern: `.*\S.*`

Required: No

## **createdAt**

The timestamp when the distribution was created.

Type: Timestamp

Required: No

## **location**

An object that describes the location of the bucket, such as the AWS Region and Availability Zone.

Type: [ResourceLocation](#) object

Required: No

## **name**

The name of the bucket.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`

Required: No

## **objectVersioning**

Indicates whether object versioning is enabled for the bucket.



The following options can be configured:

- `Enabled` - Object versioning is enabled.
- `Suspended` - Object versioning was previously enabled but is currently suspended. Existing object versions are retained.
- `NeverEnabled` - Object versioning has never been enabled.

Type: String

Pattern: `.*\S.*`

Required: No

### **`readonlyAccessAccounts`**

An array of strings that specify the AWS account IDs that have read-only access to the bucket.

Type: Array of strings

Array Members: Maximum number of 10 items.

Pattern: `.*\S.*`

Required: No

### **`resourcesReceivingAccess`**

An array of objects that describe Lightsail instances that have access to the bucket.

Use the [SetResourceAccessForBucket](#) action to update the instances that have access to a bucket.

Type: Array of [ResourceReceivingAccess](#) objects

Required: No

### **`resourceType`**

The Lightsail resource type of the bucket.

Type: String

Pattern: `.*\S.*`

Required: No

## state

An object that describes the state of the bucket.

Type: [BucketState](#) object

Required: No

## supportCode

The support code for a bucket. Include this code in your email to support when you have questions about a Lightsail bucket. This code enables our support team to look up your Lightsail information more easily.

Type: String

Pattern: `.*\S.*`

Required: No

## tags

The tag keys and optional values for the bucket. For more information, see [Tags in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

Type: Array of [Tag](#) objects

Required: No

## url

The URL of the bucket.

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# BucketAccessLogConfig

Describes the access log configuration for a bucket in the Amazon Lightsail object storage service.

For more information about bucket access logs, see [Logging bucket requests using access logging in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### enabled

A Boolean value that indicates whether bucket access logging is enabled for the bucket.

Type: Boolean

Required: Yes

### destination

The name of the bucket where the access logs are saved. The destination can be a Lightsail bucket in the same account, and in the same AWS Region as the source bucket.

#### Note

This parameter is required when enabling the access log for a bucket, and should be omitted when disabling the access log.

Type: String

Length Constraints: Minimum length of 3. Maximum length of 54.

Pattern: `^[a-z0-9][a-z0-9-]{1,52}[a-z0-9]$`


Required: No

### prefix

The optional object prefix for the bucket access log.

The prefix is an optional addition to the object key that organizes your access log files in the destination bucket. For example, if you specify a `logs/` prefix, then each log object

will begin with the `logs/` prefix in its key (for example, `logs/2021-11-01-21-32-16-E568B2907131C0C0`).

 **Note**

This parameter can be optionally specified when enabling the access log for a bucket, and should be omitted when disabling the access log.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 100.

Pattern: `^[\\w/!.*' )(-)]+$`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# BucketBundle

Describes the specifications of a bundle that can be applied to an Amazon Lightsail bucket.

A bucket bundle specifies the monthly cost, storage space, and data transfer quota for a bucket.

## Contents

### **bundleId**

The ID of the bundle.

Type: String

Pattern: `.*\S.*`

Required: No

### **isActive**

Indicates whether the bundle is active. Use for a new or existing bucket.

Type: Boolean

Required: No

### **name**

The name of the bundle.

Type: String

Pattern: `.*\S.*`

Required: No

### **price**

The monthly price of the bundle, in US dollars.

Type: Float

Required: No

### **storagePerMonthInGb**

The storage size of the bundle, in GB.

Type: Integer

Required: No

### **transferPerMonthInGb**

The monthly network transfer quota of the bundle.

Type: Integer

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# BucketState

Describes the state of an Amazon Lightsail bucket.

## Contents

### code

The state code of the bucket.

The following codes are possible:

- OK - The bucket is in a running state.
- Unknown - Creation of the bucket might have timed-out. You might want to delete the bucket and create a new one.

Type: String

Pattern: `.*\S.*`

Required: No

### message

A message that describes the state of the bucket.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# Bundle

Describes a bundle, which is a set of specs describing your virtual private server (or *instance*).

## Contents

### **bundleId**

The bundle ID (`micro_x_x`).

Type: String

Pattern: `.*\S.*`

Required: No

### **cpuCount**

The number of vCPUs included in the bundle (2).

Type: Integer

Required: No

### **diskSizeInGb**

The size of the SSD (30).

Type: Integer

Required: No

### **instanceType**

The instance type (`micro`).

Type: String

Required: No

### **isActive**

A Boolean value indicating whether the bundle is active.

Type: Boolean

Required: No

### **name**

A friendly name for the bundle (Micro).

Type: String

Required: No

### **power**

A numeric value that represents the power of the bundle (500). You can use the bundle's power value in conjunction with a blueprint's minimum power value to determine whether the blueprint will run on the bundle. For example, you need a bundle with a power value of 500 or more to create an instance that uses a blueprint with a minimum power value of 500.

Type: Integer

Required: No

### **price**

The price in US dollars (5.0) of the bundle.

Type: Float

Required: No

### **publicIpv4AddressCount**

An integer that indicates the public ipv4 address count included in the bundle, the value is either 0 or 1.

Type: Integer

Required: No

### **ramSizeInGb**

The amount of RAM in GB (2.0).

Type: Float

Required: No

## supportedAppCategories

Virtual computer blueprints that are supported by a Lightsail for Research bundle.

### Important

This parameter only applies to Lightsail for Research resources.

Type: Array of strings

Valid Values: L fR

Required: No

## supportedPlatforms

The operating system platform (Linux/Unix-based or Windows Server-based) that the bundle supports. You can only launch a `WINDOWS` bundle on a blueprint that supports the `WINDOWS` platform. `LINUX_UNIX` blueprints require a `LINUX_UNIX` bundle.

Type: Array of strings

Valid Values: `LINUX_UNIX` | `WINDOWS`

Required: No

## transferPerMonthInGb

The data transfer rate per month in GB (2000).

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# CacheBehavior

Describes the default cache behavior of an Amazon Lightsail content delivery network (CDN) distribution.

## Contents

### behavior

The cache behavior of the distribution.

The following cache behaviors can be specified:

- **cache** - This option is best for static sites. When specified, your distribution caches and serves your entire website as static content. This behavior is ideal for websites with static content that doesn't change depending on who views it, or for websites that don't use cookies, headers, or query strings to personalize content.
- **dont-cache** - This option is best for sites that serve a mix of static and dynamic content. When specified, your distribution caches and serve only the content that is specified in the distribution's `CacheBehaviorPerPath` parameter. This behavior is ideal for websites or web applications that use cookies, headers, and query strings to personalize content for individual users.

Type: String

Valid Values: `dont-cache` | `cache`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CacheBehaviorPerPath

Describes the per-path cache behavior of an Amazon Lightsail content delivery network (CDN) distribution.

A per-path cache behavior is used to override, or add an exception to, the default cache behavior of a distribution. For example, if the `cacheBehavior` is set to `cache`, then a per-path cache behavior can be used to specify a directory, file, or file type that your distribution will cache. Alternately, if the distribution's `cacheBehavior` is `dont-cache`, then a per-path cache behavior can be used to specify a directory, file, or file type that your distribution will not cache.

## Contents

### behavior

The cache behavior for the specified path.

You can specify one of the following per-path cache behaviors:

- **cache** - This behavior caches the specified path.
- **dont-cache** - This behavior doesn't cache the specified path.

Type: String

Valid Values: `dont-cache` | `cache`

Required: No

### path

The path to a directory or file to cached, or not cache. Use an asterisk symbol to specify wildcard directories (`path/to/assets/*`), and file types (`*.html`, `*jpg`, `*js`). Directories and file paths are case-sensitive.

Examples:

- Specify the following to cache all files in the document root of an Apache web server running on a Lightsail instance.

```
var/www/html/
```

- Specify the following file to cache only the index page in the document root of an Apache web server.

```
var/www/html/index.html
```

- Specify the following to cache only the .html files in the document root of an Apache web server.

```
var/www/html/*.html
```

- Specify the following to cache only the .jpg, .png, and .gif files in the images sub-directory of the document root of an Apache web server.

```
var/www/html/images/*.jpg
```

```
var/www/html/images/*.png
```

```
var/www/html/images/*.gif
```

Specify the following to cache all files in the images sub-directory of the document root of an Apache web server.

```
var/www/html/images/
```

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CacheSettings

Describes the cache settings of an Amazon Lightsail content delivery network (CDN) distribution.

These settings apply only to your distribution's `cacheBehaviors` (including the `defaultCacheBehavior`) that have a `behavior` of `cache`.

## Contents

### `allowedHTTPMethods`

The HTTP methods that are processed and forwarded to the distribution's origin.

You can specify the following options:

- `GET, HEAD` - The distribution forwards the `GET` and `HEAD` methods.
- `GET, HEAD, OPTIONS` - The distribution forwards the `GET`, `HEAD`, and `OPTIONS` methods.
- `GET, HEAD, OPTIONS, PUT, PATCH, POST, DELETE` - The distribution forwards the `GET`, `HEAD`, `OPTIONS`, `PUT`, `PATCH`, `POST`, and `DELETE` methods.

If you specify the third option, you might need to restrict access to your distribution's origin so users can't perform operations that you don't want them to. For example, you might not want users to have permission to delete objects from your origin.

Type: String

Pattern: `.*\S.*`

Required: No

### `cachedHTTPMethods`

The HTTP method responses that are cached by your distribution.

You can specify the following options:

- `GET, HEAD` - The distribution caches responses to the `GET` and `HEAD` methods.
- `GET, HEAD, OPTIONS` - The distribution caches responses to the `GET`, `HEAD`, and `OPTIONS` methods.

Type: String



Pattern: `.*\S.*`

Required: No

### **defaultTTL**

The default amount of time that objects stay in the distribution's cache before the distribution forwards another request to the origin to determine whether the content has been updated.

#### **Note**

The value specified applies only when the origin does not add HTTP headers such as `Cache-Control max-age`, `Cache-Control s-maxage`, and `Expires` to objects.

Type: Long

Required: No

### **forwardedCookies**

An object that describes the cookies that are forwarded to the origin. Your content is cached based on the cookies that are forwarded.

Type: [CookieObject](#) object

Required: No

### **forwardedHeaders**

An object that describes the headers that are forwarded to the origin. Your content is cached based on the headers that are forwarded.

Type: [HeaderObject](#) object

Required: No

### **forwardedQueryStrings**

An object that describes the query strings that are forwarded to the origin. Your content is cached based on the query strings that are forwarded.

Type: [QueryStringObject](#) object

Required: No

## maximumTTL

The maximum amount of time that objects stay in the distribution's cache before the distribution forwards another request to the origin to determine whether the object has been updated.

The value specified applies only when the origin adds HTTP headers such as `Cache-Control max-age`, `Cache-Control s-maxage`, and `Expires` to objects.

Type: Long

Required: No

## minimumTTL

The minimum amount of time that objects stay in the distribution's cache before the distribution forwards another request to the origin to determine whether the object has been updated.

A value of 0 must be specified for `minimumTTL` if the distribution is configured to forward all headers to the origin.

Type: Long

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Certificate

Describes the full details of an Amazon Lightsail SSL/TLS certificate.

## Note

To get a summary of a certificate, use the `GetCertificates` action and omit `includeCertificateDetails` from your request. The response will include only the certificate Amazon Resource Name (ARN), certificate name, domain name, and tags.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### **createdAt**

The timestamp when the certificate was created.

Type: Timestamp

Required: No

### **domainName**

The domain name of the certificate.

Type: String

Required: No

### **domainValidationRecords**

An array of objects that describe the domain validation records of the certificate.

Type: Array of [DomainValidationRecord](#) objects

Required: No

### **eligibleToRenew**

The renewal eligibility of the certificate.

Type: String

Required: No

### **inUseResourceCount**

The number of Lightsail resources that the certificate is attached to.

Type: Integer

Required: No

### **issuedAt**

The timestamp when the certificate was issued.

Type: Timestamp

Required: No

### **issuerCA**

The certificate authority that issued the certificate.

Type: String

Required: No

### **keyAlgorithm**

The algorithm used to generate the key pair (the public and private key) of the certificate.

Type: String

Required: No

### **name**

The name of the certificate (`my-certificate`).

Type: String

Required: No

## notAfter

The timestamp when the certificate expires.

Type: Timestamp

Required: No

## notBefore

The timestamp when the certificate is first valid.

Type: Timestamp

Required: No

## renewalSummary

An object that describes the status of the certificate renewal managed by Lightsail.

Type: [RenewalSummary](#) object

Required: No

## requestFailureReason

The validation failure reason, if any, of the certificate.

The following failure reasons are possible:

- **NO\_AVAILABLE\_CONTACTS** - This failure applies to email validation, which is not available for Lightsail certificates.
- **ADDITIONAL\_VERIFICATION\_REQUIRED** - Lightsail requires additional information to process this certificate request. This can happen as a fraud-protection measure, such as when the domain ranks within the Alexa top 1000 websites. To provide the required information, use the [AWS Support Center](#) to contact AWS Support.

### Note

You cannot request a certificate for Amazon-owned domain names such as those ending in `amazonaws.com`, `cloudfront.net`, or `elasticbeanstalk.com`.

- **DOMAIN\_NOT\_ALLOWED** - One or more of the domain names in the certificate request was reported as an unsafe domain by [VirusTotal](#). To correct the problem, search for your domain

name on the [VirusTotal](#) website. If your domain is reported as suspicious, see [Google Help for Hacked Websites](#) to learn what you can do.

If you believe that the result is a false positive, notify the organization that is reporting the domain. VirusTotal is an aggregate of several antivirus and URL scanners and cannot remove your domain from a block list itself. After you correct the problem and the VirusTotal registry has been updated, request a new certificate.

If you see this error and your domain is not included in the VirusTotal list, visit the [AWS Support Center](#) and create a case.

- **INVALID\_PUBLIC\_DOMAIN** - One or more of the domain names in the certificate request is not valid. Typically, this is because a domain name in the request is not a valid top-level domain. Try to request a certificate again, correcting any spelling errors or typos that were in the failed request, and ensure that all domain names in the request are for valid top-level domains. For example, you cannot request a certificate for `example.invalidpublicdomain` because `invalidpublicdomain` is not a valid top-level domain.
- **OTHER** - Typically, this failure occurs when there is a typographical error in one or more of the domain names in the certificate request. Try to request a certificate again, correcting any spelling errors or typos that were in the failed request.

Type: String

Required: No

### **revocationReason**

The reason the certificate was revoked. This value is present only when the certificate status is REVOKED.

Type: String

Required: No

### **revokedAt**

The timestamp when the certificate was revoked. This value is present only when the certificate status is REVOKED.

Type: Timestamp

Required: No

**serialNumber**

The serial number of the certificate.

Type: String

Required: No

**status**

The validation status of the certificate.

Type: String

Valid Values: PENDING\_VALIDATION | ISSUED | INACTIVE | EXPIRED | VALIDATION\_TIMED\_OUT | REVOKED | FAILED

Required: No

**subjectAlternativeNames**

An array of strings that specify the alternate domains (example2.com) and subdomains (blog.example.com) of the certificate.

Type: Array of strings

Required: No

**supportCode**

The support code. Include this code in your email to support when you have questions about your Lightsail certificate. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

**tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# CertificateSummary

Describes an Amazon Lightsail SSL/TLS certificate.

## Contents

### **certificateArn**

The Amazon Resource Name (ARN) of the certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### **certificateDetail**

An object that describes a certificate in detail.

Type: [Certificate](#) object

Required: No

### **certificateName**

The name of the certificate.

Type: String

Required: No

### **domainName**

The domain name of the certificate.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CloudFormationStackRecord

Describes a CloudFormation stack record created as a result of the `create cloud formation stack` action.

A CloudFormation stack record provides information about the AWS CloudFormation stack used to create a new Amazon Elastic Compute Cloud instance from an exported Lightsail instance snapshot.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the CloudFormation stack record.

Type: String

Pattern: `.*\S.*`

Required: No

### **createdAt**

The date when the CloudFormation stack record was created.

Type: Timestamp

Required: No

### **destinationInfo**

A list of objects describing the destination service, which is AWS CloudFormation, and the Amazon Resource Name (ARN) of the AWS CloudFormation stack.

Type: [DestinationInfo](#) object

Required: No

### **location**

A list of objects describing the Availability Zone and AWS Region of the CloudFormation stack record.

Type: [ResourceLocation](#) object

Required: No

### **name**

The name of the CloudFormation stack record. It starts with `CloudFormationStackRecord` followed by a GUID.

Type: String

Pattern: `\w[\w\-]*\w`

Required: No

### **resourceType**

The Lightsail resource type (`CloudFormationStackRecord`).

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **sourceInfo**

A list of objects describing the source of the CloudFormation stack record.

Type: Array of [CloudFormationStackRecordSourceInfo](#) objects

Required: No

### **state**

The current state of the CloudFormation stack record.

Type: String

Valid Values: `Started` | `Succeeded` | `Failed`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CloudFormationStackRecordSourceInfo

Describes the source of a CloudFormation stack record (i.e., the export snapshot record).

