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Welcome

Amazon Athena is an interactive query service that lets you use standard SQL to analyze data directly in Amazon S3. You can point Athena at your data in Amazon S3 and run ad-hoc queries and get results in seconds. Athena is serverless, so there is no infrastructure to set up or manage. You pay only for the queries you run. Athena scales automatically—executing queries in parallel—so results are fast, even with large datasets and complex queries. For more information, see What is Amazon Athena in the Amazon Athena User Guide.

If you connect to Athena using the JDBC driver, use version 1.1.0 of the driver or later with the Amazon Athena API. Earlier version drivers do not support the API. For more information and to download the driver, see Accessing Amazon Athena with JDBC.

For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

This document was last published on July 24, 2023.
Actions

The following actions are supported:

- BatchGetNamedQuery (p. 4)
- BatchGetPreparedStatement (p. 6)
- BatchGetQueryExecution (p. 9)
- CancelCapacityReservation (p. 12)
- CreateCapacityReservation (p. 14)
- CreateDataCatalog (p. 16)
- CreateNamedQuery (p. 19)
- CreateNotebook (p. 22)
- CreatePreparedStatement (p. 25)
- CreatePresignedNotebookUrl (p. 27)
- CreateWorkGroup (p. 29)
- DeleteCapacityReservation (p. 32)
- DeleteDataCatalog (p. 34)
- DeleteNamedQuery (p. 36)
- DeleteNotebook (p. 38)
- DeletePreparedStatement (p. 40)
- DeleteWorkGroup (p. 42)
- ExportNotebook (p. 44)
- GetCalculationExecution (p. 46)
- GetCalculationExecutionCode (p. 49)
- GetCalculationExecutionStatus (p. 51)
- GetCapacityAssignmentConfiguration (p. 53)
- GetCapacityReservation (p. 55)
- GetDatabase (p. 57)
- GetDataCatalog (p. 59)
- GetNamedQuery (p. 61)
- GetNotebookMetadata (p. 63)
- GetPreparedStatement (p. 65)
- GetQueryExecution (p. 67)
- GetQueryResults (p. 70)
- GetQueryRuntimeStatistics (p. 73)
- GetSession (p. 76)
- GetSessionStatus (p. 79)
- GetTableMetadata (p. 81)
- GetWorkGroup (p. 84)
- ImportNotebook (p. 86)
- ListApplicationDPUSizes (p. 89)
- ListCalculationExecutions (p. 91)
- ListCapacityReservations (p. 94)
- ListDatabases (p. 97)
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• TagResource (p. 151)
• TerminateSession (p. 153)
• UntagResource (p. 155)
• UpdateCapacityReservation (p. 157)
• UpdateDataCatalog (p. 159)
• UpdateNamedQuery (p. 162)
• UpdateNotebook (p. 164)
• UpdateNotebookMetadata (p. 167)
• UpdatePreparedStatement (p. 169)
• UpdateWorkGroup (p. 171)
BatchGetNamedQuery

Returns the details of a single named query or a list of up to 50 queries, which you provide as an array of query ID strings. Requires you to have access to the workgroup in which the queries were saved. Use ListNamedQueriesInput (p. 210) to get the list of named query IDs in the specified workgroup. If information could not be retrieved for a submitted query ID, information about the query ID submitted is listed under UnprocessedNamedQueryId (p. 254). Named queries differ from executed queries. Use BatchGetQueryExecutionInput (p. 181) to get details about each unique query execution, and ListQueryExecutionsInput (p. 211) to get a list of query execution IDs.

Request Syntax

```
{
    "NamedQueryIds": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**NamedQueryIds (p. 4)**

An array of query IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: \S+

Required: Yes

Response Syntax

```
{
    "NamedQueries": [ 
        {
            "Database": "string",
            "Description": "string",
            "Name": "string",
            "NamedQueryId": "string",
            "QueryString": "string",
            "WorkGroup": "string"
        }
    ],
    "UnprocessedNamedQueryIds": [ 
        {
            "ErrorCode": "string",
            "ErrorMessage": "string",
            "NamedQueryId": "string"
        }
    ]
}
```

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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.

**NamedQueries (p. 4)**

Information about the named query IDs submitted.

Type: Array of [NamedQuery (p. 212)] objects

**UnprocessedNamedQueryIds (p. 4)**

Information about provided query IDs.

Type: Array of [UnprocessedNamedQueryId (p. 254)] objects

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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

Returns the details of a single prepared statement or a list of up to 256 prepared statements for the array of prepared statement names that you provide. Requires you to have access to the workgroup to which the prepared statements belong. If a prepared statement cannot be retrieved for the name specified, the statement is listed in UnprocessedPreparedStatementNames.

Request Syntax

```
{
  "PreparedStatementNames": [ "string" ],
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**PreparedStatementNames (p. 6)**

A list of prepared statement names to return.

Type: Array of strings

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

Pattern: [a-zA-Z_][a-zA-Z0-9@_:]{1,256}

Required: Yes

**WorkGroup (p. 6)**

The name of the workgroup to which the prepared statements belong.

Type: String

Pattern: [a-zA-Z0-9_.-]{1,128}

Required: Yes

Response Syntax

```
{
  "PreparedStatements": [
    {
      "Description": "string",
      "LastModifiedTime": number,
      "QueryStatement": "string",
      "StatementName": "string",
      "WorkGroupName": "string"
    }
  ],
  "UnprocessedPreparedStatementNames": [ ]
}
```
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Response Elements

"errorCode": "string",
"errorMessage": "string",
"statementName": "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.

**PreparedStatements (p. 6)**

The list of prepared statements returned.

Type: Array of PreparedStatement (p. 217) objects

**UnprocessedPreparedStatementNames (p. 6)**

A list of one or more prepared statements that were requested but could not be returned.

Type: Array of UnprocessedPreparedStatementName (p. 255) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3

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7
BatchGetQueryExecution

Returns the details of a single query execution or a list of up to 50 query executions, which you provide as an array of query execution ID strings. Requires you to have access to the workgroup in which the queries ran. To get a list of query execution IDs, use ListQueryExecutions:WorkGroup (p. 119). Query executions differ from named (saved) queries. Use BatchGetNamedQueryInput (p. 180) to get details about named queries.

Request Syntax

```json
{
  "QueryExecutionIds": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**QueryExecutionIds (p. 9)**

An array of query execution IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: \S+

Required: Yes

Response Syntax

```json
{
  "QueryExecutions": [
    {
      "EngineVersion": {
        "EffectiveEngineVersion": "string",
        "SelectedEngineVersion": "string"
      },
      "ExecutionParameters": [ "string" ],
      "Query": "string",
      "QueryExecutionContext": {
        "Catalog": "string",
        "Database": "string"
      },
      "QueryExecutionId": "string",
      "ResultConfiguration": {
        "AclConfiguration": {
          "S3AclOption": "string"
        },
        "EncryptionConfiguration": {
          "EncryptionOption": "string"
        }
      }
    }
  ]
}
```
"KmsKey": "string",
"ExpectedBucketOwner": "string",
"OutputLocation": "string"
},
"ResultReuseConfiguration": {
  "ResultReuseByAgeConfiguration": {
    "Enabled": boolean,
    "MaxAgeInMinutes": number
  }
},
"StatementType": "string",
"Statistics": {
  "DataManifestLocation": "string",
  "DataScannedInBytes": number,
  "EngineExecutionTimeInMillis": number,
  "QueryPlanningTimeInMillis": number,
  "QueryQueueTimeInMillis": number,
  "ResultReuseInformation": {
    "ReusedPreviousResult": boolean
  },
  "ServiceProcessingTimeInMillis": number,
  "TotalExecutionTimeInMillis": number
},
"Status": {
  "AthenaError": {
    "ErrorCategory": number,
    "ErrorMessage": "string",
    "ErrorType": number,
    "Retryable": boolean
  },
  "CompletionDateTime": number,
  "State": "string",
  "StateChangeReason": "string",
  "SubmissionDateTime": number
},
"SubstatementType": "string",
"WorkGroup": "string"
],
"UnprocessedQueryExecutionIds": [
  {
    "ErrorCode": "string",
    "ErrorMessage": "string",
    "QueryExecutionId": "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.

**QueryExecutions (p. 9)**

Information about a query execution.

Type: Array of **QueryExecution (p. 220)** objects

**UnprocessedQueryExecutionIds (p. 9)**

Information about the query executions that failed to run.
Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CancelCapacityReservation

Cancels the capacity reservation with the specified name. Cancelled reservations remain in your account and will be deleted 45 days after cancellation. During the 45 days, you cannot re-purpose or reuse a reservation that has been cancelled, but you can refer to its tags and view it for historical reference.

Request Syntax

```
{
    "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**Name (p. 12)**

The name of the capacity reservation to cancel.

Type: String


Pattern: [a-zA-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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateCapacityReservation

Creates a capacity reservation with the specified name and number of requested data processing units.

Request Syntax

```
{
   "Name": "string",
   "Tags": [
      {
         "Key": "string",
         "Value": "string"
      }
   ],
   "TargetDpus": number
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**Name** (p. 14)

The name of the capacity reservation to create.

Type: String


Pattern: [a-zA-Z0-9._-]+

Required: Yes

**Tags** (p. 14)

The tags for the capacity reservation.

Type: Array of [Tag](p. 253) objects

Required: No

**TargetDpus** (p. 14)

The number of requested data processing units.

Type: Integer

Valid Range: Minimum value of 24.

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateDataCatalog

CreateDataCatalog creates (registers) a data catalog with the specified name and properties. Catalogs created are visible to all users of the same AWS account.

Request Syntax

```json
{
    "Description": "string",
    "Name": "string",
    "Parameters": {
        "string": "string"
    },
    "Tags": [
        {
            "Key": "string",
            "Value": "string"
        }
    ],
    "Type": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**Description (p. 16)**

A description of the data catalog to be created.

Type: String


Required: No

**Name (p. 16)**

The name of the data catalog to create. The catalog name must be unique for the AWS account and can use a maximum of 127 alphanumeric, underscore, at sign, or hyphen characters. The remainder of the length constraint of 256 is reserved for use by Athena.

Type: String

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

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDFFF\t]*

Required: Yes

**Parameters (p. 16)**

Specifies the Lambda function or functions to use for creating the data catalog. This is a mapping whose values depend on the catalog type.

- For the HIVE data catalog type, use the following syntax. The metadata-function parameter is required. The sdk-version parameter is optional and defaults to the currently supported version.
metadata-function=`lambda_arn`, sdk-version=`version_number`

- For the LAMBDA data catalog type, use one of the following sets of required parameters, but not both.
  - If you have one Lambda function that processes metadata and another for reading the actual data, use the following syntax. Both parameters are required.
    ```
    metadata-function=`lambda_arn`, record-function=`lambda_arn`
    ```
  - If you have a composite Lambda function that processes both metadata and data, use the following syntax to specify your Lambda function.
    ```
    function=`lambda_arn`
    ```

- The GLUE type takes a catalog ID parameter and is required. The `catalog_id` is the account ID of the AWS account to which the AWS Glue Data Catalog belongs.

  ```
  catalog-id=`catalog_id`
  ```

  - The GLUE data catalog type also applies to the default AwsDataCatalog that already exists in your account, of which you can have only one and cannot modify.
  - Queries that specify a AWS Glue Data Catalog other than the default AwsDataCatalog must be run on Athena engine version 2.
  - In Regions where Athena engine version 2 is not available, creating new AWS Glue data catalogs results in an INVALID_INPUT error.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Key Pattern: `[\u0020-\u0DFF\uE000-\uFFFF\uD800-\uDBFF\uDFFF\t]*`

Value Length Constraints: Maximum length of 51200.

Required: No

**Tags (p. 16)**

A list of comma separated tags to add to the data catalog that is created.

Type: Array of [Tag (p. 253)] objects

Required: No

**Type (p. 16)**

The type of data catalog to create: LAMBDA for a federated catalog, HIVE for an external hive metastore, or GLUE for an AWS Glue Data Catalog.

Type: String

Valid Values: LAMBDA | GLUE | HIVE

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 (p. 269)](#).
InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateNamedQuery

Creates a named query in the specified workgroup. Requires that you have access to the workgroup.

For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

Request Syntax

```
{
    "ClientRequestToken": "string",
    "Database": "string",
    "Description": "string",
    "Name": "string",
    "QueryString": "string",
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**ClientRequestToken (p. 19)**

A unique case-sensitive string used to ensure the request to create the query is idempotent (executes only once). If another CreateNamedQuery request is received, the same response is returned and another query is not created. If a parameter has changed, for example, the QueryString, an error is returned.

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for users. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Required: No

**Database (p. 19)**

The database to which the query belongs.

Type: String


Required: Yes

**Description (p. 19)**

The query description.

Type: String

Required: No

**Name (p. 19)**

The query name.

Type: String


Required: Yes

**QueryString (p. 19)**

The contents of the query with all query statements.

Type: String


Required: Yes

**WorkGroup (p. 19)**

The name of the workgroup in which the named query is being created.

Type: String

Pattern: \[a-zA-Z0-9._-]\{1,128\}

Required: No

### Response Syntax

```json
{
  "NamedQueryId": "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.

**NamedQueryId (p. 20)**

The unique ID of the query.

Type: String


Pattern: \S+

### Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)](##).
InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreateNotebook

Creates an empty ipynb file in the specified Apache Spark enabled workgroup. Throws an error if a file in the workgroup with the same name already exists.

Request Syntax

```json
{
    "ClientRequestToken": "string",
    "Name": "string",
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**ClientRequestToken (p. 22)**

A unique case-sensitive string used to ensure the request to create the notebook is idempotent (executes only once).

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for you. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: No

**Name (p. 22)**

The name of the ipynb file to be created in the Spark workgroup, without the .ipynb extension.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uDC00-\uDBFF\uDFFF\t]+

Required: Yes

**WorkGroup (p. 22)**

The name of the Spark enabled workgroup in which the notebook will be created.

Type: String

Pattern: [a-zA-Z0-9-_]{1,128}

Required: Yes
Response Syntax

```json
{
    "NotebookId": "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.