## Contents

### arn

The Amazon Resource Name (ARN) of the export snapshot record.

Type: String

Pattern: `.*\S.*`

Required: No

### name

The name of the record.

Type: String

Pattern: `.*\S.*`

Required: No

### resourceType

The Lightsail resource type (`ExportSnapshotRecord`).

Type: String

Valid Values: `ExportSnapshotRecord`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# ContactMethod

Describes a contact method.

A contact method is a way to send you notifications. For more information, see [Notifications in Amazon Lightsail](#).

## Contents

### **arn**

The Amazon Resource Name (ARN) of the contact method.

Type: String

Pattern: `.*\S.*`

Required: No

### **contactEndpoint**

The destination of the contact method, such as an email address or a mobile phone number.

Type: String

Pattern: `.*\S.*`

Required: No

### **createdAt**

The timestamp when the contact method was created.

Type: Timestamp

Required: No

### **location**

An object that describes the location of the contact method, such as the AWS Region and Availability Zone.

Type: [ResourceLocation](#) object

Required: No



**name**

The name of the contact method.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

**protocol**

The protocol of the contact method, such as email or SMS (text messaging).

Type: String

Valid Values: Email | SMS

Required: No

**resourceType**

The Lightsail resource type of the contact method.

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

**status**

The current status of the contact method.

A contact method has the following possible status:

- `PendingVerification` - The contact method has not yet been verified, and the verification has not yet expired.
- `Valid` - The contact method has been verified.

- **InValid** - An attempt was made to verify the contact method, but the verification has expired.

Type: String

Valid Values: PendingVerification | Valid | Invalid

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about your Lightsail contact method. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Container

Describes the settings of a container that will be launched, or that is launched, to an Amazon Lightsail container service.

## Contents

### command

The launch command for the container.

Type: Array of strings

Required: No

### environment

The environment variables of the container.

Type: String to string map

Required: No

### image

The name of the image used for the container.

Container images sourced from your Lightsail container service, that are registered and stored on your service, start with a colon (:). For example, if your container service name is `container-service-1`, the container image label is `mystaticsite`, and you want to use the third (3) version of the registered container image, then you should specify `:container-service-1.mystaticsite.3`. To use the latest version of a container image, specify `latest` instead of a version number (for example, `:container-service-1.mystaticsite.latest`). Lightsail will automatically use the highest numbered version of the registered container image.

Container images sourced from a public registry like Docker Hub don't start with a colon. For example, `nginx:latest` or `nginx`.

Type: String

Required: No

## ports

The open firewall ports of the container.

Type: String to string map

Valid Values: HTTP | HTTPS | TCP | UDP

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerImage

Describes a container image that is registered to an Amazon Lightsail container service.

## Contents

### **createdAt**

The timestamp when the container image was created.

Type: Timestamp

Required: No

### **digest**

The digest of the container image.

Type: String

Required: No

### **image**

The name of the container image.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerService

Describes an Amazon Lightsail container service.

## Contents

### arn

The Amazon Resource Name (ARN) of the container service.

Type: String

Pattern: `.*\S.*`

Required: No

### containerServiceName

The name of the container service.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 63.

Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: No

### createdAt

The timestamp when the container service was created.

Type: Timestamp

Required: No

### currentDeployment

An object that describes the current container deployment of the container service.

Type: [ContainerServiceDeployment](#) object

Required: No

## **isDisabled**

A Boolean value indicating whether the container service is disabled.

Type: Boolean

Required: No

## **location**

An object that describes the location of the container service, such as the AWS Region and Availability Zone.

Type: [ResourceLocation](#) object

Required: No

## **nextDeployment**

An object that describes the next deployment of the container service.

This value is null when there is no deployment in a pending state.

Type: [ContainerServiceDeployment](#) object

Required: No

## **power**

The power specification of the container service.

The power specifies the amount of RAM, the number of vCPUs, and the base price of the container service.

Type: String

Valid Values: nano | micro | small | medium | large | xlarge

Required: No

## **powerId**

The ID of the power of the container service.

Type: String

Required: No

## **principalArn**

The principal ARN of the container service.

The principal ARN can be used to create a trust relationship between your standard AWS account and your Lightsail container service. This allows you to give your service permission to access resources in your standard AWS account.

Type: String

Required: No

## **privateDomainName**

The private domain name of the container service.

The private domain name is accessible only by other resources within the default virtual private cloud (VPC) of your Lightsail account.

Type: String

Required: No

## **privateRegistryAccess**

An object that describes the configuration for the container service to access private container image repositories, such as Amazon Elastic Container Registry (Amazon ECR) private repositories.

For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

Type: [PrivateRegistryAccess](#) object

Required: No

## **publicDomainNames**

The public domain name of the container service, such as `example.com` and `www.example.com`.

You can specify up to four public domain names for a container service. The domain names that you specify are used when you create a deployment with a container configured as the public endpoint of your container service.



If you don't specify public domain names, then you can use the default domain of the container service.

**⚠ Important**

You must create and validate an SSL/TLS certificate before you can use public domain names with your container service. Use the `CreateCertificate` action to create a certificate for the public domain names you want to use with your container service.

See `CreateContainerService` or `UpdateContainerService` for information about how to specify public domain names for your Lightsail container service.

Type: String to array of strings map

Required: No

### **resourceType**

The Lightsail resource type of the container service.

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **scale**

The scale specification of the container service.

The scale specifies the allocated compute nodes of the container service.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 20.

Required: No

## state

The current state of the container service.

The following container service states are possible:

- PENDING - The container service is being created.
- READY - The container service is running but it does not have an active container deployment.
- DEPLOYING - The container service is launching a container deployment.
- RUNNING - The container service is running and it has an active container deployment.
- UPDATING - The container service capacity or its custom domains are being updated.
- DELETING - The container service is being deleted.
- DISABLED - The container service is disabled, and its active deployment and containers, if any, are shut down.

Type: String

Valid Values: PENDING | READY | RUNNING | UPDATING | DELETING | DISABLED | DEPLOYING

Required: No

## stateDetail

An object that describes the current state of the container service.

### Note

The state detail is populated only when a container service is in a PENDING, DEPLOYING, or UPDATING state.

Type: [ContainerServiceStateDetail](#) object

Required: No

## tags

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **url**

The publicly accessible URL of the container service.

If no public endpoint is specified in the `currentDeployment`, this URL returns a 404 response.

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceDeployment

Describes a container deployment configuration of an Amazon Lightsail container service.

A deployment specifies the settings, such as the ports and launch command, of containers that are deployed to your container service.

## Contents

### containers

An object that describes the configuration for the containers of the deployment.

Type: String to [Container](#) object map

Key Length Constraints: Minimum length of 1. Maximum length of 53.

Key Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: No

### createdAt

The timestamp when the deployment was created.

Type: Timestamp

Required: No

### publicEndpoint

An object that describes the endpoint of the deployment.

Type: [ContainerServiceEndpoint](#) object

Required: No

### state

The state of the deployment.

A deployment can be in one of the following states:

- **ACTIVATING** - The deployment is being created.

- **ACTIVE** - The deployment was successfully created, and it's currently running on the container service. The container service can have only one deployment in an active state at a time.
- **INACTIVE** - The deployment was previously successfully created, but it is not currently running on the container service.
- **FAILED** - The deployment failed. Use the `GetContainerLog` action to view the log events for the containers in the deployment to try to determine the reason for the failure.

Type: String

Valid Values: ACTIVATING | ACTIVE | INACTIVE | FAILED

Required: No

### **version**

The version number of the deployment.

Type: Integer

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceDeploymentRequest

Describes a container deployment configuration of an Amazon Lightsail container service.

A deployment specifies the settings, such as the ports and launch command, of containers that are deployed to your container service.

## Contents

### containers

An object that describes the configuration for the containers of the deployment.

Type: String to [Container](#) object map

Key Length Constraints: Minimum length of 1. Maximum length of 53.

Key Pattern: `^[a-z0-9]{1,2}|[a-z0-9][a-z0-9-]+[a-z0-9]$`

Required: No

### publicEndpoint

An object that describes the endpoint of the deployment.

Type: [EndpointRequest](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceECRImagePullerRole

Describes the activation status of the role that you can use to grant an Amazon Lightsail container service access to Amazon Elastic Container Registry (Amazon ECR) private repositories.

When activated, Lightsail creates an AWS Identity and Access Management (IAM) role for the specified Lightsail container service. You can use the ARN of the role to create a trust relationship between your Lightsail container service and an Amazon ECR private repository in your AWS account. This allows your container service to pull images from Amazon ECR private repositories. For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### isActive

A Boolean value that indicates whether the role is activated.

Type: Boolean

Required: No

### principalArn

The Amazon Resource Name (ARN) of the role, if it is activated.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceECRImagePullerRoleRequest

Describes a request to activate or deactivate the role that you can use to grant an Amazon Lightsail container service access to Amazon Elastic Container Registry (Amazon ECR) private repositories.

When activated, Lightsail creates an AWS Identity and Access Management (IAM) role for the specified Lightsail container service. You can use the ARN of the role to create a trust relationship between your Lightsail container service and an Amazon ECR private repository in your AWS account. This allows your container service to pull images from Amazon ECR private repositories. For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### isActive

A Boolean value that indicates whether to activate the role.

Type: Boolean

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# ContainerServiceEndpoint

Describes the public endpoint configuration of a deployment of an Amazon Lightsail container service.

## Contents

### containerName

The name of the container entry of the deployment that the endpoint configuration applies to.

Type: String

Required: No

### containerPort

The port of the specified container to which traffic is forwarded to.

Type: Integer

Required: No

### healthCheck

An object that describes the health check configuration of the container.

Type: [ContainerServiceHealthCheckConfig](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceHealthCheckConfig

Describes the health check configuration of an Amazon Lightsail container service.

## Contents

### healthyThreshold

The number of consecutive health checks successes required before moving the container to the Healthy state. The default value is 2.

Type: Integer

Required: No

### intervalSeconds

The approximate interval, in seconds, between health checks of an individual container. You can specify between 5 and 300 seconds. The default value is 5.

Type: Integer

Required: No

### path

The path on the container on which to perform the health check. The default value is `/`.

Type: String

Required: No

### successCodes

The HTTP codes to use when checking for a successful response from a container. You can specify values between 200 and 499. You can specify multiple values (for example, 200, 202) or a range of values (for example, 200-299).

Type: String

Required: No

### timeoutSeconds

The amount of time, in seconds, during which no response means a failed health check. You can specify between 2 and 60 seconds. The default value is 2.

Type: Integer

Required: No

### **unhealthyThreshold**

The number of consecutive health check failures required before moving the container to the `Unhealthy` state. The default value is 2.

Type: Integer

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceLogEvent

Describes the log events of a container of an Amazon Lightsail container service.

## Contents

### **createdAt**

The timestamp when the container service log event was created.

Type: Timestamp

Required: No

### **message**

The message of the container service log event.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServicePower

Describes the powers that can be specified for an Amazon Lightsail container service.

The power specifies the amount of RAM, the number of vCPUs, and the base price of the container service.

## Contents

### **cpuCount**

The number of vCPUs included in the power.

Type: Float

Required: No

### **isActive**

A Boolean value indicating whether the power is active and can be specified for container services.

Type: Boolean

Required: No

### **name**

The friendly name of the power (nano).

Type: String

Required: No

### **powerId**

The ID of the power (nano-1).

Type: String

Required: No

### **price**

The monthly price of the power in USD.

Type: Float

Required: No

### **ramSizeInGb**

The amount of RAM (in GB) of the power.

Type: Float

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ContainerServiceRegistryLogin

Describes the sign-in credentials for the container image registry of an Amazon Lightsail account.

## Contents

### **expiresAt**

The timestamp of when the container image registry sign-in credentials expire.

The log in credentials expire 12 hours after they are created, at which point you will need to create a new set of log in credentials using the `CreateContainerServiceRegistryLogin` action.

Type: Timestamp

Required: No

### **password**

The container service registry password to use to push container images to the container image registry of a Lightsail account

Type: String

Required: No

### **registry**

The address to use to push container images to the container image registry of a Lightsail account.

Type: String

Required: No

### **username**

The container service registry username to use to push container images to the container image registry of a Lightsail account.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# ContainerServiceStateDetail

Describes the current state of a container service.

## Contents

### code

The state code of the container service.

The following state codes are possible:

- The following state codes are possible if your container service is in a DEPLOYING or UPDATING state:
  - CREATING\_SYSTEM\_RESOURCES - The system resources for your container service are being created.
  - CREATING\_NETWORK\_INFRASTRUCTURE - The network infrastructure for your container service are being created.
  - PROVISIONING\_CERTIFICATE - The SSL/TLS certificate for your container service is being created.
  - PROVISIONING\_SERVICE - Your container service is being provisioned.
  - CREATING\_DEPLOYMENT - Your deployment is being created on your container service.
  - EVALUATING\_HEALTH\_CHECK - The health of your deployment is being evaluated.
  - ACTIVATING\_DEPLOYMENT - Your deployment is being activated.
- The following state codes are possible if your container service is in a PENDING state:
  - CERTIFICATE\_LIMIT\_EXCEEDED - The SSL/TLS certificate required for your container service exceeds the maximum number of certificates allowed for your account.
  - UNKNOWN\_ERROR - An error was experienced when your container service was being created.

Type: String

Valid Values: CREATING\_SYSTEM\_RESOURCES | CREATING\_NETWORK\_INFRASTRUCTURE | PROVISIONING\_CERTIFICATE | PROVISIONING\_SERVICE | CREATING\_DEPLOYMENT | EVALUATING\_HEALTH\_CHECK | ACTIVATING\_DEPLOYMENT | CERTIFICATE\_LIMIT\_EXCEEDED | UNKNOWN\_ERROR

Required: No

## message

A message that provides more information for the state code.

### Note

The state detail is populated only when a container service is in a PENDING, DEPLOYING, or UPDATING state.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CookieObject

Describes whether an Amazon Lightsail content delivery network (CDN) distribution forwards cookies to the origin and, if so, which ones.

For the cookies that you specify, your distribution caches separate versions of the specified content based on the cookie values in viewer requests.

## Contents

### `cookiesAllowList`

The specific cookies to forward to your distribution's origin.

Type: Array of strings

Required: No

### `option`

Specifies which cookies to forward to the distribution's origin for a cache behavior: `all`, `none`, or `allow-list` to forward only the cookies specified in the `cookiesAllowList` parameter.

Type: String

Valid Values: `none` | `allow-list` | `all`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# CostEstimate

Describes the estimated cost for resources in your Lightsail for Research account.

## Contents

### resultsByTime

The cost estimate result that's associated with a time period.

Type: Array of [EstimateByTime](#) objects

Required: No

### usageType

The types of usage that are included in the estimate, such as costs, usage, or data transfer.

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DestinationInfo

Describes the destination of a record.

## Contents

### id

The ID of the resource created at the destination.

Type: String

Pattern: `.*\S.*`

Required: No

### service

The destination service of the record.

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Disk

Describes a block storage disk.

## Contents

### addOns

An array of objects representing the add-ons enabled on the disk.

Type: Array of [AddOn](#) objects

Required: No

### arn

The Amazon Resource Name (ARN) of the disk.

Type: String

Pattern: `.*\S.*`

Required: No

### attachedTo

The resources to which the disk is attached.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### attachmentState

*This member has been deprecated.*

(Discontinued) The attachment state of the disk.

#### Note

In releases prior to November 14, 2017, this parameter returned `attached` for system disks in the API response. It is now discontinued, but still included in the response. Use `isAttached` instead.

Type: String

Required: No

### **autoMountStatus**

The status of automatically mounting a storage disk to a virtual computer.

#### **Important**

This parameter only applies to Lightsail for Research resources.

Type: String

Valid Values: Failed | Pending | Mounted | NotMounted

Required: No

### **createdAt**

The date when the disk was created.

Type: Timestamp

Required: No

### **gbInUse**

*This member has been deprecated.*

(Discontinued) The number of GB in use by the disk.

#### **Note**

In releases prior to November 14, 2017, this parameter was not included in the API response. It is now discontinued.

Type: Integer

Required: No

**iops**

The input/output operations per second (IOPS) of the disk.

Type: Integer

Required: No

**isAttached**

A Boolean value indicating whether the disk is attached.

Type: Boolean

Required: No

**isSystemDisk**

A Boolean value indicating whether this disk is a system disk (has an operating system loaded on it).

Type: Boolean

Required: No

**location**

The AWS Region and Availability Zone where the disk is located.

Type: [ResourceLocation](#) object

Required: No

**name**

The unique name of the disk.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

**path**

The disk path.



Type: String

Required: No

### **resourceType**

The Lightsail resource type (Disk).

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

### **sizeInGb**

The size of the disk in GB.

Type: Integer

Required: No

### **state**

Describes the status of the disk.

Type: String

Valid Values: pending | error | available | in-use | unknown

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

## tags

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DiskInfo

Describes a disk.

## Contents

### isSystemDisk

A Boolean value indicating whether this disk is a system disk (has an operating system loaded on it).

Type: Boolean

Required: No

### name

The disk name.

Type: String

Required: No

### path

The disk path.

Type: String

Pattern: `.*\S.*`

Required: No

### sizeInGb

The size of the disk in GB (32).

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DiskMap

Describes a block storage disk mapping.