**NotebookId (p. 23)**

A unique identifier for the notebook.

Type: String


Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)](#).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for JavaScript](#)
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreatePreparedStatement

Creates a prepared statement for use with SQL queries in Athena.

Request Syntax

```
{
  "Description": "string",
  "QueryStatement": "string",
  "StatementName": "string",
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**Description** (p. 25)

The description of the prepared statement.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 1024.
- **Required**: No

**QueryStatement** (p. 25)

The query string for the prepared statement.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 262144.
- **Required**: Yes

**StatementName** (p. 25)

The name of the prepared statement.

- **Type**: String
- **Length Constraints**: Minimum length of 1. Maximum length of 256.
- **Pattern**: `[a-zA-Z_]\[a-zA-Z0-9@:]{1,256}
- **Required**: Yes

**WorkGroup** (p. 25)

The name of the workgroup to which the prepared statement belongs.

- **Type**: String
- **Pattern**: `[a-zA-Z0-9.]\{1,128}
- **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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
CreatePresignedNotebookUrl

Gets an authentication token and the URL at which the notebook can be accessed. During programmatic access, CreatePresignedNotebookUrl must be called every 10 minutes to refresh the authentication token. For information about granting programmatic access, see Grant programmatic access.

Request Syntax

```json
{
    "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**SessionId (p. 27)**

The session ID.

Type: String

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

Required: Yes

Response Syntax

```json
{
    "AuthToken": "string",
    "AuthTokenExpirationTime": number,
    "NotebookUrl": "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.

**AuthToken (p. 27)**

The authentication token for the notebook.

Type: String

Length Constraints: Maximum length of 2048.

**AuthTokenExpirationTime (p. 27)**

The UTC epoch time when the authentication token expires.
Type: Long

**NotebookUrl (p. 27)**

The URL of the notebook. The URL includes the authentication token and notebook file name and points directly to the opened notebook.

Type: String

### Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)](##).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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

Creates a workgroup with the specified name. A workgroup can be an Apache Spark enabled workgroup or an Athena SQL workgroup.

Request Syntax

```
{
  "Configuration": {
    "AdditionalConfiguration": "string",
    "BytesScannedCutoffPerQuery": number,
    "CustomerContentEncryptionConfiguration": {
      "KmsKey": "string"
    },
    "EnableMinimumEncryptionConfiguration": boolean,
    "EnforceWorkGroupConfiguration": boolean,
    "EngineVersion": {
      "EffectiveEngineVersion": "string",
      "SelectedEngineVersion": "string"
    },
    "ExecutionRole": "string",
    "PublishCloudWatchMetricsEnabled": boolean,
    "RequesterPaysEnabled": boolean,
    "ResultConfiguration": {
      "AclConfiguration": {
        "S3AclOption": "string"
      },
      "EncryptionConfiguration": {
        "EncryptionOption": "string",
        "KmsKey": "string"
      },
      "ExpectedBucketOwner": "string",
      "OutputLocation": "string"
    }
  },
  "Description": "string",
  "Name": "string",
  "Tags": [
    {"Key": "string",
     "Value": "string"
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**Configuration (p. 29)**

Contains configuration information for creating an Athena SQL workgroup or Spark enabled Athena workgroup. Athena SQL workgroup configuration includes the location in Amazon S3 where query and calculation results are stored, the encryption configuration, if any, used for encrypting query results, whether the Amazon CloudWatch Metrics are enabled for the workgroup, the limit for the amount of bytes scanned (cutoff) per query, if it is specified, and whether workgroup's settings
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Response Elements


Type: WorkGroupConfiguration (p. 259) object

Required: No

Description (p. 29)

The workgroup description.
Type: String
Length Constraints: Minimum length of 0. Maximum length of 1024.
Required: No

Name (p. 29)

The workgroup name.
Type: String
Pattern: [\-a-zA-Z0-9._-]{1,128}
Required: Yes

Tags (p. 29)

A list of comma separated tags to add to the workgroup that is created.
Type: Array of Tag (p. 253) objects
Required: No

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 (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
• AWS SDK for Java V2
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
DeleteCapacityReservation

Deletes a cancelled capacity reservation. A reservation must be cancelled before it can be deleted. A deleted reservation is immediately removed from your account and can no longer be referenced, including by its ARN. A deleted reservation cannot be called by GetCapacityReservation, and deleted reservations do not appear in the output of ListCapacityReservations.

Request Syntax

```json
{
  "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

Name (p. 32)

The name of the capacity reservation to delete.

Type: String


Pattern: [a-zA-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 (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

See Also

For more information about using this API in one of the language-specific AWS SDKs, see the following:
• Amazon Athena API Reference
• AWS Command Line Interface
• AWS SDK for .NET
• AWS SDK for C++
• AWS SDK for Go
• AWS SDK for Java V2
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
DeleteDataCatalog

Deletes a data catalog.

Request Syntax

```json
{
  "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**Name (p. 34)**

The name of the data catalog to delete.

Type: String

- Pattern: [\u0020-\uD7FF\uE000-\uFFFFD\uD800\uDC00-\uDBFF\uDFFF\t]*

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

- HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

- HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteNamedQuery

Deletes the named query if you have access to the workgroup in which the query was saved.

For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

Request Syntax

```json
{
   "NamedQueryId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**NamedQueryId (p. 36)**

The unique ID of the query to delete.

Type: String


Pattern: \S+

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteNotebook

Deletes the specified notebook.

Request Syntax

```json
{
   "NotebookId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**NotebookId (p. 38)**

The ID of the notebook to delete.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeletePreparedStatement

Deletes the prepared statement with the specified name from the specified workgroup.

Request Syntax

```json
{
    "StatementName": "string",
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**StatementName (p. 40)**

The name of the prepared statement to delete.

Type: String

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

Pattern: [a-zA-Z_] [a-zA-Z0-9-@:]{1,256}

Required: Yes

**WorkGroup (p. 40)**

The workgroup to which the statement to be deleted belongs.

Type: String

Pattern: [a-zA-Z0-9.-]{1,128}

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 (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
DeleteWorkGroup

Deletes the workgroup with the specified name. The primary workgroup cannot be deleted.

Request Syntax

```json
{
    "RecursiveDeleteOption": boolean,
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**RecursiveDeleteOption (p. 42)**

The option to delete the workgroup and its contents even if the workgroup contains any named queries, query executions, or notebooks.

Type: Boolean

Required: No

**WorkGroup (p. 42)**

The unique name of the workgroup to delete.

Type: String

Pattern: [a-zA-Z0-9._-]{1,128}

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

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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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ExportNotebook

Exports the specified notebook and its metadata.