## Contents

### **newDiskName**

The new disk name (my-new-disk).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **originalDiskPath**

The original disk path exposed to the instance (for example, /dev/sdh).

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DiskSnapshot

Describes a block storage disk snapshot.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the disk snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

### **createdAt**

The date when the disk snapshot was created.

Type: Timestamp

Required: No

### **fromDiskArn**

The Amazon Resource Name (ARN) of the source disk from which the disk snapshot was created.

Type: String

Pattern: `.*\S.*`

Required: No

### **fromDiskName**

The unique name of the source disk from which the disk snapshot was created.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

**fromInstanceArn**

The Amazon Resource Name (ARN) of the source instance from which the disk (system volume) snapshot was created.

Type: String

Pattern: `.*\S.*`

Required: No

**fromInstanceName**

The unique name of the source instance from which the disk (system volume) snapshot was created.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

**isFromAutoSnapshot**

A Boolean value indicating whether the snapshot was created from an automatic snapshot.

Type: Boolean

Required: No

**location**

The AWS Region and Availability Zone where the disk snapshot was created.

Type: [ResourceLocation](#) object

Required: No

**name**

The name of the disk snapshot (`my-disk-snapshot`).

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

**progress**

The progress of the snapshot.

Type: String

Required: No

**resourceType**

The Lightsail resource type (DiskSnapshot).

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

**sizeInGb**

The size of the disk in GB.

Type: Integer

Required: No

**state**

The status of the disk snapshot operation.

Type: String

Valid Values: pending | completed | error | unknown

Required: No

**supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.



Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DiskSnapshotInfo

Describes a disk snapshot.

## Contents

### sizeInGb

The size of the disk in GB (32).

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DistributionBundle

Describes the specifications of a distribution bundle.

## Contents

### **bundleId**

The ID of the bundle.

Type: String

Required: No

### **isActive**

Indicates whether the bundle is active, and can be specified for a new or existing distribution.

Type: Boolean

Required: No

### **name**

The name of the distribution bundle.

Type: String

Required: No

### **price**

The monthly price, in US dollars, of the bundle.

Type: Float

Required: No

### **transferPerMonthInGb**

The monthly network transfer quota of the bundle.

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DnsRecordCreationState

Describes the creation state of the canonical name (CNAME) records that are automatically added by Amazon Lightsail to the DNS of a domain to validate domain ownership for an SSL/TLS certificate.

When you create an SSL/TLS certificate for a Lightsail resource, you must add a set of CNAME records to the DNS of the domains for the certificate to validate that you own the domains. Lightsail can automatically add the CNAME records to the DNS of the domain if the DNS zone for the domain exists within your Lightsail account. If automatic record addition fails, or if you manage the DNS of your domain using a third-party service, then you must manually add the CNAME records to the DNS of your domain. For more information, see [Verify an SSL/TLS certificate in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### code

The status code for the automated DNS record creation.

Following are the possible values:

- SUCCEEDED - The validation records were successfully added to the domain.
- STARTED - The automatic DNS record creation has started.
- FAILED - The validation records failed to be added to the domain.

Type: String

Valid Values: SUCCEEDED | STARTED | FAILED

Required: No

### message

The message that describes the reason for the status code.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Domain

Describes a domain where you are storing recordsets.

## Contents

### arn

The Amazon Resource Name (ARN) of the domain recordset (arn:aws:lightsail:global:123456789101:Domain/824cede0-abc7-4f84-8dbc-12345EXAMPLE).

Type: String

Pattern: .\*\\S.\*

Required: No

### createdAt

The date when the domain recordset was created.

Type: Timestamp

Required: No

### domainEntries

An array of key-value pairs containing information about the domain entries.

Type: Array of [DomainEntry](#) objects

Required: No

### location

The AWS Region and Availability Zones where the domain recordset was created.

Type: [ResourceLocation](#) object

Required: No

### name

The name of the domain.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **registeredDomainDelegationInfo**

An object that describes the state of the Route 53 domain delegation to a Lightsail DNS zone.

Type: [RegisteredDomainDelegationInfo](#) object

Required: No

### **resourceType**

The resource type.

Type: String

Valid Values: `ContainerService | Instance | StaticIp | KeyPair | InstanceSnapshot | Domain | PeeredVpc | LoadBalancer | LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase | RelationalDatabaseSnapshot | ExportSnapshotRecord | CloudFormationStackRecord | Alarm | ContactMethod | Distribution | Certificate | Bucket`

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects



Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DomainEntry

Describes a domain recordset entry.

## Contents

### id

The ID of the domain recordset entry.

Type: String

Pattern: `.*\S.*`

Required: No

### isAlias

When `true`, specifies whether the domain entry is an alias used by the Lightsail load balancer, Lightsail container service, Lightsail content delivery network (CDN) distribution, or another AWS resource. You can include an alias (A type) record in your request, which points to the DNS name of a load balancer, container service, CDN distribution, or other AWS resource and routes traffic to that resource.

Type: Boolean

Required: No

### name

The name of the domain.

Type: String

Required: No

### options

*This member has been deprecated.*

(Discontinued) The options for the domain entry.

**Note**

In releases prior to November 29, 2017, this parameter was not included in the API response. It is now discontinued.

Type: String to string map

Required: No

**target**

The target IP address (192.0.2.0), or AWS name server (ns-111.awsdns-22.com.).

For Lightsail load balancers, the value looks like

ab1234c56789c6b86aba6fb203d443bc-123456789.us-east-2.elb.amazonaws.com.

For Lightsail distributions, the value looks like `exampled1182ne.cloudfront.net`.

For Lightsail container services, the value looks like `container-`

`service-1.example23scljs.us-west-2.cs.amazonlightsail.com`. Be sure to also set `isAlias` to `true` when setting up an A record for a Lightsail load balancer, distribution, or container service.

Type: String

Required: No

**type**

The type of domain entry, such as address for IPv4 (A), address for IPv6 (AAAA), canonical name (CNAME), mail exchanger (MX), name server (NS), start of authority (SOA), service locator (SRV), or text (TXT).

The following domain entry types can be used:

- A
- AAAA
- CNAME
- MX
- NS
- SOA

- SRV
- TXT

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# DomainValidationRecord

Describes the domain name system (DNS) records that you must add to the DNS of your registered domain to validate ownership for an Amazon Lightsail SSL/TLS certificate.

## Contents

### **dnsRecordCreationState**

An object that describes the state of the canonical name (CNAME) records that are automatically added by Lightsail to the DNS of the domain to validate domain ownership.

Type: [DnsRecordCreationState](#) object

Required: No

### **domainName**

The domain name of the certificate validation record. For example, `example.com` or `www.example.com`.

Type: String

Required: No

### **resourceRecord**

An object that describes the DNS records to add to your domain's DNS to validate it for the certificate.

Type: [ResourceRecord](#) object

Required: No

### **validationStatus**

The validation status of the record.

Type: String

Valid Values: `PENDING_VALIDATION` | `FAILED` | `SUCCESS`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# EndpointRequest

Describes the settings of a public endpoint for an Amazon Lightsail container service.

## Contents

### containerName

The name of the container for the endpoint.

Type: String

Required: Yes

### containerPort

The port of the container to which traffic is forwarded to.

Type: Integer

Required: Yes

### healthCheck

An object that describes the health check configuration of the container.

Type: [ContainerServiceHealthCheckConfig](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# EstimateByTime

An estimate that's associated with a time period.

## Contents

### currency

The currency of the estimate in USD.

Type: String

Valid Values: USD

Required: No

### pricingUnit

The unit of measurement that's used for the cost estimate.

Type: String

Valid Values: GB | Hrs | GB-Mo | Bundles | Queries

Required: No

### timePeriod

The period of time, in days, that an estimate covers. The period has a start date and an end date. The start date must come before the end date.

Type: [TimePeriod](#) object

Required: No

### unit

The number of pricing units used to calculate the total number of hours. For example, 1 unit equals 1 hour.

Type: Double

Required: No



## usageCost

The amount of cost or usage that's measured for the cost estimate.

Type: Double

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ExportSnapshotRecord

Describes an export snapshot record.

## Contents

### arn

The Amazon Resource Name (ARN) of the export snapshot record.

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The date when the export snapshot record was created.

Type: Timestamp

Required: No

### destinationInfo

A list of objects describing the destination of the export snapshot record.

Type: [DestinationInfo](#) object

Required: No

### location

The AWS Region and Availability Zone where the export snapshot record is located.

Type: [ResourceLocation](#) object

Required: No

### name

The export snapshot record name.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **resourceType**

The Lightsail resource type (ExportSnapshotRecord).

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

### **sourceInfo**

A list of objects describing the source of the export snapshot record.

Type: [ExportSnapshotRecordSourceInfo](#) object

Required: No

### **state**

The state of the export snapshot record.

Type: String

Valid Values: Started | Succeeded | Failed

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)

- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ExportSnapshotRecordSourceInfo

Describes the source of an export snapshot record.

## Contents

### arn

The Amazon Resource Name (ARN) of the source instance or disk snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The date when the source instance or disk snapshot was created.

Type: Timestamp

Required: No

### diskSnapshotInfo

A list of objects describing a disk snapshot.

Type: [DiskSnapshotInfo](#) object

Required: No

### fromResourceArn

The Amazon Resource Name (ARN) of the snapshot's source instance or disk.

Type: String

Pattern: `.*\S.*`

Required: No

### fromResourceName

The name of the snapshot's source instance or disk.

Type: String

Pattern: `.*\S.*`

Required: No

### **instanceSnapshotInfo**

A list of objects describing an instance snapshot.

Type: [InstanceSnapshotInfo](#) object

Required: No

### **name**

The name of the source instance or disk snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

### **resourceType**

The Lightsail resource type (InstanceSnapshot or DiskSnapshot).

Type: String

Valid Values: InstanceSnapshot | DiskSnapshot

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# HeaderObject

Describes the request headers that a Lightsail distribution bases caching on.

For the headers that you specify, your distribution caches separate versions of the specified content based on the header values in viewer requests. For example, suppose viewer requests for `logo.jpg` contain a custom product header that has a value of either `acme` or `apex`, and you configure your distribution to cache your content based on values in the product header. Your distribution forwards the product header to the origin and caches the response from the origin once for each header value.

## Contents

### `headersAllowList`

The specific headers to forward to your distribution's origin.

Type: Array of strings

Valid Values: `Accept` | `Accept-Charset` | `Accept-Datetime` | `Accept-Encoding` | `Accept-Language` | `Authorization` | `CloudFront-Forwarded-Proto` | `CloudFront-Is-Desktop-Viewer` | `CloudFront-Is-Mobile-Viewer` | `CloudFront-Is-SmartTV-Viewer` | `CloudFront-Is-Tablet-Viewer` | `CloudFront-Viewer-Country` | `Host` | `Origin` | `Referer`

Required: No

### `option`

The headers that you want your distribution to forward to your origin and base caching on.

You can configure your distribution to do one of the following:

- **all** - Forward all headers to your origin.
- **none** - Forward only the default headers.
- **allow-list** - Forward only the headers you specify using the `headersAllowList` parameter.

Type: String

Valid Values: `none` | `allow-list` | `all`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# HostKeyAttributes

Describes the public SSH host keys or the RDP certificate.

## Contents

### algorithm

The SSH host key algorithm or the RDP certificate format.

For SSH host keys, the algorithm may be `ssh-rsa`, `ecdsa-sha2-nistp256`, `ssh-ed25519`, etc. For RDP certificates, the algorithm is always `x509-cert`.

Type: String

Required: No

### fingerprintSHA1

The SHA-1 fingerprint of the returned SSH host key or RDP certificate.

- Example of an SHA-1 SSH fingerprint:

```
SHA1:1CHH6FaAaXjtF0sR/t83vf91SR0
```

- Example of an SHA-1 RDP fingerprint:

```
af:34:51:fe:09:f0:e0:da:b8:4e:56:ca:60:c2:10:ff:38:06:db:45
```

Type: String

Required: No

### fingerprintSHA256

The SHA-256 fingerprint of the returned SSH host key or RDP certificate.

- Example of an SHA-256 SSH fingerprint:

```
SHA256:KTsMnRBh1IhD17HpdfsbzeGA4j0ijm5tyXsMjKVbB8o
```

- Example of an SHA-256 RDP fingerprint:

```
03:9b:36:9f:4b:de:4e:61:70:fc:7c:c9:78:e7:d2:1a:1c:25:a8:0c:91:f6:7c:e4:d6:a
```

Type: String

Required: No

### **notValidAfter**

The returned RDP certificate is not valid after this point in time.

This value is listed only for RDP certificates.

Type: Timestamp

Required: No

### **notValidBefore**

The returned RDP certificate is valid after this point in time.

This value is listed only for RDP certificates.

Type: Timestamp

Required: No

### **publicKey**

The public SSH host key or the RDP certificate.

Type: String

Required: No

### **witnessedAt**

The time that the SSH host key or RDP certificate was recorded by Lightsail.

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# InputOrigin

Describes the origin resource of an Amazon Lightsail content delivery network (CDN) distribution.

An origin can be a Lightsail instance, bucket, container service, or load balancer. A distribution pulls content from an origin, caches it, and serves it to viewers via a worldwide network of edge servers.

## Contents

### name

The name of the origin resource.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

### protocolPolicy

The protocol that your Amazon Lightsail distribution uses when establishing a connection with your origin to pull content.

Type: String

Valid Values: `http-only` | `https-only`

Required: No

### regionName

The AWS Region name of the origin resource.

Type: String

Valid Values: `us-east-1` | `us-east-2` | `us-west-1` | `us-west-2` | `eu-west-1` | `eu-west-2` | `eu-west-3` | `eu-central-1` | `ca-central-1` | `ap-south-1` | `ap-southeast-1` | `ap-southeast-2` | `ap-northeast-1` | `ap-northeast-2` | `eu-north-1`

Required: No

## **responseTimeout**

The amount of time, in seconds, that the distribution waits for a response after forwarding a request to the origin. The minimum timeout is 1 second, the maximum is 60 seconds, and the default (if you don't specify otherwise) is 30 seconds.

Type: Integer

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Instance

Describes an instance (a virtual private server).

## Contents

### addOns

An array of objects representing the add-ons enabled on the instance.

Type: Array of [AddOn](#) objects

Required: No

### arn

The Amazon Resource Name (ARN) of the instance (arn:aws:lightsail:us-east-2:123456789101:Instance/244ad76f-8aad-4741-809f-12345EXAMPLE).

Type: String

Pattern: `.*\S.*`

Required: No

### blueprintId

The blueprint ID (amazon\_linux\_2023).

Type: String

Pattern: `.*\S.*`

Required: No

### blueprintName

The friendly name of the blueprint (Amazon Linux 2023).

Type: String

Pattern: `.*\S.*`

Required: No

## bundleId

The bundle for the instance (`micro_x_x`).

Type: String

Pattern: `.*\S.*`

Required: No

## createdAt

The timestamp when the instance was created (`1479734909.17`) in Unix time format.

Type: Timestamp

Required: No

## hardware

The size of the vCPU and the amount of RAM for the instance.

Type: [InstanceHardware](#) object

Required: No

## ipAddressType

The IP address type of the instance.

The possible values are `ipv4` for IPv4 only, `ipv6` for IPv6 only, and `dualstack` for IPv4 and IPv6.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

## ipv6Addresses

The IPv6 addresses of the instance.

Type: Array of strings

Pattern: `([A-F0-9]{1,4}:){7}[A-F0-9]{1,4}`

Required: No

### **isStaticIp**

A Boolean value indicating whether this instance has a static IP assigned to it.

Type: Boolean

Required: No

### **location**

The region name and Availability Zone where the instance is located.

Type: [ResourceLocation](#) object

Required: No

### **metadataOptions**

The metadata options for the Amazon Lightsail instance.

Type: [InstanceMetadataOptions](#) object

Required: No

### **name**

The name the user gave the instance (Amazon\_Linux\_2023-1).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **networking**

Information about the public ports and monthly data transfer rates for the instance.

Type: [InstanceNetworking](#) object

Required: No

### **privateIpAddress**

The private IP address of the instance.



Type: String

Pattern: (`[0-9]{1,3}\.`){3}`[0-9]{1,3}`

Required: No

### **publicIpAddress**

The public IP address of the instance.

Type: String

Pattern: (`[0-9]{1,3}\.`){3}`[0-9]{1,3}`

Required: No

### **resourceType**

The type of resource (usually Instance).

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **sshKeyName**

The name of the SSH key being used to connect to the instance (`LightsailDefaultKeyPair`).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **state**

The status code and the state (`running`) for the instance.

Type: [InstanceState](#) object

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

### **username**

The user name for connecting to the instance (ec2-user).

Type: String

Pattern: `.*\S.*`

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstanceAccessDetails

The parameters for gaining temporary access to one of your Amazon Lightsail instances.

## Contents

### certKey

For SSH access, the public key to use when accessing your instance For OpenSSH clients (command line SSH), you should save this value to `tempkey-cert.pub`.

Type: String

Required: No

### expiresAt

For SSH access, the date on which the temporary keys expire.

Type: Timestamp

Required: No

### hostKeys

Describes the public SSH host keys or the RDP certificate.

Type: Array of [HostKeyAttributes](#) objects

Required: No

### instanceName

The name of this Amazon Lightsail instance.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### ipAddress

The public IP address of the Amazon Lightsail instance.