Request Syntax

```
{
    "NotebookId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters (p. 267)](#).

The request accepts the following data in JSON format.

**NotebookId (p. 44)**

The ID of the notebook to export.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: Yes

Response Syntax

```
{
    "NotebookMetadata": {
        "CreationTime": number,
        "LastModifiedTime": number,
        "Name": "string",
        "NotebookId": "string",
        "Type": "string",
        "WorkGroup": "string"
    },
    "Payload": "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.

**NotebookMetadata (p. 44)**

The notebook metadata, including notebook ID, notebook name, and workgroup name.

Type: [NotebookMetadata (p. 214)](#) object
Payload (p. 44)

The content of the exported notebook.

Type: String


Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetCalculationExecution

Describes a previously submitted calculation execution.

Request Syntax

```
{
   "CalculationExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CalculationExecutionId (p. 46)**

The calculation execution UUID.

Type: String


Required: Yes

Response Syntax

```
{
   "CalculationExecutionId": "string",
   "Description": "string",
   "Result": {
      "ResultS3Uri": "string",
      "ResultType": "string",
      "StdErrorS3Uri": "string",
      "StdOutS3Uri": "string"
   },
   "SessionId": "string",
   "Statistics": {
      "DpuExecutionInMillis": number,
      "Progress": "string"
   },
   "Status": {
      "CompletionDateTime": number,
      "State": "string",
      "StateChangeReason": "string",
      "SubmissionDateTime": number
   },
   "WorkingDirectory": "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.

**CalculationExecutionId (p. 46)**

The calculation execution UUID.

- **Type:** String
- **Length Constraints:** Minimum length of 1. Maximum length of 36.

**Description (p. 46)**

The description of the calculation execution.

- **Type:** String
- **Length Constraints:** Minimum length of 1. Maximum length of 1024.

**Result (p. 46)**

Contains result information. This field is populated only if the calculation is completed.

- **Type:** CalculationResult (p. 183) object

**SessionId (p. 46)**

The session ID that the calculation ran in.

- **Type:** String
- **Length Constraints:** Minimum length of 1. Maximum length of 256.

**Statistics (p. 46)**

Contains information about the data processing unit (DPU) execution time and progress. This field is populated only when statistics are available.

- **Type:** CalculationStatistics (p. 185) object

**Status (p. 46)**

Contains information about the status of the calculation.

- **Type:** CalculationStatus (p. 186) object

**WorkingDirectory (p. 46)**

The Amazon S3 location in which calculation results are stored.

- **Type:** String
- **Length Constraints:** Maximum length of 1024.
- **Pattern:** ^(https|s3|S3)://([^/]+)/(.*)$

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

- **HTTP Status Code:** 500
InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

ResourceNotFoundException

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetCalculationExecutionCode

Retrieves the unencrypted code that was executed for the calculation.

**Request Syntax**

```json
{
  "CalculationExecutionId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

- **CalculationExecutionId** *(p. 49)*
  
  The calculation execution UUID.
  
  Type: String
  
  
  Required: Yes

**Response Syntax**

```json
{
  "CodeBlock": "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.

- **CodeBlock** *(p. 49)*
  
  The unencrypted code that was executed for the calculation.
  
  Type: String
  
  Length Constraints: Maximum length of 68000.

**Errors**

For information about the errors that are common to all actions, see [Common Errors](p. 269).

- **InternalServerException**
  
  Indicates a platform issue, which may be due to a transient condition or outage.
HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetCalculationExecutionStatus

Gets the status of a current calculation.

**Request Syntax**

```
{
    "CalculationExecutionId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CalculationExecutionId (p. 51)**

The calculation execution UUID.

Type: String


Required: Yes

**Response Syntax**

```
{
    "Statistics": {
        "DpuExecutionInMillis": number,
        "Progress": "string"
    },
    "Status": {
        "CompletionDateTime": number,
        "State": "string",
        "StateChangeReason": "string",
        "SubmissionDateTime": 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.

**Statistics (p. 51)**

Contains information about the DPU execution time and progress.

Type: CalculationStatistics (p. 185) object
Status (p. 51)

Contains information about the calculation execution status.

Type: CalculationStatus (p. 186) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

ResourceNotFoundException

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetCapacityAssignmentConfiguration

Gets the capacity assignment configuration for a capacity reservation, if one exists.

**Request Syntax**

```json
{
   "CapacityReservationName": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**CapacityReservationName (p. 53)**

The name of the capacity reservation to retrieve the capacity assignment configuration for.

Type: String


Pattern: `[a-zA-Z0-9._-]+`

Required: Yes

**Response Syntax**

```json
{
   "CapacityAssignmentConfiguration": {
      "CapacityAssignments": [
         {
            "WorkGroupNames": [ "string" ]
         },
         "CapacityReservationName": "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.

**CapacityAssignmentConfiguration (p. 53)**

The requested capacity assignment configuration for the specified capacity reservation.

Type: [CapacityAssignmentConfiguration (p. 191)] object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetCapacityReservation

Returns information about the capacity reservation with the specified name.

Request Syntax

```json
{
   "Name": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

Name (p. 55)

The name of the capacity reservation.

Type: String


Pattern: [a-zA-Z0-9._-]+

Required: Yes

Response Syntax

```json
{
   "CapacityReservation": {
      "AllocatedDpus": number,
      "CreationTime": number,
      "LastAllocation": {
         "RequestCompletionTime": number,
         "RequestTime": number,
         "Status": "string",
         "StatusMessage": "string"
      },
      "LastSuccessfulAllocationTime": number,
      "Name": string,
      "Status": "string",
      "TargetDpus": 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.
**CapacityReservation (p. 55)**

The requested capacity reservation structure.

Type: [CapacityReservation (p. 192)](p. 192) object

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 269)](p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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-clf)
- [AWS SDK for .NET](aws-sdk-net)
- [AWS SDK for C++](aws-sdk-c++)
- [AWS SDK for Go](aws-sdk-go)
- [AWS SDK for Java V2](aws-sdk-java)
- [AWS SDK for JavaScript](aws-sdk-javascript)
- [AWS SDK for PHP V3](aws-sdk-php)
- [AWS SDK for Python](aws-sdk-python)
- [AWS SDK for Ruby V3](aws-sdk-ruby)

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GetDatabase

Returns a database object for the specified database and data catalog.

Request Syntax

```json
{
  "CatalogName": "string",
  "DatabaseName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CatalogName (p. 57)**

The name of the data catalog that contains the database to return.

Type: String

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

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDC00-\uDFFF\t]*`

Required: Yes

**DatabaseName (p. 57)**

The name of the database to return.

Type: String


Required: Yes

Response Syntax

```json
{
  "Database": {
    "Description": "string",
    "Name": "string",
    "Parameters": {
      "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.

**Database (p. 57)**

The database returned.

Type: [Database (p. 198)](p.198) object

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 269)](p.269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**MetadataException**

An exception that Athena received when it called a custom metastore. Occurs if the error is not caused by user input (InvalidRequestException) or from the Athena platform (InternalServerException). For example, if a user-created Lambda function is missing permissions, the Lambda 4XX exception is returned in a MetadataException.

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](p.198)
- [AWS SDK for .NET](p.198)
- [AWS SDK for C++](p.198)
- [AWS SDK for Go](p.198)
- [AWS SDK for Java V2](p.198)
- [AWS SDK for JavaScript](p.198)
- [AWS SDK for PHP V3](p.198)
- [AWS SDK for Python](p.198)
- [AWS SDK for Ruby V3](p.198)
GetDataCatalog

Returns the specified data catalog.

**Request Syntax**

```
{
   "Name": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters (p. 267)](#).

The request accepts the following data in JSON format.

**Name (p. 59)**

The name of the data catalog to return.

Type: String

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

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDC00-\uDFFF\uDBFF\uFF00-\uFFFD\uFFFF\t]*`

Required: Yes

**Response Syntax**

```
{
   "DataCatalog": {
      "Description": "string",
      "Name": "string",
      "Parameters": {
         "string": "string"
      },
      "Type": "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.

**DataCatalog (p. 59)**

The data catalog returned.

Type: [DataCatalog (p. 199)](#) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetNamedQuery

Returns information about a single query. Requires that you have access to the workgroup in which the query was saved.

Request Syntax

```json
{
  "NamedQueryId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**NamedQueryId (p. 61)**

The unique ID of the query. Use [ListNamedQueries (p. 107)] to get query IDs.

- Type: String
- Pattern: \S+
- Required: Yes

Response Syntax

```json
{
  "NamedQuery": {
    "Database": "string",
    "Description": "string",
    "Name": "string",
    "NamedQueryId": "string",
    "QueryString": "string",
    "WorkGroup": "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.

**NamedQuery (p. 61)**

Information about the query.

- Type: [NamedQuery (p. 212)] object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetNotebookMetadata

Retrieves notebook metadata for the specified notebook ID.

Request Syntax

```
{
   "NotebookId": "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.

**NotebookId (p. 63)**

The ID of the notebook whose metadata is to be retrieved.

Type: String


Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

Response Syntax

```
{
   "NotebookMetadata": {
      "CreationTime": number,
      "LastModifiedTime": number,
      "Name": "string",
      "NotebookId": "string",
      "Type": "string",
      "WorkGroup": "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.

**NotebookMetadata (p. 63)**

The metadata that is returned for the specified notebook ID.

Type: [NotebookMetadata](#) object
Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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

Retrieves the prepared statement with the specified name from the specified workgroup.

**Request Syntax**

```json
{
   "StatementName": "string",
   "WorkGroup": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

* **StatementName (p. 65)**
  
  The name of the prepared statement to retrieve.
  
  Type: String
  
  Length Constraints: Minimum length of 1. Maximum length of 256.
  
  Pattern: [a-zA-Z_][a-zA-Z0-9@:]{1,256}
  
  Required: Yes

* **WorkGroup (p. 65)**
  
  The workgroup to which the statement to be retrieved belongs.
  
  Type: String
  
  Pattern: [a-zA-Z0-9.-_]{1,128}
  
  Required: Yes

**Response Syntax**

```json
{
   "PreparedStatement": {
      "Description": "string",
      "LastModifiedTime": number,
      "QueryStatement": "string",
      "StatementName": "string",
      "WorkGroupName": "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.

**PreparedStatement (p. 65)**

The name of the prepared statement that was retrieved.

Type: PreparedStatement (p. 217) object

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetQueryExecution

Returns information about a single execution of a query if you have access to the workgroup in which the query ran. Each time a query executes, information about the query execution is saved with a unique ID.

Request Syntax

```
{
    "QueryExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**QueryExecutionId (p. 67)**

The unique ID of the query execution.

Type: String


Pattern: \S+

Required: Yes

Response Syntax

```
[
    "QueryExecution": {
        "EngineVersion": {
            "EffectiveEngineVersion": "string",
            "SelectedEngineVersion": "string"
        },
        "ExecutionParameters": [ "string" ],
        "Query": "string",
        "QueryExecutionContext": {
            "Catalog": "string",
            "Database": "string"
        },
        "QueryExecutionId": "string",
        "ResultConfiguration": {
            "S3AclOption": "string"
        },
        "EncryptionConfiguration": {
            "EncryptionOption": "string",
            "KmsKey": "string"
        },
        "ExpectedBucketOwner": "string",
        "OutputLocation": "string"
    },
    "ResultReuseConfiguration": {
```

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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.

QueryExecution (p. 67)

Information about the query execution.

Type: QueryExecution (p. 220) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetQueryResults

Streams the results of a single query execution specified by QueryExecutionId from the Athena query results location in Amazon S3. For more information, see Working with query results, recent queries, and output files in the Amazon Athena User Guide. This request does not execute the query but returns results. Use StartQueryExecution (p. 139) to run a query.

To stream query results successfully, the IAM principal with permission to call GetQueryResults also must have permissions to the Amazon S3 GetObject action for the Athena query results location.

**Important**
IAM principals with permission to the Amazon S3 GetObject action for the query results location are able to retrieve query results from Amazon S3 even if permission to the GetQueryResults action is denied. To restrict user or role access, ensure that Amazon S3 permissions to the Athena query location are denied.

Request Syntax

```json
{
    "MaxResults": number,
    "NextToken": "string",
    "QueryExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 70)**

The maximum number of results (rows) to return in this request.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 1000.

Required: No

**NextToken (p. 70)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

**QueryExecutionId (p. 70)**

The unique ID of the query execution.

Type: String
Response Syntax

```
{
   "NextToken": "string",
   "ResultSet": {
      "ResultSetMetadata": {
         "ColumnInfo": [
            {
               "CaseSensitive": boolean,
               "CatalogName": "string",
               "Label": "string",
               "Name": "string",
               "Nullable": "string",
               "Precision": number,
               "Scale": number,
               "SchemaName": "string",
               "TableName": "string",
               "Type": "string"
            }
         ]
      },
      "Rows": [
         {
            "Data": [
               { "VarCharValue": "string" }
            ]
         }
      ],
      "UpdateCount": 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.

**NextToken (p. 71)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


**ResultSet (p. 71)**

The results of the query execution.

Type: ResultSet (p. 242) object
**UpdateCount (p. 71)**

The number of rows inserted with a CREATE TABLE AS SELECT statement.

Type: Long

**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetQueryRuntimeStatistics

Returns query execution runtime statistics related to a single execution of a query if you have access to the workgroup in which the query ran. Query execution runtime statistics are returned only when `QueryExecutionStatus.State (p. 226)` is in a SUCCEEDED or FAILED state. Stage-level input and output row count and data size statistics are not shown when a query has row-level filters defined in Lake Formation.

Request Syntax

```
{
    "QueryExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**QueryExecutionId (p. 73)**

The unique ID of the query execution.

Type: String


Pattern: \S+

Required: Yes

Response Syntax

```
{
    "QueryRuntimeStatistics": {
        "OutputStage": {
            "ExecutionTime": number,
            "InputBytes": number,
            "InputRows": number,
            "OutputBytes": number,
            "OutputRows": number,
            "QueryStagePlan": {
                "Children": [
                    "QueryStagePlanNode"
                ],
                "Identifier": "string",
                "Name": "string",
                "RemoteSources": [ "string" ]
            },
            "StageId": number,
            "State": "string",
            "SubStages": [
                "QueryStage"
            ]
        }
    }
}
```
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.