Type: String

Pattern: (`[0-9]{1,3}\.){3}[0-9]{1,3}`

Required: No

### **ipv6Addresses**

The IPv6 address of the Amazon Lightsail instance.

Type: Array of strings

Pattern: (`[A-F0-9]{1,4}:`){7}`[A-F0-9]{1,4}`

Required: No

### **password**

For RDP access, the password for your Amazon Lightsail instance. Password will be an empty string if the password for your new instance is not ready yet. When you create an instance, it can take up to 15 minutes for the instance to be ready.

#### **Note**

If you create an instance using any key pair other than the default (`LightsailDefaultKeyPair`), password will always be an empty string. If you change the Administrator password on the instance, Lightsail will continue to return the original password value. When accessing the instance using RDP, you need to manually enter the Administrator password after changing it from the default.

Type: String

Required: No

### **passwordData**

For a Windows Server-based instance, an object with the data you can use to retrieve your password. This is only needed if `password` is empty and the instance is not new (and therefore the password is not ready yet). When you create an instance, it can take up to 15 minutes for the instance to be ready.

Type: [PasswordData](#) object

Required: No

## privateKey

For SSH access, the temporary private key. For OpenSSH clients (command line SSH), you should save this value to tempkey).

Type: String

Required: No

## protocol

The protocol for these Amazon Lightsail instance access details.

Type: String

Valid Values: ssh | rdp

Required: No

## username

The user name to use when logging in to the Amazon Lightsail instance.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstanceEntry

Describes the Amazon Elastic Compute Cloud instance and related resources to be created using the `create cloud formation stack` operation.

## Contents

### **availabilityZone**

The Availability Zone for the new Amazon EC2 instance.

Type: String

Required: Yes

### **instanceType**

The instance type (`t2.micro`) to use for the new Amazon EC2 instance.

Type: String

Pattern: `.*\S.*`

Required: Yes

### **portInfoSource**

The port configuration to use for the new Amazon EC2 instance.

The following configuration options are available:

- **DEFAULT** - Use the default firewall settings from the Lightsail instance blueprint. If this is specified, then IPv4 and IPv6 will be configured for the new instance that is created in Amazon EC2.
- **INSTANCE** - Use the configured firewall settings from the source Lightsail instance. If this is specified, the new instance that is created in Amazon EC2 will be configured to match the configuration of the source Lightsail instance. For example, if the source instance is configured for dual-stack (IPv4 and IPv6), then IPv4 and IPv6 will be configured for the new instance that is created in Amazon EC2. If the source instance is configured for IPv4 only, then only IPv4 will be configured for the new instance that is created in Amazon EC2.
- **NONE** - Use the default Amazon EC2 security group. If this is specified, then only IPv4 will be configured for the new instance that is created in Amazon EC2.

- **CLOSED** - All ports closed. If this is specified, then only IPv4 will be configured for the new instance that is created in Amazon EC2.

**Note**

If you configured `lightsail-connect` as a `cidrListAliases` on your instance, or if you chose to allow the Lightsail browser-based SSH or RDP clients to connect to your instance, that configuration is not carried over to your new Amazon EC2 instance.

Type: String

Valid Values: `DEFAULT` | `INSTANCE` | `NONE` | `CLOSED`

Required: Yes

**sourceName**

The name of the export snapshot record, which contains the exported Lightsail instance snapshot that will be used as the source of the new Amazon EC2 instance.

Use the `get export snapshot records` operation to get a list of export snapshot records that you can use to create a CloudFormation stack.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: Yes

**userData**

A launch script you can create that configures a server with additional user data. For example, you might want to run `apt-get -y update`.

**Note**

Depending on the machine image you choose, the command to get software on your instance varies. Amazon Linux and CentOS use `yum`, Debian and Ubuntu use `apt-get`, and FreeBSD uses `pkg`.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# InstanceHardware

Describes the hardware for the instance.

## Contents

### cpuCount

The number of vCPUs the instance has.

Type: Integer

Required: No

### disks

The disks attached to the instance.

Type: Array of [Disk](#) objects

Required: No

### ramSizeInGb

The amount of RAM in GB on the instance (1 . 0).

Type: Float

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstanceHealthSummary

Describes information about the health of the instance.

## Contents

### instanceHealth

Describes the overall instance health. Valid values are below.

Type: String

Valid Values: `initial` | `healthy` | `unhealthy` | `unused` | `draining` | `unavailable`

Required: No

### instanceHealthReason

More information about the instance health. If the `instanceHealth` is `healthy`, then an `instanceHealthReason` value is not provided.

If `instanceHealth` is `initial`, the `instanceHealthReason` value can be one of the following:

- **Lb.RegistrationInProgress** - The target instance is in the process of being registered with the load balancer.
- **Lb.InitialHealthChecking** - The Lightsail load balancer is still sending the target instance the minimum number of health checks required to determine its health status.

If `instanceHealth` is `unhealthy`, the `instanceHealthReason` value can be one of the following:

- **Instance.ResponseCodeMismatch** - The health checks did not return an expected HTTP code.
- **Instance.Timeout** - The health check requests timed out.
- **Instance.FailedHealthChecks** - The health checks failed because the connection to the target instance timed out, the target instance response was malformed, or the target instance failed the health check for an unknown reason.
- **Lb.InternalError** - The health checks failed due to an internal error.

If **instanceHealth** is unused, the **instanceHealthReason** value can be one of the following:

- **Instance.NotRegistered** - The target instance is not registered with the target group.
- **Instance.NotInUse** - The target group is not used by any load balancer, or the target instance is in an Availability Zone that is not enabled for its load balancer.
- **Instance.IpUnusable** - The target IP address is reserved for use by a Lightsail load balancer.
- **Instance.InvalidState** - The target is in the stopped or terminated state.

If **instanceHealth** is draining, the **instanceHealthReason** value can be one of the following:

- **Instance.DeregistrationInProgress** - The target instance is in the process of being deregistered and the deregistration delay period has not expired.

Type: String

Valid Values: Lb.RegistrationInProgress | Lb.InitialHealthChecking | Lb.InternalError | Instance.ResponseCodeMismatch | Instance.Timeout | Instance.FailedHealthChecks | Instance.NotRegistered | Instance.NotInUse | Instance.DeregistrationInProgress | Instance.InvalidState | Instance.IpUnusable

Required: No

## instanceName

The name of the Lightsail instance for which you are requesting health check data.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstanceMetadataOptions

The metadata options for the instance.

## Contents

### httpEndpoint

Indicates whether the HTTP metadata endpoint on your instances is enabled or disabled.

If the value is `disabled`, you cannot access your instance metadata.

Type: String

Valid Values: `disabled` | `enabled`

Required: No

### httpProtocolIpv6

Indicates whether the IPv6 endpoint for the instance metadata service is enabled or disabled.

Type: String

Valid Values: `disabled` | `enabled`

Required: No

### httpPutResponseHopLimit

The desired HTTP PUT response hop limit for instance metadata requests. A larger number means that the instance metadata requests can travel farther.

Type: Integer

Required: No

### httpTokens

The state of token usage for your instance metadata requests.

If the state is `optional`, you can choose whether to retrieve instance metadata with a signed token header on your request. If you retrieve the IAM role credentials without a token, the version 1.0 role credentials are returned. If you retrieve the IAM role credentials by using a valid signed token, the version 2.0 role credentials are returned.

If the state is required, you must send a signed token header with all instance metadata retrieval requests. In this state, retrieving the IAM role credential always returns the version 2.0 credentials. The version 1.0 credentials are not available.

### Important

Not all instance blueprints in Lightsail support version 2.0 credentials. Use the `MetadataNoToken` instance metric to track the number of calls to the instance metadata service that are using version 1.0 credentials. For more information, see [Viewing instance metrics in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

Type: String

Valid Values: `optional` | `required`

Required: No

## state

The state of the metadata option changes.

The following states are possible:

- `pending` - The metadata options are being updated. The instance is not yet ready to process metadata traffic with the new selection.
- `applied` - The metadata options have been successfully applied to the instance.

Type: String

Valid Values: `pending` | `applied`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# InstanceNetworking

Describes monthly data transfer rates and port information for an instance.

## Contents

### monthlyTransfer

The amount of data in GB allocated for monthly data transfers.

Type: [MonthlyTransfer](#) object

Required: No

### ports

An array of key-value pairs containing information about the ports on the instance.

Type: Array of [InstancePortInfo](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# InstancePortInfo

Describes information about ports for an Amazon Lightsail instance.

## Contents

### accessDirection

The access direction (inbound or outbound).

#### Note

Lightsail currently supports only inbound access direction.

Type: String

Valid Values: inbound | outbound

Required: No

### accessFrom

The location from which access is allowed. For example, Anywhere ( $0.0.0.0/0$ ), or Custom if a specific IP address or range of IP addresses is allowed.

Type: String

Required: No

### accessType

The type of access (Public or Private).

Type: String

Valid Values: Public | Private

Required: No

### cidrListAliases

An alias that defines access for a preconfigured range of IP addresses.

The only alias currently supported is `lightsail-connect`, which allows IP addresses of the browser-based RDP/SSH client in the Lightsail console to connect to your instance.

Type: Array of strings

Required: No

### **cidrs**

The IPv4 address, or range of IPv4 addresses (in CIDR notation) that are allowed to connect to an instance through the ports, and the protocol.

#### **Note**

The `ipv6Cidrs` parameter lists the IPv6 addresses that are allowed to connect to an instance.

For more information about CIDR block notation, see [Classless Inter-Domain Routing](#) on *Wikipedia*.

Type: Array of strings

Required: No

### **commonName**

The common name of the port information.

Type: String

Required: No

### **fromPort**

The first port in a range of open ports on an instance.

Allowed ports:

- TCP and UDP - 0 to 65535
- ICMP - The ICMP type for IPv4 addresses. For example, specify 8 as the `fromPort` (ICMP type), and -1 as the `toPort` (ICMP code), to enable ICMP Ping. For more information, see [Control Messages](#) on *Wikipedia*.

- **ICMPv6** - The ICMP type for IPv6 addresses. For example, specify 128 as the `fromPort` (ICMPv6 type), and 0 as `toPort` (ICMPv6 code). For more information, see [Internet Control Message Protocol for IPv6](#).

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

## ipv6Cidrs

The IPv6 address, or range of IPv6 addresses (in CIDR notation) that are allowed to connect to an instance through the ports, and the protocol. Only devices with an IPv6 address can connect to an instance through IPv6; otherwise, IPv4 should be used.

### Note

The `cidrs` parameter lists the IPv4 addresses that are allowed to connect to an instance.

For more information about CIDR block notation, see [Classless Inter-Domain Routing](#) on *Wikipedia*.

Type: Array of strings

Required: No

## protocol

The IP protocol name.

The name can be one of the following:

- `tcp` - Transmission Control Protocol (TCP) provides reliable, ordered, and error-checked delivery of streamed data between applications running on hosts communicating by an IP network. If you have an application that doesn't require reliable data stream service, use UDP instead.
- `all` - All transport layer protocol types. For more general information, see [Transport layer](#) on *Wikipedia*.

- `udp` - With User Datagram Protocol (UDP), computer applications can send messages (or datagrams) to other hosts on an Internet Protocol (IP) network. Prior communications are not required to set up transmission channels or data paths. Applications that don't require reliable data stream service can use UDP, which provides a connectionless datagram service that emphasizes reduced latency over reliability. If you do require reliable data stream service, use TCP instead.
- `icmp` - Internet Control Message Protocol (ICMP) is used to send error messages and operational information indicating success or failure when communicating with an instance. For example, an error is indicated when an instance could not be reached. When you specify `icmp` as the `protocol`, you must specify the ICMP type using the `fromPort` parameter, and ICMP code using the `toPort` parameter.
- `icmp6` - Internet Control Message Protocol (ICMP) for IPv6. When you specify `icmp6` as the `protocol`, you must specify the ICMP type using the `fromPort` parameter, and ICMP code using the `toPort` parameter.

Type: String

Valid Values: `tcp` | `all` | `udp` | `icmp` | `icmpv6`

Required: No

## **toPort**

The last port in a range of open ports on an instance.

Allowed ports:

- TCP and UDP - 0 to 65535
- ICMP - The ICMP code for IPv4 addresses. For example, specify 8 as the `fromPort` (ICMP type), and -1 as the `toPort` (ICMP code), to enable ICMP Ping. For more information, see [Control Messages](#) on *Wikipedia*.
- ICMPv6 - The ICMP code for IPv6 addresses. For example, specify 128 as the `fromPort` (ICMPv6 type), and 0 as `toPort` (ICMPv6 code). For more information, see [Internet Control Message Protocol for IPv6](#).

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstancePortState

Describes open ports on an instance, the IP addresses allowed to connect to the instance through the ports, and the protocol.

## Contents

### cidrListAliases

An alias that defines access for a preconfigured range of IP addresses.

The only alias currently supported is `lightsail-connect`, which allows IP addresses of the browser-based RDP/SSH client in the Lightsail console to connect to your instance.

Type: Array of strings

Required: No

### cidrs

The IPv4 address, or range of IPv4 addresses (in CIDR notation) that are allowed to connect to an instance through the ports, and the protocol.

#### Note

The `ipv6Cidrs` parameter lists the IPv6 addresses that are allowed to connect to an instance.

For more information about CIDR block notation, see [Classless Inter-Domain Routing](#) on *Wikipedia*.

Type: Array of strings

Required: No

### fromPort

The first port in a range of open ports on an instance.

Allowed ports:

- TCP and UDP - 0 to 65535

- ICMP - The ICMP type for IPv4 addresses. For example, specify 8 as the `fromPort` (ICMP type), and -1 as the `toPort` (ICMP code), to enable ICMP Ping. For more information, see [Control Messages](#) on *Wikipedia*.
- ICMPv6 - The ICMP type for IPv6 addresses. For example, specify 128 as the `fromPort` (ICMPv6 type), and 0 as `toPort` (ICMPv6 code). For more information, see [Internet Control Message Protocol for IPv6](#).

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

### **ipv6Cidrs**

The IPv6 address, or range of IPv6 addresses (in CIDR notation) that are allowed to connect to an instance through the ports, and the protocol. Only devices with an IPv6 address can connect to an instance through IPv6; otherwise, IPv4 should be used.

#### **Note**

The `cidrs` parameter lists the IPv4 addresses that are allowed to connect to an instance.

For more information about CIDR block notation, see [Classless Inter-Domain Routing](#) on *Wikipedia*.

Type: Array of strings

Required: No

### **protocol**

The IP protocol name.

The name can be one of the following:

- `tcp` - Transmission Control Protocol (TCP) provides reliable, ordered, and error-checked delivery of streamed data between applications running on hosts communicating by an IP network. If you have an application that doesn't require reliable data stream service, use UDP instead.

- `all` - All transport layer protocol types. For more general information, see [Transport layer](#) on *Wikipedia*.
- `udp` - With User Datagram Protocol (UDP), computer applications can send messages (or datagrams) to other hosts on an Internet Protocol (IP) network. Prior communications are not required to set up transmission channels or data paths. Applications that don't require reliable data stream service can use UDP, which provides a connectionless datagram service that emphasizes reduced latency over reliability. If you do require reliable data stream service, use TCP instead.
- `icmp` - Internet Control Message Protocol (ICMP) is used to send error messages and operational information indicating success or failure when communicating with an instance. For example, an error is indicated when an instance could not be reached. When you specify `icmp` as the `protocol`, you must specify the ICMP type using the `fromPort` parameter, and ICMP code using the `toPort` parameter.
- `icmp6` - Internet Control Message Protocol (ICMP) for IPv6. When you specify `icmp6` as the `protocol`, you must specify the ICMP type using the `fromPort` parameter, and ICMP code using the `toPort` parameter.

Type: String

Valid Values: `tcp` | `all` | `udp` | `icmp` | `icmpv6`

Required: No

## **state**

Specifies whether the instance port is open or closed.

### **Note**

The port state for Lightsail instances is always open.

Type: String

Valid Values: `open` | `closed`

Required: No

## **toPort**

The last port in a range of open ports on an instance.



**Allowed ports:**

- TCP and UDP - 0 to 65535
- ICMP - The ICMP code for IPv4 addresses. For example, specify 8 as the `fromPort` (ICMP type), and -1 as the `toPort` (ICMP code), to enable ICMP Ping. For more information, see [Control Messages](#) on *Wikipedia*.
- ICMPv6 - The ICMP code for IPv6 addresses. For example, specify 128 as the `fromPort` (ICMPv6 type), and 0 as `toPort` (ICMPv6 code). For more information, see [Internet Control Message Protocol for IPv6](#).

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstanceSnapshot

Describes an instance snapshot.

## Contents

### arn

The Amazon Resource Name (ARN) of the snapshot (`arn:aws:lightsail:us-east-2:123456789101:InstanceSnapshot/d23b5706-3322-4d83-81e5-12345EXAMPLE`).

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The timestamp when the snapshot was created (`1479907467.024`).

Type: Timestamp

Required: No

### fromAttachedDisks

An array of disk objects containing information about all block storage disks.

Type: Array of [Disk](#) objects

Required: No

### fromBlueprintId

The blueprint ID from which you created the snapshot (`amazon_linux_2023`). A blueprint is a virtual private server (or *instance*) image used to create instances quickly.