**QueryRuntimeStatistics (p. 73)**

Runtime statistics about the query execution.

Type: [QueryRuntimeStatistics (p. 228)](#) object

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)](#).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetSession

Gets the full details of a previously created session, including the session status and configuration.

Request Syntax

```json
{
  "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**SessionId (p. 76)**

The session ID.

Type: String

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

Required: Yes

Response Syntax

```json
{
  "Description": "string",
  "EngineConfiguration": {
    "AdditionalConfigs": {
      "string": "string"
    },
    "CoordinatorDpuSize": number,
    "DefaultExecutorDpuSize": number,
    "MaxConcurrentDpus": number,
    "SparkProperties": {
      "string": "string"
    }
  },
  "EngineVersion": "string",
  "NotebookVersion": "string",
  "SessionConfiguration": {
    "EncryptionConfiguration": {
      "EncryptionOption": "string",
      "KmsKey": "string"
    },
    "ExecutionRole": "string",
    "IdleTimeoutSeconds": number,
    "WorkingDirectory": "string"
  },
  "SessionId": "string",
  "Statistics": {
    "DpuExecutionInMillis": 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.

**Description (p. 76)**

The session description.

Type: String


**EngineConfiguration (p. 76)**

Contains engine configuration information like DPU usage.

Type: EngineConfiguration (p. 204) object

**EngineVersion (p. 76)**

The engine version used by the session (for example, PySpark engine version 3). You can get a list of engine versions by calling ListEngineVersions (p. 102).

Type: String


**NotebookVersion (p. 76)**

The notebook version.

Type: String


**SessionConfiguration (p. 76)**

Contains the workgroup configuration information used by the session.

Type: SessionConfiguration (p. 245) object

**SessionId (p. 76)**

The session ID.

Type: String

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

**Statistics (p. 76)**

Contains the DPU execution time.
Type: `SessionStatistics (p. 246)` object

**Status (p. 76)**

Contains information about the status of the session.

Type: `SessionStatus (p. 247)` object

**WorkGroup (p. 76)**

The workgroup to which the session belongs.

Type: String

Pattern: `[a-zA-Z0-9._-]{1,128}`

---

**Errors**

For information about the errors that are common to all actions, see `Common Errors (p. 269)`.

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetSessionStatus

Gets the current status of a session.

Request Syntax

```json
{
  "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**SessionId (p. 79)**

The session ID.

Type: String

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

Required: Yes

Response Syntax

```json
{
  "SessionId": "string",
  "Status": {
    "EndDateTime": number,
    "IdleSinceDateTime": number,
    "LastModifiedDateTime": number,
    "StartDateTime": number,
    "State": "string",
    "StateChangeReason": "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.

**SessionId (p. 79)**

The session ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 256.
Status (p. 79)
Contains information about the status of the session.
Type: SessionStatus (p. 247) object

Errors
For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException
Indicates a platform issue, which may be due to a transient condition or outage.
HTTP Status Code: 500

InvalidRequestException
Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
HTTP Status Code: 400

ResourceNotFoundException
A resource, such as a workgroup, was not found.
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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetTableMetadata

Returns table metadata for the specified catalog, database, and table.

Request Syntax

```
{
  "CatalogName": "string",
  "DatabaseName": "string",
  "TableName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters (p. 267)](https://docs.aws.amazon.com/athena/latest/ug/api-common-parameters.html).

The request accepts the following data in JSON format.

**CatalogName (p. 81)**

The name of the data catalog that contains the database and table metadata to return.

Type: String

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

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uDC00-\uDFFF\t]*

Required: Yes

**DatabaseName (p. 81)**

The name of the database that contains the table metadata to return.

Type: String


Required: Yes

**TableName (p. 81)**

The name of the table for which metadata is returned.

Type: String


Required: Yes

Response Syntax

```
{
  "TableMetadata": {
    "Columns": [
      
    ]
  }
}
```
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.

TableMetadata (p. 81)

An object that contains table metadata.

Type: TableMetadata (p. 251) object

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

MetadataException

An exception that Athena received when it called a custom metastore. Occurs if the error is not caused by user input (InvalidRequestException) or from the Athena platform (InternalServerException). For example, if a user-created Lambda function is missing permissions, the Lambda 4XX exception is returned in a MetadataException.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
GetWorkGroup

Returns information about the workgroup with the specified name.

Request Syntax

```json
{
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**WorkGroup (p. 84)**

- The name of the workgroup.
- Type: String
- Pattern: [a-zA-Z0-9._-][1,128]
- Required: Yes

Response Syntax

```json
{
    "WorkGroup": {
        "Configuration": {
            "AdditionalConfiguration": "string",
            "BytesScannedCutoffPerQuery": number,
            "CustomerContentEncryptionConfiguration": {
                "KmsKey": "string"
            },
            "EnableMinimumEncryptionConfiguration": boolean,
            "EnforceWorkGroupConfiguration": boolean,
            "EngineVersion": {
                "EffectiveEngineVersion": "string",
                "SelectedEngineVersion": "string"
            },
            "ExecutionRole": "string",
            "PublishCloudWatchMetricsEnabled": boolean,
            "RequesterPaysEnabled": boolean,
            "ResultConfiguration": {
                "AclConfiguration": {
                    "S3AclOption": "string"
                },
                "EncryptionConfiguration": {
                    "EncryptionOption": "string",
                    "KmsKey": "string"
                },
                "ExpectedBucketOwner": "string",
                "OutputLocation": "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.

**WorkGroup (p. 84)**

Information about the workgroup.

Type: [WorkGroup](p. 257) object

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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

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**ImportNotebook**

Imports a single ipynb file to a Spark enabled workgroup. The maximum file size that can be imported is 10 megabytes. If an ipynb file with the same name already exists in the workgroup, throws an error.

## Request Syntax

```json
{
    "ClientRequestToken": "string",
    "Name": "string",
    "Payload": "string",
    "Type": "string",
    "WorkGroup": "string"
}
```

## Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

### ClientRequestToken (p. 86)

A unique case-sensitive string used to ensure the request to import the notebook is idempotent (executes only once).

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for you. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

### Name (p. 86)

The name of the notebook to import.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: `[ -퟿-�𐀀-􏿿	]+`

Required: Yes

### Payload (p. 86)

The notebook content to be imported.

Type: String

Required: Yes

**Type (p. 86)**

The notebook content type. Currently, the only valid type is IPYNB.

Type: String

Valid Values: IPYNB

Required: Yes

**WorkGroup (p. 86)**

The name of the Spark enabled workgroup to import the notebook to.

Type: String

Pattern: [a-zA-Z0-9._-]{1,128}

Required: Yes

**Response Syntax**

```
{
   "NotebookId": "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.

**NotebookId (p. 87)**

The ID assigned to the imported notebook.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

**Errors**

For information about the errors that are common to all actions, see **Common Errors (p. 269)**.

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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

Returns the supported DPU sizes for the supported application runtimes (for example, Athena notebook version 1).

Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 89)**

Specifies the maximum number of results to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken (p. 89)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated.

Type: String


Required: No

Response Syntax

```
[
   "ApplicationDPUSizes": [ 
      { 
         "ApplicationRuntimeId": "string",
         "SupportedDPUSizes": [ number ]
      }
   ],
   "NextToken": "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.

**ApplicationDPUSizes (p. 89)**

A list of the supported DPU sizes that the application runtime supports.

Type: Array of ApplicationDPUSizes (p. 177) objects

**NextToken (p. 89)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


**Errors**

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListCalculationExecutions

Lists the calculations that have been submitted to a session in descending order. Newer calculations are listed first; older calculations are listed later.

**Request Syntax**

```
{
  "MaxResults": number,
  "NextToken": "string",
  "SessionId": "string",
  "StateFilter": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters (p. 267)](#).

The request accepts the following data in JSON format.

**MaxResults (p. 91)**

The maximum number of calculation executions to return.

- **Type:** Integer
- **Valid Range:** Minimum value of 1. Maximum value of 100.
- **Required:** No

**NextToken (p. 91)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

- **Type:** String
- **Length Constraints:** Maximum length of 2048.
- **Required:** No

**SessionId (p. 91)**

The session ID.

- **Type:** String
- **Length Constraints:** Minimum length of 1. Maximum length of 256.
- **Required:** Yes

**StateFilter (p. 91)**

A filter for a specific calculation execution state. A description of each state follows.

- **CREATING** - The calculation is in the process of being created.
- **CREATED** - The calculation has been created and is ready to run.
QUEUED - The calculation has been queued for processing.

RUNNING - The calculation is running.

CANCELING - A request to cancel the calculation has been received and the system is working to stop it.

CANCELED - The calculation is no longer running as the result of a cancel request.

COMPLETED - The calculation has completed without error.

FAILED - The calculation failed and is no longer running.

Type: String

Valid Values: CREATING | CREATED | QUEUED | RUNNING | CANCELING | CANCELED | COMPLETED | FAILED

Required: No

Response Syntax

```json
{
  "Calculations": [
    {
      "CalculationExecutionId": "string",
      "Description": "string",
      "Status": {
        "CompletionDateTime": number,
        "State": "string",
        "StateChangeReason": "string",
        "SubmissionDateTime": number
      }
    }
  ],
  "NextToken": "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.

**Calculations (p. 92)**

A list of CalculationSummary (p. 188) objects.

Type: Array of CalculationSummary (p. 188) objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

**NextToken (p. 92)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String
Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListCapacityReservations

Lists the capacity reservations for the current account.

Request Syntax

```json
{
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**MaxResults** (p. 94)

- Specifies the maximum number of results to return.
  - Type: Integer
  - Required: No

**NextToken** (p. 94)

- A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated.
  - Type: String
  - Required: No

Response Syntax

```json
{
    "CapacityReservations": [
        {
            "AllocatedDpus": number,
            "CreationTime": number,
            "LastAllocation": {
                "RequestCompletionTime": number,
                "RequestTime": number,
                "Status": "string",
                "StatusMessage": "string"
            },
            "LastSuccessfulAllocationTime": number,
            "Name": "string",
            "Status": "string",
            "TargetDpus": number
        }
    ]
}
```

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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.

- **CapacityReservations (p. 94)**
  - The capacity reservations for the current account.
  - Type: Array of CapacityReservation (p. 192) objects

- **NextToken (p. 94)**
  - A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.
  - Type: String

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

- **InternalServerException**
  - Indicates a platform issue, which may be due to a transient condition or outage.
  - HTTP Status Code: 500

- **InvalidRequestException**
  - Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
  - 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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
• AWS SDK for Ruby V3
ListDatabases

Lists the databases in the specified data catalog.

Request Syntax

```
{
    "CatalogName": "string",
    "MaxResults": number,
    "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CatalogName (p. 97)**

The name of the data catalog that contains the databases to return.

Type: String

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

Pattern: \[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDC00-\uDBFF\uDFFF\t\]*

Required: Yes

**MaxResults (p. 97)**

Specifies the maximum number of results to return.

Type: Integer


Required: No

**NextToken (p. 97)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

Response Syntax

```
{
}
```
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.

**DatabaseList (p. 97)**

A list of databases from a data catalog.

Type: Array of [Database (p. 198)] objects

**NextToken (p. 97)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**MetadataException**

An exception that Athena received when it called a custom metastore. Occurs if the error is not caused by user input (InvalidRequestException) or from the Athena platform (InternalServerException). For example, if a user-created Lambda function is missing permissions, the Lambda 4XX exception is returned in a MetadataException.

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

Lists the data catalogs in the current AWS account.

**Note**
In the Athena console, data catalogs are listed as "data sources" on the **Data sources** page under the **Data source name** column.

**Request Syntax**

```json
{
   "MaxResults": number,
   "NextToken": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 100)**

- Specifies the maximum number of data catalogs to return.
- Type: Integer
- Required: No

**NextToken (p. 100)**

- A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.
- Type: String
- Required: No

**Response Syntax**

```json
{
   "DataCatalogsSummary": [
      {
         "CatalogName": "string",
         "Type": "string"
      }
   ],
   "NextToken": "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.

**DataCatalogsSummary (p. 100)**

A summary list of data catalogs.

Type: Array of DataCatalogSummary (p. 201) objects

**NextToken (p. 100)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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

Returns a list of engine versions that are available to choose from, including the Auto option.

Request Syntax

```json
{
   "MaxResults": number,
   "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 102)**

The maximum number of engine versions to return in this request.

Type: Integer


Required: No

**NextToken (p. 102)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

Response Syntax

```json
{
   "EngineVersions": [
      {
         "EffectiveEngineVersion": "string",
         "SelectedEngineVersion": "string"
      }
   ],
   "NextToken": "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.

**EngineVersions (p. 102)**

A list of engine versions that are available to choose from.

Type: Array of [EngineVersion](p. 206) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

**NextToken (p. 102)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 269)](p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListExecutors

Lists, in descending order, the executors that joined a session. Newer executors are listed first; older executors are listed later. The result can be optionally filtered by state.

Request Syntax

```
{
    "ExecutorStateFilter": "string",
    "MaxResults": number,
    "NextToken": "string",
    "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**ExecutorStateFilter (p. 104)**

A filter for a specific executor state. A description of each state follows.

- **CREATING** - The executor is being started, including acquiring resources.
- **CREATED** - The executor has been started.
- **REGISTERED** - The executor has been registered.
- **TERMINATING** - The executor is in the process of shutting down.
- **TERMINATED** - The executor is no longer running.
- **FAILED** - Due to a failure, the executor is no longer running.