Type: String

Required: No

### fromBundleId

The bundle ID from which you created the snapshot (`micro_x_x`).

Type: String

Required: No

### **fromInstanceArn**

The Amazon Resource Name (ARN) of the instance from which the snapshot was created (`arn:aws:lightsail:us-east-2:123456789101:Instance/64b8404c-ccb1-430b-8daf-12345EXAMPLE`).

Type: String

Pattern: `.*\S.*`

Required: No

### **fromInstanceName**

The instance from which the snapshot was created.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **isFromAutoSnapshot**

A Boolean value indicating whether the snapshot was created from an automatic snapshot.

Type: Boolean

Required: No

### **location**

The region name and Availability Zone where you created the snapshot.

Type: [ResourceLocation](#) object

Required: No

### **name**

The name of the snapshot.

Type: String

Pattern: `\w[\w\-*]\w`

Required: No

### **progress**

The progress of the snapshot.

#### **Note**

This is populated only for disk snapshots, and is `null` for instance snapshots.

Type: String

Required: No

### **resourceType**

The type of resource (usually `InstanceSnapshot`).

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **sizeInGb**

The size in GB of the SSD.

Type: Integer

Required: No

### **state**

The state the snapshot is in.

Type: String

Valid Values: `pending` | `error` | `available`

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# InstanceSnapshotInfo

Describes an instance snapshot.

## Contents

### fromBlueprintId

The blueprint ID from which the source instance (`amazon_linux_2023`).

Type: String

Pattern: `.*\S.*`

Required: No

### fromBundleId

The bundle ID from which the source instance was created (`micro_x_x`).

Type: String

Pattern: `.*\S.*`

Required: No

### fromDiskInfo

A list of objects describing the disks that were attached to the source instance.

Type: Array of [DiskInfo](#) objects

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# InstanceState

Describes the virtual private server (or *instance*) status.

## Contents

### code

The status code for the instance.

Type: Integer

Required: No

### name

The state of the instance (running or pending).

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# KeyPair

Describes an SSH key pair.

## Contents

### arn

The Amazon Resource Name (ARN) of the key pair (`arn:aws:lightsail:us-east-2:123456789101:KeyPair/05859e3d-331d-48ba-9034-12345EXAMPLE`).

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The timestamp when the key pair was created (`1479816991.349`).

Type: Timestamp

Required: No

### fingerprint

The RSA fingerprint of the key pair.

Type: String

Required: No

### location

The region name and Availability Zone where the key pair was created.

Type: [ResourceLocation](#) object

Required: No

### name

The friendly name of the SSH key pair.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **resourceType**

The resource type (usually `KeyPair`).

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LightsailDistribution

Describes an Amazon Lightsail content delivery network (CDN) distribution.

## Contents

### **ableToUpdateBundle**

Indicates whether the bundle that is currently applied to your distribution, specified using the `distributionName` parameter, can be changed to another bundle.

Use the `UpdateDistributionBundle` action to change your distribution's bundle.

Type: Boolean

Required: No

### **alternativeDomainNames**

The alternate domain names of the distribution.

Type: Array of strings

Required: No

### **arn**

The Amazon Resource Name (ARN) of the distribution.

Type: String

Pattern: `.*\S.*`

Required: No

### **bundleId**

The ID of the bundle currently applied to the distribution.

Type: String

Required: No

### **cacheBehaviors**

An array of objects that describe the per-path cache behavior of the distribution.

Type: Array of [CacheBehaviorPerPath](#) objects

Required: No

### **cacheBehaviorSettings**

An object that describes the cache behavior settings of the distribution.

Type: [CacheSettings](#) object

Required: No

### **certificateName**

The name of the SSL/TLS certificate attached to the distribution, if any.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **createdAt**

The timestamp when the distribution was created.

Type: Timestamp

Required: No

### **defaultCacheBehavior**

An object that describes the default cache behavior of the distribution.

Type: [CacheBehavior](#) object

Required: No

### **domainName**

The domain name of the distribution.

Type: String

Required: No

### **ipAddressType**

The IP address type of the distribution.

The possible values are `ipv4` for IPv4 only, and `dualstack` for IPv4 and IPv6.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

### **isEnabled**

Indicates whether the distribution is enabled.

Type: Boolean

Required: No

### **location**

An object that describes the location of the distribution, such as the AWS Region and Availability Zone.

#### **Note**

Lightsail distributions are global resources that can reference an origin in any AWS Region, and distribute its content globally. However, all distributions are located in the `us-east-1` Region.

Type: [ResourceLocation](#) object

Required: No

### **name**

The name of the distribution.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **origin**

An object that describes the origin resource of the distribution, such as a Lightsail instance, bucket, or load balancer.

The distribution pulls, caches, and serves content from the origin.

Type: [Origin](#) object

Required: No

### **originPublicDNS**

The public DNS of the origin.

Type: String

Required: No

### **resourceType**

The Lightsail resource type (`Distribution`).

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **status**

The status of the distribution.

Type: String

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about your Lightsail distribution. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

### **viewerMinimumTlsProtocolVersion**

The minimum TLS protocol version that the distribution can use to communicate with viewers.

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# LoadBalancer

Describes a load balancer.

## Contents

### arn

The Amazon Resource Name (ARN) of the load balancer.

Type: String

Pattern: `.*\S.*`

Required: No

### configurationOptions

A string to string map of the configuration options for your load balancer. Valid values are listed below.

Type: String to string map

Valid Keys: `HealthCheckPath` | `SessionStickinessEnabled` | `SessionStickiness_LB_CookieDurationSeconds` | `HttpsRedirectionEnabled` | `TlsPolicyName`

Required: No

### createdAt

The date when your load balancer was created.

Type: Timestamp

Required: No

### dnsName

The DNS name of your Lightsail load balancer.

Type: String

Pattern: `.*\S.*`

Required: No

### **healthCheckPath**

The path you specified to perform your health checks. If no path is specified, the load balancer tries to make a request to the default (root) page.

Type: String

Pattern: `.*\S.*`

Required: No

### **httpsRedirectionEnabled**

A Boolean value that indicates whether HTTPS redirection is enabled for the load balancer.

Type: Boolean

Required: No

### **instanceHealthSummary**

An array of InstanceHealthSummary objects describing the health of the load balancer.

Type: Array of [InstanceHealthSummary](#) objects

Required: No

### **instancePort**

The port where the load balancer will direct traffic to your Lightsail instances. For HTTP traffic, it's port 80. For HTTPS traffic, it's port 443.

Type: Integer

Required: No

### **ipAddressType**

The IP address type of the load balancer.

The possible values are `ipv4` for IPv4 only, `ipv6` for IPv6 only, and `dualstack` for IPv4 and IPv6.

Type: String

Valid Values: `dualstack` | `ipv4` | `ipv6`

Required: No

### **location**

The AWS Region where your load balancer was created (`us-east-2a`). Lightsail automatically creates your load balancer across Availability Zones.

Type: [ResourceLocation](#) object

Required: No

### **name**

The name of the load balancer (`my-load-balancer`).

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

### **protocol**

The protocol you have enabled for your load balancer. Valid values are below.

You can't just have `HTTP_HTTPS`, but you can have just `HTTP`.

Type: String

Valid Values: `HTTP_HTTPS` | `HTTP`

Required: No

### **publicPorts**

An array of public port settings for your load balancer. For `HTTP`, use port 80. For `HTTPS`, use port 443.

Type: Array of integers

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

## resourceType

The resource type (LoadBalancer.

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

## state

The status of your load balancer. Valid values are below.

Type: String

Valid Values: active | provisioning | active\_impaired | failed | unknown

Required: No

## supportCode

The support code. Include this code in your email to support when you have questions about your Lightsail load balancer. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

## tags

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## tlsCertificateSummaries

An array of `LoadBalancerTlsCertificateSummary` objects that provide additional information about the SSL/TLS certificates. For example, if `true`, the certificate is attached to the load balancer.

Type: Array of [LoadBalancerTlsCertificateSummary](#) objects

Required: No

## tlsPolicyName

The name of the TLS security policy for the load balancer.

Type: String

Pattern: `\w[\w\-]*\w`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LoadBalancerTlsCertificate

Describes a load balancer SSL/TLS certificate.

TLS is just an updated, more secure version of Secure Socket Layer (SSL).

## Contents

### arn

The Amazon Resource Name (ARN) of the SSL/TLS certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The time when you created your SSL/TLS certificate.

Type: Timestamp

Required: No

### domainName

The domain name for your SSL/TLS certificate.

Type: String

Required: No

### domainValidationRecords

An array of `LoadBalancerTlsCertificateDomainValidationRecord` objects describing the records.

Type: Array of [LoadBalancerTlsCertificateDomainValidationRecord](#) objects


Required: No

### failureReason

The validation failure reason, if any, of the certificate.

The following failure reasons are possible:

- **NO\_AVAILABLE\_CONTACTS** - This failure applies to email validation, which is not available for Lightsail certificates.
- **ADDITIONAL\_VERIFICATION\_REQUIRED** - Lightsail requires additional information to process this certificate request. This can happen as a fraud-protection measure, such as when the domain ranks within the Alexa top 1000 websites. To provide the required information, use the [AWS Support Center](#) to contact AWS Support.

 **Note**

You cannot request a certificate for Amazon-owned domain names such as those ending in `amazonaws.com`, `cloudfront.net`, or `elasticbeanstalk.com`.

- **DOMAIN\_NOT\_ALLOWED** - One or more of the domain names in the certificate request was reported as an unsafe domain by [VirusTotal](#). To correct the problem, search for your domain name on the [VirusTotal](#) website. If your domain is reported as suspicious, see [Google Help for Hacked Websites](#) to learn what you can do.

If you believe that the result is a false positive, notify the organization that is reporting the domain. VirusTotal is an aggregate of several antivirus and URL scanners and cannot remove your domain from a block list itself. After you correct the problem and the VirusTotal registry has been updated, request a new certificate.

If you see this error and your domain is not included in the VirusTotal list, visit the [AWS Support Center](#) and create a case.

- **INVALID\_PUBLIC\_DOMAIN** - One or more of the domain names in the certificate request is not valid. Typically, this is because a domain name in the request is not a valid top-level domain. Try to request a certificate again, correcting any spelling errors or typos that were in the failed request, and ensure that all domain names in the request are for valid top-level domains. For example, you cannot request a certificate for `example.invalidpublicdomain` because `invalidpublicdomain` is not a valid top-level domain.
- **OTHER** - Typically, this failure occurs when there is a typographical error in one or more of the domain names in the certificate request. Try to request a certificate again, correcting any spelling errors or typos that were in the failed request.

Type: String

Valid Values: NO\_AVAILABLE\_CONTACTS | ADDITIONAL\_VERIFICATION\_REQUIRED | DOMAIN\_NOT\_ALLOWED | INVALID\_PUBLIC\_DOMAIN | OTHER

Required: No

### **isAttached**

When `true`, the SSL/TLS certificate is attached to the Lightsail load balancer.

Type: Boolean

Required: No

### **issuedAt**

The time when the SSL/TLS certificate was issued.

Type: Timestamp

Required: No

### **issuer**

The issuer of the certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### **keyAlgorithm**

The algorithm used to generate the key pair (the public and private key).

Type: String

Pattern: `.*\S.*`

Required: No

### **loadBalancerName**

The load balancer name where your SSL/TLS certificate is attached.

Type: String



Pattern: `\w[\w\ -]*\w`

Required: No

### **location**

The AWS Region and Availability Zone where you created your certificate.

Type: [ResourceLocation](#) object

Required: No

### **name**

The name of the SSL/TLS certificate (`my-certificate`).

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **notAfter**

The timestamp when the SSL/TLS certificate expires.

Type: Timestamp

Required: No

### **notBefore**

The timestamp when the SSL/TLS certificate is first valid.

Type: Timestamp

Required: No

### **renewalSummary**

An object that describes the status of the certificate renewal managed by Lightsail.

Type: [LoadBalancerTlsCertificateRenewalSummary](#) object

Required: No

## resourceType

The resource type (LoadBalancerTlsCertificate).

- **Instance** - A Lightsail instance (a virtual private server)
- **StaticIp** - A static IP address
- **KeyPair** - The key pair used to connect to a Lightsail instance
- **InstanceSnapshot** - A Lightsail instance snapshot
- **Domain** - A DNS zone
- **PeeredVpc** - A peered VPC
- **LoadBalancer** - A Lightsail load balancer
- **LoadBalancerTlsCertificate** - An SSL/TLS certificate associated with a Lightsail load balancer
- **Disk** - A Lightsail block storage disk
- **DiskSnapshot** - A block storage disk snapshot

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair | InstanceSnapshot | Domain | PeeredVpc | LoadBalancer | LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase | RelationalDatabaseSnapshot | ExportSnapshotRecord | CloudFormationStackRecord | Alarm | ContactMethod | Distribution | Certificate | Bucket

Required: No

## revocationReason

The reason the certificate was revoked. This value is present only when the certificate status is REVOKED.

Type: String

Valid Values: UNSPECIFIED | KEY\_COMPROMISE | CA\_COMPROMISE | AFFILIATION\_CHANGED | SUPERCEDED | CESSATION\_OF\_OPERATION | CERTIFICATE\_HOLD | REMOVE\_FROM\_CRL | PRIVILEGE\_WITHDRAWN | A\_A\_COMPROMISE

Required: No

### **revokedAt**

The timestamp when the certificate was revoked. This value is present only when the certificate status is REVOKED.

Type: Timestamp

Required: No

### **serial**

The serial number of the certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### **signatureAlgorithm**

The algorithm that was used to sign the certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### **status**

The validation status of the SSL/TLS certificate. Valid values are below.

Type: String

Valid Values: PENDING\_VALIDATION | ISSUED | INACTIVE | EXPIRED | VALIDATION\_TIMED\_OUT | REVOKED | FAILED | UNKNOWN

Required: No

### **subject**

The name of the entity that is associated with the public key contained in the certificate.

Type: String

Pattern: `.*\S.*`

Required: No

### **subjectAlternativeNames**

An array of strings that specify the alternate domains (`example2.com`) and subdomains (`blog.example.com`) for the certificate.

Type: Array of strings

Required: No

### **supportCode**

The support code. Include this code in your email to support when you have questions about your Lightsail load balancer or SSL/TLS certificate. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LoadBalancerTlsCertificateDnsRecordCreationState

An object that describes the state of the canonical name (CNAME) records that are automatically added by Lightsail to the DNS of the domain to validate domain ownership.

## Contents

### code

The status code for the automated DNS record creation.

Following are the possible values:

- SUCCEEDED - The validation records were successfully added.
- STARTED - The automatic DNS record creation has started.
- FAILED - The validation record addition failed.

Type: String

Valid Values: SUCCEEDED | STARTED | FAILED

Required: No

### message

The message that describes the reason for the status code.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LoadBalancerTlsCertificateDomainValidationOption

Contains information about the domain names on an SSL/TLS certificate that you will use to validate domain ownership.

## Contents

### domainName

The fully qualified domain name in the certificate request.

Type: String

Required: No

### validationStatus

The status of the domain validation. Valid values are listed below.

Type: String

Valid Values: PENDING\_VALIDATION | FAILED | SUCCESS

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LoadBalancerTlsCertificateDomainValidationRecord

Describes the validation record of each domain name in the SSL/TLS certificate.

## Contents

### **dnsRecordCreationState**

An object that describes the state of the canonical name (CNAME) records that are automatically added by Lightsail to the DNS of a domain to validate domain ownership.

Type: [LoadBalancerTlsCertificateDnsRecordCreationState](#) object

Required: No

### **domainName**

The domain name against which your SSL/TLS certificate was validated.

Type: String

Required: No

### **name**

A fully qualified domain name in the certificate. For example, `example.com`.

Type: String

Pattern: `.*\S.*`

Required: No

### **type**

The type of validation record. For example, CNAME for domain validation.

Type: String

Pattern: `.*\S.*`

Required: No

### **validationStatus**

The validation status. Valid values are listed below.

Type: String

Valid Values: PENDING\_VALIDATION | FAILED | SUCCESS

Required: No

### value

The value for that type.

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# LoadBalancerTlsCertificateRenewalSummary

Contains information about the status of Lightsail's managed renewal for the certificate.

The renewal status of the certificate.

The following renewal status are possible:

- **PendingAutoRenewal** - Lightsail is attempting to automatically validate the domain names in the certificate. No further action is required.
- **PendingValidation** - Lightsail couldn't automatically validate one or more domain names in the certificate. You must take action to validate these domain names or the certificate won't be renewed. If you used DNS validation, check to make sure your certificate's domain validation records exist in your domain's DNS, and that your certificate remains in use.
- **Success** - All domain names in the certificate are validated, and Lightsail renewed the certificate. No further action is required.
- **Failed** - One or more domain names were not validated before the certificate expired, and Lightsail did not renew the certificate. You can request a new certificate using the `CreateCertificate` action.

## Contents

### domainValidationOptions

Contains information about the validation of each domain name in the certificate, as it pertains to Lightsail's managed renewal. This is different from the initial validation that occurs as a result of the `RequestCertificate` request.

Type: Array of [LoadBalancerTlsCertificateDomainValidationOption](#) objects

Required: No

### renewalStatus

The renewal status of the certificate.

The following renewal status are possible:

- **PendingAutoRenewal** - Lightsail is attempting to automatically validate the domain names of the certificate. No further action is required.

- **PendingValidation** - Lightsail couldn't automatically validate one or more domain names of the certificate. You must take action to validate these domain names or the certificate won't be renewed. Check to make sure your certificate's domain validation records exist in your domain's DNS, and that your certificate remains in use.
- **Success** - All domain names in the certificate are validated, and Lightsail renewed the certificate. No further action is required.
- **Failed** - One or more domain names were not validated before the certificate expired, and Lightsail did not renew the certificate. You can request a new certificate using the `CreateCertificate` action.

Type: String

Valid Values: PENDING\_AUTO\_RENEWAL | PENDING\_VALIDATION | SUCCESS | FAILED

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LoadBalancerTlsCertificateSummary

Provides a summary of SSL/TLS certificate metadata.

## Contents

### isAttached

When `true`, the SSL/TLS certificate is attached to the Lightsail load balancer.

Type: Boolean

Required: No

### name

The name of the SSL/TLS certificate.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LoadBalancerTlsPolicy

Describes the TLS security policies that are available for Lightsail load balancers.

For more information about load balancer TLS security policies, see [Configuring TLS security policies on your Amazon Lightsail load balancers](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### ciphers

The ciphers used by the TLS security policy.

The ciphers are listed in order of preference.

Type: Array of strings

Required: No

### description

The description of the TLS security policy.

Type: String

Required: No

### isDefault

A Boolean value that indicates whether the TLS security policy is the default.

Type: Boolean

Required: No

### name

The name of the TLS security policy.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

## protocols

The protocols used in a given TLS security policy.

Type: Array of strings

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# LogEvent

Describes a database log event.

## Contents

### **createdAt**

The timestamp when the database log event was created.

Type: Timestamp

Required: No

### **message**

The message of the database log event.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# MetricDatapoint

Describes the metric data point.

## Contents

### **average**

The average.

Type: Double

Required: No

### **maximum**

The maximum.

Type: Double

Required: No

### **minimum**

The minimum.

Type: Double

Required: No

### **sampleCount**

The sample count.

Type: Double

Required: No

### **sum**

The sum.

Type: Double

Required: No

## timestamp

The timestamp (1479816991.349).

Type: Timestamp

Required: No

## unit

The unit.

Type: String

Valid Values: Seconds | Microseconds | Milliseconds | Bytes | Kilobytes | Megabytes | Gigabytes | Terabytes | Bits | Kilobits | Megabits | Gigabits | Terabits | Percent | Count | Bytes/Second | Kilobytes/Second | Megabytes/Second | Gigabytes/Second | Terabytes/Second | Bits/Second | Kilobits/Second | Megabits/Second | Gigabits/Second | Terabits/Second | Count/Second | None

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# MonitoredResourceInfo

Describes resource being monitored by an alarm.

An alarm is a way to monitor your Amazon Lightsail resource metrics. For more information, see [Alarms in Amazon Lightsail](#).

## Contents

### arn

The Amazon Resource Name (ARN) of the resource being monitored.

Type: String

Pattern: `^arn:(aws[^:]*):([a-zA-Z0-9-]+):([a-z0-9-]+):([0-9]+):([a-zA-Z]+)/([a-zA-Z0-9-]+)$`

Required: No

### name

The name of the Lightsail resource being monitored.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### resourceType

The Lightsail resource type of the resource being monitored.

Instances, load balancers, and relational databases are the only Lightsail resources that can currently be monitored by alarms.

Type: String

Valid Values: `ContainerService | Instance | StaticIp | KeyPair | InstanceSnapshot | Domain | PeeredVpc | LoadBalancer | LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase | RelationalDatabaseSnapshot | ExportSnapshotRecord |`

[CloudFormationStackRecord](#) | [Alarm](#) | [ContactMethod](#) | [Distribution](#) | [Certificate](#) | [Bucket](#)

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# MonthlyTransfer

Describes the monthly data transfer in and out of your virtual private server (or *instance*).

## Contents

### **gbPerMonthAllocated**

The amount allocated per month (in GB).

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# NameServersUpdateState

Describes the state of the name server records update made by Amazon Lightsail to an Amazon Route 53 registered domain.

For more information, see [DNS in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### code

The status code for the name servers update.

Following are the possible values:

- SUCCEEDED - The name server records were successfully updated.
- PENDING - The name server record update is in progress.
- FAILED - The name server record update failed.
- STARTED - The automatic name server record update started.

Type: String

Valid Values: SUCCEEDED | PENDING | FAILED | STARTED

Required: No

### message

The message that describes the reason for the status code.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# Operation

Describes the API operation.

## Contents

### **createdAt**

The timestamp when the operation was initialized (1479816991.349).

Type: Timestamp

Required: No

### **errorCode**

The error code.

Type: String

Required: No

### **errorDetails**

The error details.

Type: String

Required: No

### **id**

The ID of the operation.

Type: String

Pattern: `.*\S.*`

Required: No

### **isTerminal**

A Boolean value indicating whether the operation is terminal.

Type: Boolean

Required: No

## location

The AWS Region and Availability Zone.

Type: [ResourceLocation](#) object

Required: No

## operationDetails

Details about the operation (Debian-1GB-Ohio-1).

Type: String

Required: No

## operationType

The type of operation.

Type: String

Valid Values: DeleteKnownHostKeys | DeleteInstance | CreateInstance | StopInstance | StartInstance | RebootInstance | OpenInstancePublicPorts | PutInstancePublicPorts | CloseInstancePublicPorts | AllocateStaticIp | ReleaseStaticIp | AttachStaticIp | DetachStaticIp | UpdateDomainEntry | DeleteDomainEntry | CreateDomain | DeleteDomain | CreateInstanceSnapshot | DeleteInstanceSnapshot | CreateInstancesFromSnapshot | CreateLoadBalancer | DeleteLoadBalancer | AttachInstancesToLoadBalancer | DetachInstancesFromLoadBalancer | UpdateLoadBalancerAttribute | CreateLoadBalancerTlsCertificate | DeleteLoadBalancerTlsCertificate | AttachLoadBalancerTlsCertificate | CreateDisk | DeleteDisk | AttachDisk | DetachDisk | CreateDiskSnapshot | DeleteDiskSnapshot | CreateDiskFromSnapshot | CreateRelationalDatabase | UpdateRelationalDatabase | DeleteRelationalDatabase | CreateRelationalDatabaseFromSnapshot | CreateRelationalDatabaseSnapshot | DeleteRelationalDatabaseSnapshot | UpdateRelationalDatabaseParameters | StartRelationalDatabase | RebootRelationalDatabase | StopRelationalDatabase | EnableAddOn | DisableAddOn | PutAlarm | GetAlarms | DeleteAlarm | TestAlarm | CreateContactMethod |

GetContactMethods | SendContactMethodVerification | DeleteContactMethod  
| CreateDistribution | UpdateDistribution | DeleteDistribution  
| ResetDistributionCache | AttachCertificateToDistribution |  
DetachCertificateFromDistribution | UpdateDistributionBundle  
| SetIpAddressType | CreateCertificate | DeleteCertificate |  
CreateContainerService | UpdateContainerService | DeleteContainerService  
| CreateContainerServiceDeployment | CreateContainerServiceRegistryLogin  
| RegisterContainerImage | DeleteContainerImage | CreateBucket  
| DeleteBucket | CreateBucketAccessKey | DeleteBucketAccessKey |  
UpdateBucketBundle | UpdateBucket | SetResourceAccessForBucket |  
UpdateInstanceMetadataOptions | StartGUISession | StopGUISession |  
SetupInstanceHttps

Required: No

### **resourceName**

The resource name.

Type: String

Pattern: `\w[\w\-]*\w`

Required: No

### **resourceType**

The resource type.

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

### **status**

The status of the operation.



Type: String

Valid Values: NotStarted | Started | Failed | Completed | Succeeded

Required: No

### **statusChangedAt**

The timestamp when the status was changed (1479816991.349).

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Origin

Describes the origin resource of an Amazon Lightsail content delivery network (CDN) distribution.

An origin can be a Lightsail instance, bucket, or load balancer. A distribution pulls content from an origin, caches it, and serves it to viewers via a worldwide network of edge servers.

## Contents

### name

The name of the origin resource.

Type: String

Pattern: `\w[\w\-\-]*\w`

Required: No

### protocolPolicy

The protocol that your Amazon Lightsail distribution uses when establishing a connection with your origin to pull content.

Type: String

Valid Values: `http-only` | `https-only`

Required: No

### regionName

The AWS Region name of the origin resource.

Type: String

Valid Values: `us-east-1` | `us-east-2` | `us-west-1` | `us-west-2` | `eu-west-1` | `eu-west-2` | `eu-west-3` | `eu-central-1` | `ca-central-1` | `ap-south-1` | `ap-southeast-1` | `ap-southeast-2` | `ap-northeast-1` | `ap-northeast-2` | `eu-north-1`

Required: No

## resourceType

The resource type of the origin resource (*Instance*).

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

## responseTimeout

The amount of time, in seconds, that the distribution waits for a response after forwarding a request to the origin. The minimum timeout is 1 second, the maximum is 60 seconds, and the default (if you don't specify otherwise) is 30 seconds.

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PasswordData

The password data for the Windows Server-based instance, including the ciphertext and the key pair name.

## Contents

### ciphertext

The encrypted password. Ciphertext will be an empty string if access to your new instance is not ready yet. When you create an instance, it can take up to 15 minutes for the instance to be ready.

#### Note

If you use the default key pair (`LightsailDefaultKeyPair`), the decrypted password will be available in the password field.

If you are using a custom key pair, you need to use your own means of decryption.

If you change the Administrator password on the instance, Lightsail will continue to return the original ciphertext value. When accessing the instance using RDP, you need to manually enter the Administrator password after changing it from the default.

Type: String

Required: No

### keyPairName

The name of the key pair that you used when creating your instance. If no key pair name was specified when creating the instance, Lightsail uses the default key pair (`LightsailDefaultKeyPair`).

If you are using a custom key pair, you need to use your own means of decrypting your password using the `ciphertext`. Lightsail creates the ciphertext by encrypting your password with the public key part of this key pair.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PendingMaintenanceAction

Describes a pending database maintenance action.

## Contents

### action

The type of pending database maintenance action.

Type: String

Pattern: `.*\S.*`

Required: No

### currentApplyDate

The effective date of the pending database maintenance action.

Type: Timestamp

Required: No

### description

Additional detail about the pending database maintenance action.

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# PendingModifiedRelationalDatabaseValues

Describes a pending database value modification.

## Contents

### **backupRetentionEnabled**

A Boolean value indicating whether automated backup retention is enabled.

Type: Boolean

Required: No

### **engineVersion**

The database engine version.

Type: String

Required: No

### **masterUserPassword**

The password for the master user of the database.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# PortInfo

Describes ports to open on an instance, the IP addresses allowed to connect to the instance through the ports, and the protocol.

## Contents

### cidrListAliases

An alias that defines access for a preconfigured range of IP addresses.

The only alias currently supported is `lightsail-connect`, which allows IP addresses of the browser-based RDP/SSH client in the Lightsail console to connect to your instance.

Type: Array of strings

Required: No

### cidrs

The IPv4 address, or range of IPv4 addresses (in CIDR notation) that are allowed to connect to an instance through the ports, and the protocol.

#### Note

The `ipv6Cidrs` parameter lists the IPv6 addresses that are allowed to connect to an instance.

Examples:

- To allow the IP address `192.0.2.44`, specify `192.0.2.44` or `192.0.2.44/32`.
- To allow the IP addresses `192.0.2.0` to `192.0.2.255`, specify `192.0.2.0/24`.

For more information about CIDR block notation, see [Classless Inter-Domain Routing](#) on *Wikipedia*.

Type: Array of strings

Required: No

## fromPort

The first port in a range of open ports on an instance.

Allowed ports:

- TCP and UDP - 0 to 65535
- ICMP - The ICMP type for IPv4 addresses. For example, specify 8 as the `fromPort` (ICMP type), and -1 as the `toPort` (ICMP code), to enable ICMP Ping. For more information, see [Control Messages](#) on *Wikipedia*.
- ICMPv6 - The ICMP type for IPv6 addresses. For example, specify 128 as the `fromPort` (ICMPv6 type), and 0 as `toPort` (ICMPv6 code). For more information, see [Internet Control Message Protocol for IPv6](#).

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

## ipv6Cidrs

The IPv6 address, or range of IPv6 addresses (in CIDR notation) that are allowed to connect to an instance through the ports, and the protocol. Only devices with an IPv6 address can connect to an instance through IPv6; otherwise, IPv4 should be used.

### Note

The `cidrs` parameter lists the IPv4 addresses that are allowed to connect to an instance.

For more information about CIDR block notation, see [Classless Inter-Domain Routing](#) on *Wikipedia*.

Type: Array of strings

Required: No

## protocol

The IP protocol name.

The name can be one of the following:

- `tcp` - Transmission Control Protocol (TCP) provides reliable, ordered, and error-checked delivery of streamed data between applications running on hosts communicating by an IP network. If you have an application that doesn't require reliable data stream service, use UDP instead.
- `all` - All transport layer protocol types. For more general information, see [Transport layer](#) on *Wikipedia*.
- `udp` - With User Datagram Protocol (UDP), computer applications can send messages (or datagrams) to other hosts on an Internet Protocol (IP) network. Prior communications are not required to set up transmission channels or data paths. Applications that don't require reliable data stream service can use UDP, which provides a connectionless datagram service that emphasizes reduced latency over reliability. If you do require reliable data stream service, use TCP instead.
- `icmp` - Internet Control Message Protocol (ICMP) is used to send error messages and operational information indicating success or failure when communicating with an instance. For example, an error is indicated when an instance could not be reached. When you specify `icmp` as the `protocol`, you must specify the ICMP type using the `fromPort` parameter, and ICMP code using the `toPort` parameter.
- `icmp6` - Internet Control Message Protocol (ICMP) for IPv6. When you specify `icmp6` as the `protocol`, you must specify the ICMP type using the `fromPort` parameter, and ICMP code using the `toPort` parameter.

Type: String

Valid Values: `tcp` | `all` | `udp` | `icmp` | `icmpv6`

Required: No

## **toPort**

The last port in a range of open ports on an instance.

Allowed ports:

- TCP and UDP - 0 to 65535
- ICMP - The ICMP code for IPv4 addresses. For example, specify 8 as the `fromPort` (ICMP type), and -1 as the `toPort` (ICMP code), to enable ICMP Ping. For more information, see [Control Messages](#) on *Wikipedia*.

- ICMPv6 - The ICMP code for IPv6 addresses. For example, specify 128 as the `fromPort` (ICMPv6 type), and 0 as `toPort` (ICMPv6 code). For more information, see [Internet Control Message Protocol for IPv6](#).

Type: Integer

Valid Range: Minimum value of -1. Maximum value of 65535.

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PrivateRegistryAccess

Describes the configuration for an Amazon Lightsail container service to access private container image repositories, such as Amazon Elastic Container Registry (Amazon ECR) private repositories.

For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### ecrImagePullerRole

An object that describes the activation status of the role that you can use to grant a Lightsail container service access to Amazon ECR private repositories. If the role is activated, the Amazon Resource Name (ARN) of the role is also listed.

Type: [ContainerServiceECRImagePullerRole](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# PrivateRegistryAccessRequest

Describes a request to configure an Amazon Lightsail container service to access private container image repositories, such as Amazon Elastic Container Registry (Amazon ECR) private repositories.

For more information, see [Configuring access to an Amazon ECR private repository for an Amazon Lightsail container service](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### ecrImagePullerRole

An object to describe a request to activate or deactivate the role that you can use to grant an Amazon Lightsail container service access to Amazon Elastic Container Registry (Amazon ECR) private repositories.

Type: [ContainerServiceECRImagePullerRoleRequest](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# QueryStringObject

Describes the query string parameters that an Amazon Lightsail content delivery network (CDN) distribution uses to base caching on.

For the query strings that you specify, your distribution caches separate versions of the specified content based on the query string values in viewer requests.

## Contents

### option

Indicates whether the distribution forwards and caches based on query strings.

Type: Boolean

Required: No

### queryStringAllowList

The specific query strings that the distribution forwards to the origin.

Your distribution will cache content based on the specified query strings.

If the `option` parameter is true, then your distribution forwards all query strings, regardless of what you specify using the `queryStringAllowList` parameter.

Type: Array of strings

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# R53HostedZoneDeletionState

Describes the deletion state of an Amazon Route 53 hosted zone for a domain that is being automatically delegated to an Amazon Lightsail DNS zone.

## Contents

### code

The status code for the deletion state.

Following are the possible values:

- SUCCEEDED - The hosted zone was successfully deleted.
- PENDING - The hosted zone deletion is in progress.
- FAILED - The hosted zone deletion failed.
- STARTED - The hosted zone deletion started.

Type: String

Valid Values: SUCCEEDED | PENDING | FAILED | STARTED

Required: No

### message

The message that describes the reason for the status code.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)





# Region

Describes the AWS Region.

## Contents

### **availabilityZones**

The Availability Zones. Follows the format `us-east-2a` (case-sensitive).

Type: Array of [AvailabilityZone](#) objects

Required: No

### **continentCode**

The continent code (NA, meaning North America).

Type: String

Required: No

### **description**

The description of the AWS Region (This region is recommended to serve users in the eastern United States and eastern Canada).

Type: String

Required: No

### **displayName**

The display name (Ohio).

Type: String

Required: No

### **name**

The region name (`us-east-2`).

Type: String

Valid Values: us-east-1 | us-east-2 | us-west-1 | us-west-2 | eu-west-1 | eu-west-2 | eu-west-3 | eu-central-1 | ca-central-1 | ap-south-1 | ap-southeast-1 | ap-southeast-2 | ap-northeast-1 | ap-northeast-2 | eu-north-1

Required: No

### **relationalDatabaseAvailabilityZones**

The Availability Zones for databases. Follows the format us-east-2a (case-sensitive).

Type: Array of [AvailabilityZone](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RegisteredDomainDelegationInfo

Describes the delegation state of an Amazon Route 53 registered domain to Amazon Lightsail.

When you delegate an Amazon Route 53 registered domain to Lightsail, you can manage the DNS of the domain using a Lightsail DNS zone. You no longer use the Route 53 hosted zone to manage the DNS of the domain. To delegate the domain, Lightsail automatically updates the domain's name servers in Route 53 to the name servers of the Lightsail DNS zone. Then, Lightsail automatically deletes the Route 53 hosted zone for the domain.

All of the following conditions must be true for automatic domain delegation to be successful:

- The registered domain must be in the same AWS account as the Lightsail account making the request.
- The user or entity making the request must have permission to manage domains in Route 53.
- The Route 53 hosted zone for the domain must be empty. It cannot contain DNS records other than start of authority (SOA) and name server records.

If automatic domain delegation fails, or if you manage the DNS of your domain using a service other than Route 53, then you must manually add the Lightsail DNS zone name servers to your domain in order to delegate management of its DNS to Lightsail. For more information, see [Creating a DNS zone to manage your domain's records in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Contents

### nameServersUpdateState

An object that describes the state of the name server records that are automatically added to the Route 53 domain by Lightsail.

Type: [NameServersUpdateState](#) object

Required: No

### r53HostedZoneDeletionState

Describes the deletion state of an Amazon Route 53 hosted zone for a domain that is being automatically delegated to an Amazon Lightsail DNS zone.

Type: [R53HostedZoneDeletionState](#) object

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabase

Describes a database.

## Contents

### **arn**

The Amazon Resource Name (ARN) of the database.

Type: String

Pattern: `.*\S.*`

Required: No

### **backupRetentionEnabled**

A Boolean value indicating whether automated backup retention is enabled for the database.

Type: Boolean

Required: No

### **caCertificateIdentifier**

The certificate associated with the database.

Type: String

Required: No

### **createdAt**

The timestamp when the database was created. Formatted in Unix time.

Type: Timestamp

Required: No

### **engine**

The database software (for example, MySQL).

Type: String

Pattern: .\*\\S.\*

Required: No

### **engineVersion**

The database engine version (for example, 5.7.23).

Type: String

Pattern: .\*\\S.\*

Required: No

### **hardware**

Describes the hardware of the database.

Type: [RelationalDatabaseHardware](#) object

Required: No

### **latestRestorableTime**

The latest point in time to which the database can be restored. Formatted in Unix time.

Type: Timestamp

Required: No

### **location**

The Region name and Availability Zone where the database is located.

Type: [ResourceLocation](#) object

Required: No

### **masterDatabaseName**

The name of the master database created when the Lightsail database resource is created.

Type: String

Required: No

## **masterEndpoint**

The master endpoint for the database.

Type: [RelationalDatabaseEndpoint](#) object

Required: No

## **masterUsername**

The master user name of the database.

Type: String

Pattern: `.*\S.*`

Required: No

## **name**

The unique name of the database resource in Lightsail.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## **parameterApplyStatus**

The status of parameter updates for the database.

Type: String

Pattern: `.*\S.*`

Required: No

## **pendingMaintenanceActions**

Describes the pending maintenance actions for the database.

Type: Array of [PendingMaintenanceAction](#) objects

Required: No



## **pendingModifiedValues**

Describes pending database value modifications.

Type: [PendingModifiedRelationalDatabaseValues](#) object

Required: No

## **preferredBackupWindow**

The daily time range during which automated backups are created for the database (for example, 16:00-16:30).

Type: String

Pattern: `.*\S.*`

Required: No

## **preferredMaintenanceWindow**

The weekly time range during which system maintenance can occur on the database.

In the format `ddd:hh24:mi-ddd:hh24:mi`. For example, `Tue:17:00-Tue:17:30`.

Type: String

Pattern: `.*\S.*`

Required: No

## **publiclyAccessible**

A Boolean value indicating whether the database is publicly accessible.

Type: Boolean

Required: No

## **relationalDatabaseBlueprintId**

The blueprint ID for the database. A blueprint describes the major engine version of a database.

Type: String

Pattern: `.*\S.*`

Required: No

### **relationalDatabaseBundleId**

The bundle ID for the database. A bundle describes the performance specifications for your database.

Type: String

Pattern: `.*\S.*`

Required: No

### **resourceType**

The Lightsail resource type for the database (for example, `RelationalDatabase`).

Type: String

Valid Values: `ContainerService` | `Instance` | `StaticIp` | `KeyPair` | `InstanceSnapshot` | `Domain` | `PeeredVpc` | `LoadBalancer` | `LoadBalancerTlsCertificate` | `Disk` | `DiskSnapshot` | `RelationalDatabase` | `RelationalDatabaseSnapshot` | `ExportSnapshotRecord` | `CloudFormationStackRecord` | `Alarm` | `ContactMethod` | `Distribution` | `Certificate` | `Bucket`

Required: No

### **secondaryAvailabilityZone**

Describes the secondary Availability Zone of a high availability database.

The secondary database is used for failover support of a high availability database.

Type: String

Required: No

### **state**

Describes the current state of the database.

Type: String

Pattern: `.*\S.*`

Required: No

### **supportCode**

The support code for the database. Include this code in your email to support when you have questions about a database in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabaseBlueprint

Describes a database image, or blueprint. A blueprint describes the major engine version of a database.

## Contents

### **blueprintId**

The ID for the database blueprint.

Type: String

Required: No

### **engine**

The database software of the database blueprint (for example, MySQL).

Type: String

Valid Values: `mysql`

Required: No

### **engineDescription**

The description of the database engine for the database blueprint.

Type: String

Required: No

### **engineVersion**

The database engine version for the database blueprint (for example, 5.7.23).

Type: String

Required: No

### **engineVersionDescription**

The description of the database engine version for the database blueprint.

Type: String

Required: No

### **isEngineDefault**

A Boolean value indicating whether the engine version is the default for the database blueprint.

Type: Boolean

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabaseBundle

Describes a database bundle. A bundle describes the performance specifications of the database.

## Contents

### **bundleId**

The ID for the database bundle.

Type: String

Required: No

### **cpuCount**

The number of virtual CPUs (vCPUs) for the database bundle.

Type: Integer

Required: No

### **diskSizeInGb**

The size of the disk for the database bundle.

Type: Integer

Required: No

### **isActive**

A Boolean value indicating whether the database bundle is active.

Type: Boolean

Required: No

### **isEncrypted**

A Boolean value indicating whether the database bundle is encrypted.

Type: Boolean

Required: No

**name**

The name for the database bundle.

Type: String

Required: No

**price**

The cost of the database bundle in US currency.

Type: Float

Required: No

**ramSizeInGb**

The amount of RAM in GB (for example, 2.0) for the database bundle.

Type: Float

Required: No

**transferPerMonthInGb**

The data transfer rate per month in GB for the database bundle.

Type: Integer

Required: No

**See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabaseEndpoint

Describes an endpoint for a database.

## Contents

### address

Specifies the DNS address of the database.

Type: String

Pattern: `.*\S.*`

Required: No

### port

Specifies the port that the database is listening on.

Type: Integer

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# RelationalDatabaseEvent

Describes an event for a database.

## Contents

### **createdAt**

The timestamp when the database event was created.

Type: Timestamp

Required: No

### **eventCategories**

The category that the database event belongs to.

Type: Array of strings

Required: No

### **message**

The message of the database event.

Type: String

Required: No

### **resource**

The database that the database event relates to.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabaseHardware

Describes the hardware of a database.

## Contents

### cpuCount

The number of vCPUs for the database.

Type: Integer

Required: No

### diskSizeInGb

The size of the disk for the database.

Type: Integer

Required: No

### ramSizeInGb

The amount of RAM in GB for the database.

Type: Float

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabaseParameter

Describes the parameters of a database.

## Contents

### **allowedValues**

Specifies the valid range of values for the parameter.

Type: String

Required: No

### **applyMethod**

Indicates when parameter updates are applied.

Can be `immediate` or `pending-reboot`.

Type: String

Required: No

### **applyType**

Specifies the engine-specific parameter type.

Type: String

Required: No

### **dataType**

Specifies the valid data type for the parameter.

Type: String

Required: No

### **description**

Provides a description of the parameter.

Type: String

Required: No

### **isModifiable**

A Boolean value indicating whether the parameter can be modified.

Type: Boolean

Required: No

### **parameterName**

Specifies the name of the parameter.

Type: String

Required: No

### **parameterValue**

Specifies the value of the parameter.

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RelationalDatabaseSnapshot

Describes a database snapshot.

## Contents

### arn

The Amazon Resource Name (ARN) of the database snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The timestamp when the database snapshot was created.

Type: Timestamp

Required: No

### engine

The software of the database snapshot (for example, MySQL)

Type: String

Pattern: `.*\S.*`

Required: No

### engineVersion

The database engine version for the database snapshot (for example, 5.7.23).

Type: String

Pattern: `.*\S.*`

Required: No

**fromRelationalDatabaseArn**

The Amazon Resource Name (ARN) of the database from which the database snapshot was created.

Type: String

Pattern: `.*\S.*`

Required: No

**fromRelationalDatabaseBlueprintId**

The blueprint ID of the database from which the database snapshot was created. A blueprint describes the major engine version of a database.

Type: String

Required: No

**fromRelationalDatabaseBundleId**

The bundle ID of the database from which the database snapshot was created.

Type: String

Required: No

**fromRelationalDatabaseName**

The name of the source database from which the database snapshot was created.

Type: String

Pattern: `.*\S.*`

Required: No

**location**

The Region name and Availability Zone where the database snapshot is located.

Type: [ResourceLocation](#) object

Required: No

**name**

The name of the database snapshot.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### **resourceType**

The Lightsail resource type.

Type: String

Valid Values: `ContainerService | Instance | StaticIp | KeyPair | InstanceSnapshot | Domain | PeeredVpc | LoadBalancer | LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase | RelationalDatabaseSnapshot | ExportSnapshotRecord | CloudFormationStackRecord | Alarm | ContactMethod | Distribution | Certificate | Bucket`

Required: No

### **sizeInGb**

The size of the disk in GB (for example, 32) for the database snapshot.

Type: Integer

Required: No

### **state**

The state of the database snapshot.

Type: String

Pattern: `.*\S.*`

Required: No

### **supportCode**

The support code for the database snapshot. Include this code in your email to support when you have questions about a database snapshot in Lightsail. This code enables our support team to look up your Lightsail information more easily.



Type: String

Required: No

### **tags**

The tag keys and optional values for the resource. For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

Type: Array of [Tag](#) objects

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# RenewalSummary

Describes the status of a SSL/TLS certificate renewal managed by Amazon Lightsail.

## Contents

### **domainValidationRecords**

An array of objects that describe the domain validation records of the certificate.

Type: Array of [DomainValidationRecord](#) objects

Required: No

### **renewalStatus**

The renewal status of the certificate.

The following renewal status are possible:

- **PendingAutoRenewal** - Lightsail is attempting to automatically validate the domain names of the certificate. No further action is required.
- **PendingValidation** - Lightsail couldn't automatically validate one or more domain names of the certificate. You must take action to validate these domain names or the certificate won't be renewed. Check to make sure your certificate's domain validation records exist in your domain's DNS, and that your certificate remains in use.
- **Success** - All domain names in the certificate are validated, and Lightsail renewed the certificate. No further action is required.
- **Failed** - One or more domain names were not validated before the certificate expired, and Lightsail did not renew the certificate. You can request a new certificate using the `CreateCertificate` action.

Type: String

Valid Values: `PendingAutoRenewal` | `PendingValidation` | `Success` | `Failed`

Required: No

### **renewalStatusReason**

The reason for the renewal status of the certificate.

Type: String

Required: No

### **updatedAt**

The timestamp when the certificate was last updated.

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ResourceBudgetEstimate

Describes the estimated cost or usage that a budget tracks.

## Contents

### costEstimates

The cost estimate for the specified budget.

Type: Array of [CostEstimate](#) objects

Required: No

### endTime

The estimate end time.

Type: Timestamp

Required: No

### resourceName

The resource name.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### resourceType

The type of resource the budget will track.

Type: String

Valid Values: `ContainerService | Instance | StaticIp | KeyPair | InstanceSnapshot | Domain | PeeredVpc | LoadBalancer | LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase | RelationalDatabaseSnapshot | ExportSnapshotRecord | CloudFormationStackRecord | Alarm | ContactMethod | Distribution | Certificate | Bucket`

Required: No

### **startTime**

The estimate start time.

Type: Timestamp

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ResourceLocation

Describes the resource location.

## Contents

### **availabilityZone**

The Availability Zone. Follows the format `us-east-2a` (case-sensitive).

Type: String

Required: No

### **regionName**

The AWS Region name.

Type: String

Valid Values: `us-east-1` | `us-east-2` | `us-west-1` | `us-west-2` | `eu-west-1` | `eu-west-2` | `eu-west-3` | `eu-central-1` | `ca-central-1` | `ap-south-1` | `ap-southeast-1` | `ap-southeast-2` | `ap-northeast-1` | `ap-northeast-2` | `eu-north-1`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ResourceReceivingAccess

Describes an Amazon Lightsail instance that has access to a Lightsail bucket.

## Contents

### name

The name of the Lightsail instance.

Type: String

Pattern: `.*\S.*`

Required: No

### resourceType

The Lightsail resource type (for example, Instance).

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# ResourceRecord

Describes the domain name system (DNS) records to add to your domain's DNS to validate it for an Amazon Lightsail certificate.

## Contents

### name

The name of the record.

Type: String

Required: No

### type

The DNS record type.

Type: String

Required: No

### value

The value for the DNS record.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# Session

Describes a web-based, remote graphical user interface (GUI), Amazon DCV session. The session is used to access a virtual computer's operating system or application.

## Contents

### isPrimary

When true, this Boolean value indicates the primary session for the specified resource.

Type: Boolean

Required: No

### name

The session name.

Type: String

Pattern: `.*\S.*`

Required: No

### url

The session URL.

Type: String

Pattern: `.*\S.*`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)

- [AWS SDK for Ruby V3](#)

# SetupExecutionDetails

Returns details about the commands that were run.

## Contents

### **command**

The command that was executed.

Type: String

Required: No

### **dateTime**

The timestamp for when the request was run.

Type: Timestamp

Required: No

### **name**

The name of the target resource.

Type: String

Pattern: `.*\S.*`

Required: No

### **standardError**

The text written by the command to stderr.

Type: String

Required: No

### **standardOutput**

The text written by the command to stdout.

Type: String

Required: No

### **status**

The status of the SetupInstanceHttps request.

Type: String

Valid Values: succeeded | failed | inProgress

Required: No

### **version**

The current version of the script..

Type: String

Required: No

## **See Also**

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# SetupHistory

Returns a list of the commands that were ran on the target resource.

The status of each command is also returned.

## Contents

### executionDetails

Describes the full details of the request.

Type: Array of [SetupExecutionDetails](#) objects

Required: No

### operationId

A GUID that's used to identify the operation.

Type: String

Pattern: `.*\S.*`

Required: No

### request

Information about the specified request.

Type: [SetupRequest](#) object

Required: No

### resource

The target resource name for the request.

Type: [SetupHistoryResource](#) object

Required: No

### status

The status of the request.

Type: String

Valid Values: succeeded | failed | inProgress

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# SetupHistoryResource

The Lightsail resource that SetupHistory was ran on.

## Contents

### arn

The Amazon Resource Name (ARN) of the Lightsail resource.

Type: String

Pattern: `.*\S.*`

Required: No

### createdAt

The timestamp for when the resource was created.

Type: Timestamp

Required: No

### location

Describes the resource location.

Type: [ResourceLocation](#) object

Required: No

### name

The name of the Lightsail resource.

Type: String

Pattern: `\w[\w\ -]*\w`

Required: No

### resourceType

The Lightsail resource type. For example, Instance.

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# SetupRequest

Returns information that was submitted during the SetupInstanceHttps request. Email information is redacted for privacy.

## Contents

### certificateProvider

The Certificate Authority (CA) that issues the SSL/TLS certificate.

Type: String

Valid Values: LetsEncrypt

Required: No

### domainNames

The name of the domain and subdomains that the SSL/TLS certificate secures.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 10 items.

Length Constraints: Minimum length of 4. Maximum length of 253.

Pattern: `^[a-zA-Z0-9\-\]{1,63}(\.[a-zA-Z0-9\-\]{1,63}){0,8}(\.[a-zA-Z]{2,63})$`

Required: No

### instanceName

The name of the Lightsail instance.

Type: String

Pattern: `\w[\w\-\]*\w`

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StaticIp

Describes a static IP.

## Contents

### arn

The Amazon Resource Name (ARN) of the static IP (`arn:aws:lightsail:us-east-2:123456789101:StaticIp/9cbb4a9e-f8e3-4dfe-b57e-12345EXAMPLE`).

Type: String

Pattern: `.*\S.*`

Required: No

### attachedTo

The instance where the static IP is attached (`Amazon_Linux-1GB-Ohio-1`).

Type: String

Pattern: `\w[\w\-*]*\w`

Required: No

### createdAt

The timestamp when the static IP was created (`1479735304.222`).

Type: Timestamp

Required: No

### ipAddress

The static IP address.

Type: String

Pattern: `([0-9]{1,3}\.){3}[0-9]{1,3}`

Required: No

## **isAttached**

A Boolean value indicating whether the static IP is attached.

Type: Boolean

Required: No

## **location**

The region and Availability Zone where the static IP was created.

Type: [ResourceLocation](#) object

Required: No

## **name**

The name of the static IP (StaticIP-Ohio-EXAMPLE).

Type: String

Pattern: `\w[\w\-]*\w`

Required: No

## **resourceType**

The resource type (usually StaticIp).

Type: String

Valid Values: ContainerService | Instance | StaticIp | KeyPair  
| InstanceSnapshot | Domain | PeeredVpc | LoadBalancer |  
LoadBalancerTlsCertificate | Disk | DiskSnapshot | RelationalDatabase  
| RelationalDatabaseSnapshot | ExportSnapshotRecord |  
CloudFormationStackRecord | Alarm | ContactMethod | Distribution |  
Certificate | Bucket

Required: No

## **supportCode**

The support code. Include this code in your email to support when you have questions about an instance or another resource in Lightsail. This code enables our support team to look up your Lightsail information more easily.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# StopInstanceOnIdleRequest

Describes a request to create or edit the StopInstanceOnIdle add-on.

## Important

This add-on only applies to Lightsail for Research resources.

## Contents

### duration

The amount of idle time in minutes after which your virtual computer will automatically stop.

Type: String

Required: No

### threshold

The value to compare with the duration.

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# Tag

Describes a tag key and optional value assigned to an Amazon Lightsail resource.

For more information about tags in Lightsail, see the [Amazon Lightsail Developer Guide](#).

## Contents

### key

The key of the tag.

Constraints: Tag keys accept a maximum of 128 letters, numbers, spaces in UTF-8, or the following characters: + - = . \_ : / @

Type: String

Required: No

### value

The value of the tag.

Constraints: Tag values accept a maximum of 256 letters, numbers, spaces in UTF-8, or the following characters: + - = . \_ : / @

Type: String

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)

# TimePeriod

Sets the start date and end date for retrieving a cost estimate. The start date is inclusive, but the end date is exclusive. For example, if `start` is `2017-01-01` and `end` is `2017-05-01`, then the cost and usage data is retrieved from `2017-01-01` up to and including `2017-04-30` but not including `2017-05-01`.

## Contents

### end

The end of the time period. The end date is exclusive. For example, if `end` is `2017-05-01`, Lightsail for Research retrieves cost and usage data from the start date up to, but not including, `2017-05-01`.

Type: Timestamp

Required: No

### start

The beginning of the time period. The start date is inclusive. For example, if `start` is `2017-01-01`, Lightsail for Research retrieves cost and usage data starting at `2017-01-01` up to the end date. The start date must be equal to or no later than the current date to avoid a validation error.

Type: Timestamp

Required: No

## See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:

- [AWS SDK for C++](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)



# Amazon Lightsail for Research actions

You can use the following API actions, which are part of the Lightsail API, to manage Amazon Lightsail for Research resources. Choose the name of the action to view more information about that action. For more information about Lightsail for Research, see the [Amazon Lightsail for Research User Guide](#).

## Lightsail for Research actions

- [AddOnRequest](#) - Describes a request to enable, modify, or disable an add-on for an Amazon Lightsail or Lightsail for Research resource. Valid values are `AutoSnapshot` | `StopInstanceOnIdle`.
- [CreateGUISessionAccessDetails](#) - Creates two URLs that are used to access a virtual computer's graphical user interface (GUI) session.
- [GetCostEstimate](#) - Retrieves information about the cost estimate for a specified resource.
- [StartGUISession](#) - Initiates a Amazon DCV GUI session that's used to access a virtual computer's operating system or application. The session will be active for 1 hour. Use this action to resume the session after it expires.
- [StopGUISession](#) - Terminates a web-based Amazon DCV GUI session that's used to access a virtual computer's operating system or application. The session will close and any unsaved data will be lost.

## Virtual computer and instance actions

- [CreateInstances](#) - Creates one or more virtual computers.
- [DeleteInstance](#) - Deletes a virtual computer.
- [GetBlueprints](#) - Returns the list of available virtual computer applications, or blueprints.
- [GetBundles](#) - Returns the hardware bundles that you can apply to a virtual computer when you create it.
- [GetInstance](#) - Returns information about a specific virtual computer or instance.
- [GetInstanceMetricData](#) - Returns the data points for the specified virtual computer metric, given an virtual computer name.
- [GetInstances](#) - Returns information about all Lightsail instances and Lightsail for Research virtual computers in the user's account.

- [GetInstanceState](#) - Returns the state of a specific virtual computer or instance.
- [RebootInstance](#) - Restarts a specific virtual computer.
- [StartInstance](#) - Starts a specific virtual computer from a stopped state. To restart a virtual computer, use the `reboot` instance operation.
- [StopInstance](#) - Stops a specific virtual computer that is currently running.
- [UpdateInstanceMetadataOptions](#) - Modifies the virtual computer metadata parameters on a running or stopped virtual computer.

## Disk actions

- [AttachDisk](#) - Attaches a block storage disk to a running or stopped virtual computer, and exposes it to the virtual computer with the specified disk name.
- [CreateDisk](#) - Creates a block storage disk that can be attached to a virtual computer in the same AWS Region.
- [DeleteDisk](#) - Deletes the specified block storage disk.
- [DetachDisk](#) - Detaches a stopped block storage disk from a virtual computer.
- [GetDisk](#) - Returns information about a specific block storage disk.
- [GetDisks](#) - Returns information about all block storage disks in your AWS account and region.

## Key pair actions

- [CreateKeyPair](#) - Creates a custom SSH key pair that you can use with a Lightsail for Research virtual computer.
- [DeleteKeyPair](#) - Deletes the specified key pair by removing the public key from Amazon Lightsail.
- [DownloadDefaultKeyPair](#) - Downloads the regional Lightsail default key pair. This action also creates a Lightsail default key pair if a default key pair does not currently exist in the AWS Region.
- [GetInstanceAccessDetails](#) - Returns temporary SSH keys you can use to connect to a specific virtual computer.
- [GetKeyPair](#) - Returns information about a specific key pair.
- [GetKeyPairs](#) - Returns information about all key pairs in the user's account.
- [ImportKeyPair](#) - Imports the public SSH key from a specific key pair.

## Networking actions

- [GetInstancePortStates](#) - Returns the firewall port states for a specific virtual computer, the IP addresses allowed to connect to the virtual computer through the ports, and the protocol.
- [IsVpcPeered](#) - Returns a Boolean value indicating whether your Lightsail VPC is peered.
- [OpenInstancePublicPorts](#) - Opens ports for a specific virtual computer, and specifies the IP addresses allowed to connect to the virtual computer through the ports, and the protocol.
- [PutInstancePublicPorts](#) - Opens ports for a specific virtual computer, and specifies the IP addresses allowed to connect to the virtual computer through the ports, and the protocol.
- [PeerVpc](#) - Peers the Lightsail VPC with the user's default VPC.
- [SetIpAddressType](#) - Sets the IP address type for a virtual computer.
- [UnpeerVpc](#) - Unpeers the Lightsail VPC from the user's default VPC.

## Snapshot actions

- [CopySnapshot](#) - Copies a manual snapshot of an virtual computer or disk as another manual snapshot, or copies an automatic snapshot of an virtual computer or disk as a manual snapshot.
- [CreateDiskFromSnapshot](#) - Creates a block storage disk from a manual or automatic snapshot of a disk.
- [CreateDiskSnapshot](#) - Creates a snapshot of a block storage disk.
- [CreateInstancesFromSnapshot](#) - Creates one or more new virtual computers from a manual or automatic snapshot of a virtual computer.
- [CreateInstanceSnapshot](#) - Creates a snapshot of a specific virtual computer.
- [DeleteAutoSnapshot](#) - Deletes an automatic snapshot of a virtual computer or disk.
- [DeleteDiskSnapshot](#) - Deletes a specific snapshot of a disk.
- [DeleteInstanceSnapshot](#) - Deletes a specific snapshot of a virtual computer.
- [ExportSnapshot](#) - Exports a virtual computer or block storage disk snapshot to Amazon Elastic Compute Cloud (Amazon EC2).
- [GetDiskSnapshot](#) - Returns information about a specific block storage disk snapshot.
- [GetDiskSnapshots](#) - Returns information about all block storage disk snapshots in your AWS account and region.
- [GetExportSnapshotRecords](#) - Returns all export snapshot records created as a result of the export snapshot operation.

- [GetInstanceSnapshot](#) - Returns information about a specific virtual computer snapshot.
- [GetInstanceSnapshots](#) - Returns all virtual computer snapshots for the user's account.

### Tag actions

- [TagResource](#) - Adds one or more tags to the specified resource.
- [UntagResource](#) - Deletes the specified set of tag keys and their values from the specified resource.

### Additional resource actions

- [GetActiveNames](#) - Returns the names of all active (not deleted) resources.
- [GetOperation](#) - Returns information about a specific operation. Operations include events such as when you create a virtual computer, attach a disk, and so on.
- [GetOperations](#) - Returns information about all operations. Results are returned from oldest to newest, up to a maximum of 200. Results can be paged by making each subsequent call to `GetOperations` use the maximum (last) `statusChangedAt` value from the previous request.
- [GetOperationsForResource](#) - Gets operations for a specific resource, such as a virtual computer or a disk.
- [GetRegions](#) - Returns a list of all valid AWS Regions for Lightsail. Use the `includeAvailabilityZones` parameter to also return the Availability Zones in a region.

# Object storage actions

Use the following API actions for Amazon Simple Storage Service (Amazon S3) to manage buckets and objects in the Amazon Lightsail object storage service. Choose the name of an API action to view the documentation for it in the *Amazon S3 API reference*. For more information about buckets in Lightsail, see [Object storage in Amazon Lightsail](#).

## Uploading files to buckets

- [PutObject](#) - Adds a file to a bucket. For more information, see [Uploading files to a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

## Uploading objects to buckets using multipart upload

- [CreateMultipartUpload](#) - Initiates a multipart upload and returns an upload ID. For more information, see [Initiate a multipart upload](#) in the *Amazon Lightsail Developer Guide*.
- [UploadPart](#) - Uploads a part in a specific multipart upload. For more information, see [Upload a part](#) in the *Amazon Lightsail Developer Guide*.
- [ListParts](#) - Lists the parts that have been uploaded for a specific multipart upload. For more information, see [List parts of a multipart upload](#) in the *Amazon Lightsail Developer Guide*.
- [CompleteMultipartUpload](#) - Completes a multipart upload by assembling previously uploaded parts. For more information, see [Complete a multipart upload](#) in the *Amazon Lightsail Developer Guide*.
- [ListMultipartUploads](#) - Lists all in-progress multipart uploads for a bucket. For more information, see [List multipart uploads for a bucket](#) in the *Amazon Lightsail Developer Guide*.
- [AbortMultipartUpload](#) - Stops a multipart upload. For more information, see [Stop a multipart upload](#) in the *Amazon Lightsail Developer Guide*.

## Listing objects and object details

- [ListObjectsV2](#) - Returns a list of the objects (up to 1,000 in each request) in a bucket. For more information, see [Viewing objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

- [HeadObject](#) - Returns metadata from an object without returning the object itself. This action is useful if you're only interested in an object's metadata. For more information, see [Viewing objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- [GetObject](#) - Downloads an object from a bucket. For more information, see [Downloading objects from a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- [GetObjectTagging](#) - Returns the tags of an object. For more information, see [Tagging objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- [ListObjectVersions](#) - Returns metadata about all versions of objects in a bucket. For more information, see [Enabling and suspending object versioning in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

### Copying and moving objects

- [CopyObject](#) - Creates a copy of an object. For more information, see [Copying or moving objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

### Editing individual object permissions

- [GetObjectAcl](#) - Sets the access control list (ACL) permissions for an object, which is how you can control the access permissions for an individual object. For more information, see [Configuring access permissions for individual objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- [GetObjectAcl](#) - Returns the access control list (ACL) set for an object, which controls the access permissions for the individual object. For more information, see [Configuring access permissions for individual objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

### Editing object tags

- [PutObjectTagging](#) - Sets the supplied tag to an object. For more information, see [Tagging objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

### Listing and restoring object versions

- [ListObjectVersions](#) - Returns metadata about all versions of objects in a bucket. For more information, see [Enabling and suspending object versioning in a bucket in Amazon Lightsail](#) and

[Restoring previous versions of objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

- [CopyObject](#) - Creates a copy of an object in a bucket, including previous versions of an object. To restore an object version, use the CopyObject action to copy a previous version of an object and make it the latest version. For more information, see [Restoring previous versions of objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- [DeleteObject](#) - Deletes an object from a bucket, including previous versions of an object. For more information, see [Delete multiple objects or object versions using the AWS CLI](#) in the *Amazon Lightsail Developer Guide*.

## Deleting objects

- [DeleteObject](#) - Deletes an object from a bucket. For more information, see [Deleting objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.
- [DeleteObjects](#) - Deletes multiple objects from a bucket using a single request. For more information, see [Deleting objects in a bucket in Amazon Lightsail](#) in the *Amazon Lightsail Developer Guide*.

# Common Parameters

The following list contains the parameters that all actions use for signing Signature Version 4 requests with a query string. Any action-specific parameters are listed in the topic for that action. For more information about Signature Version 4, see [Signing AWS API requests](#) in the *IAM User Guide*.

## Action

The action to be performed.

Type: string

Required: Yes

## Version

The API version that the request is written for, expressed in the format YYYY-MM-DD.

Type: string

Required: Yes

## X-Amz-Algorithm

The hash algorithm that you used to create the request signature.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Valid Values: AWS4-HMAC-SHA256

Required: Conditional

## X-Amz-Credential

The credential scope value, which is a string that includes your access key, the date, the region you are targeting, the service you are requesting, and a termination string ("aws4\_request"). The value is expressed in the following format: *access\_key/YYYYMMDD/region/service/aws4\_request*.



For more information, see [Create a signed AWS API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

### **X-Amz-Date**

The date that is used to create the signature. The format must be ISO 8601 basic format (YYYYMMDD'T'HHMMSS'Z'). For example, the following date time is a valid X-Amz-Date value: 20120325T120000Z.

Condition: X-Amz-Date is optional for all requests; it can be used to override the date used for signing requests. If the Date header is specified in the ISO 8601 basic format, X-Amz-Date is not required. When X-Amz-Date is used, it always overrides the value of the Date header. For more information, see [Elements of an AWS API request signature](#) in the *IAM User Guide*.

Type: string

Required: Conditional

### **X-Amz-Security-Token**

The temporary security token that was obtained through a call to AWS Security Token Service (AWS STS). For a list of services that support temporary security credentials from AWS STS, see [AWS services that work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from AWS STS, you must include the security token.

Type: string

Required: Conditional

### **X-Amz-Signature**

Specifies the hex-encoded signature that was calculated from the string to sign and the derived signing key.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

### **X-Amz-SignedHeaders**

Specifies all the HTTP headers that were included as part of the canonical request. For more information about specifying signed headers, see [Create a signed AWS API request](#) in the *IAM User Guide*.

Condition: Specify this parameter when you include authentication information in a query string instead of in the HTTP authorization header.

Type: string

Required: Conditional

# Common Errors

This section lists the errors common to the API actions of all AWS services. For errors specific to an API action for this service, see the topic for that API action.

## **AccessDeniedException**

You do not have sufficient access to perform this action.

HTTP Status Code: 400

## **IncompleteSignature**

The request signature does not conform to AWS standards.

HTTP Status Code: 400

## **InternalFailure**

The request processing has failed because of an unknown error, exception or failure.

HTTP Status Code: 500

## **InvalidAction**

The action or operation requested is invalid. Verify that the action is typed correctly.

HTTP Status Code: 400

## **InvalidClientTokenId**

The X.509 certificate or AWS access key ID provided does not exist in our records.

HTTP Status Code: 403

## **NotAuthorized**

You do not have permission to perform this action.

HTTP Status Code: 400

## **OptInRequired**

The AWS access key ID needs a subscription for the service.

HTTP Status Code: 403

**RequestExpired**

The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.

HTTP Status Code: 400

**ServiceUnavailable**

The request has failed due to a temporary failure of the server.

HTTP Status Code: 503

**ThrottlingException**

The request was denied due to request throttling.

HTTP Status Code: 400

**ValidationError**

The input fails to satisfy the constraints specified by an AWS service.

HTTP Status Code: 400