Type: String

Valid Values: CREATING | CREATED | REGISTERED | TERMINATING | TERMINATED | FAILED

Required: No

**MaxResults (p. 104)**

The maximum number of executors to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

**NextToken (p. 104)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.
Type: String
Length Constraints: Maximum length of 2048.
Required: No

**SessionId (p. 104)**
The session ID.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: Yes

### Response Syntax

```json
{
   "ExecutorsSummary": [
      {
         "ExecutorId": "string",
         "ExecutorSize": number,
         "ExecutorState": "string",
         "ExecutorType": "string",
         "StartDateDateTime": number,
         "TerminationDateTime": number
      }
   ],
   "NextToken": "string",
   "SessionId": "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.

**ExecutorsSummary (p. 105)**
Contains summary information about the executor.
Type: Array of **ExecutorsSummary** objects

**NextToken (p. 105)**
A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.
Type: String
Length Constraints: Maximum length of 2048.

**SessionId (p. 105)**
The session ID.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListNamedQueries

Provides a list of available query IDs only for queries saved in the specified workgroup. Requires that you have access to the specified workgroup. If a workgroup is not specified, lists the saved queries for the primary workgroup.

For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string",
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 107)**

The maximum number of queries to return in this request.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 50.

Required: No

**NextToken (p. 107)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

**WorkGroup (p. 107)**

The name of the workgroup from which the named queries are being returned. If a workgroup is not specified, the saved queries for the primary workgroup are returned.

Type: String

Pattern: [a-zA-Z0-9_.-]{1,128}

Required: No
Response Syntax

```json
{
    "NamedQueryIds": [ "string" ],
    "NextToken": "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.

**NamedQueryIds (p. 108)**

The list of unique query IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: \S+

**NextToken (p. 108)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the `NextToken` from the response object of the previous page call.

Type: String


Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)](#).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
• AWS SDK for Java V2
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
ListNotebookMetadata

Displays the notebook files for the specified workgroup in paginated format.

Request Syntax

```json
{
  "Filters": {
    "Name": "string"
  },
  "MaxResults": number,
  "NextToken": "string",
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

Filters (p. 110)

Search filter string.

Type: FilterDefinition (p. 209) object

Required: No

MaxResults (p. 110)

Specifies the maximum number of results to return.

Type: Integer


Required: No

NextToken (p. 110)

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated.

Type: String


Required: No

WorkGroup (p. 110)

The name of the Spark enabled workgroup to retrieve notebook metadata for.

Type: String

Pattern: [a-zA-Z0-9_.-]{1,128}

Required: Yes
Response Syntax

```
{
  "NextToken": "string",
  "NotebookMetadataList": [
    {
      "CreationTime": number,
      "LastModifiedTime": number,
      "Name": "string",
      "NotebookId": "string",
      "Type": "string",
      "WorkGroup": "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.

**NextToken (p. 111)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


**NotebookMetadataList (p. 111)**

The list of notebook metadata for the specified workgroup.

Type: Array of NotebookMetadata (p. 214) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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

Lists, in descending order, the sessions that have been created in a notebook that are in an active state like CREATING, CREATED, IDLE or BUSY. Newer sessions are listed first; older sessions are listed later.

Request Syntax

```json
{
    "MaxResults": number,
    "NextToken": "string",
    "NotebookId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 113)**

The maximum number of notebook sessions to return.

- Type: Integer
- Valid Range: Minimum value of 1. Maximum value of 100.
- Required: No

**NextToken (p. 113)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

- Type: String
- Required: No

**NotebookId (p. 113)**

The ID of the notebook to list sessions for.

- Type: String
- Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}
- Required: Yes

Response Syntax

```json
{
}
```
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.

**NextToken (p. 113)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


**NotebookSessionsList (p. 113)**

A list of the sessions belonging to the notebook.

Type: Array of NotebookSessionSummary (p. 216) objects

Array Members: Minimum number of 0 items. Maximum number of 10 items.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListPreparedStatements

Lists the prepared statements in the specified workgroup.

Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string",
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

MaxResults (p. 116)

The maximum number of results to return in this request.

Type: Integer


Required: No

NextToken (p. 116)

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

WorkGroup (p. 116)

The workgroup to list the prepared statements for.

Type: String

Pattern: [a-zA-Z0-9._-]{1,128}

Required: Yes

Response Syntax

```
{
  "NextToken": "string",
  "PreparedStatements": [
  ]
}
```
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.

NextToken (p. 116)

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


PreparedStatements (p. 116)

The list of prepared statements for the workgroup.

Type: Array of PreparedStatementSummary (p. 219) objects

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
See Also

- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
ListQueryExecutions

Provides a list of available query execution IDs for the queries in the specified workgroup. If a workgroup is not specified, returns a list of query execution IDs for the primary workgroup. Requires you to have access to the workgroup in which the queries ran.

For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

Request Syntax

```json
{
  "MaxResults": number,
  "NextToken": "string",
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 119)**

The maximum number of query executions to return in this request.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 50.

Required: No

**NextToken (p. 119)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

**WorkGroup (p. 119)**

The name of the workgroup from which queries are being returned. If a workgroup is not specified, a list of available query execution IDs for the queries in the primary workgroup is returned.

Type: String

Pattern: [a-zA-Z0-9_.-]{1,128}

Required: No
Response Syntax

```
{
   "NextToken": "string",
   "QueryExecutionIds": [ "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.

**NextToken (p. 120)**

A token to be used by the next request if this request is truncated.

Type: String


**QueryExecutionIds (p. 120)**

The unique IDs of each query execution as an array of strings.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: \S+

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
AWS SDK for Java V2
AWS SDK for JavaScript
AWS SDK for PHP V3
AWS SDK for Python
AWS SDK for Ruby V3
ListSessions

Lists the sessions in a workgroup that are in an active state like CREATING, CREATED, IDLE, or BUSY. Newer sessions are listed first; older sessions are listed later.

Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string",
  "StateFilter": "string",
  "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

MaxResults (p. 122)

The maximum number of sessions to return.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 100.

Required: No

NextToken (p. 122)

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String

Length Constraints: Maximum length of 2048.

Required: No

StateFilter (p. 122)

A filter for a specific session state. A description of each state follows.

CREATING - The session is being started, including acquiring resources.

CREATED - The session has been started.

IDLE - The session is able to accept a calculation.

BUSY - The session is processing another task and is unable to accept a calculation.

TERMINATING - The session is in the process of shutting down.

TERMINATED - The session and its resources are no longer running.
DEGRADED - The session has no healthy coordinators.
FAILED - Due to a failure, the session and its resources are no longer running.

Type: String
Valid Values: CREATING | CREATED | IDLE | BUSY | TERMINATING | TERMINATED | DEGRADED | FAILED

Required: No

**WorkGroup (p. 122)**

The workgroup to which the session belongs.

Type: String
Pattern: [a-zA-Z0-9._-]{1,128}

Required: Yes

**Response Syntax**

```json
{
    "NextToken": "string",
    "Sessions": [
        {
            "Description": "string",
            "EngineVersion": {
                "EffectiveEngineVersion": "string",
                "SelectedEngineVersion": "string"
            },
            "NotebookVersion": "string",
            "SessionId": "string",
            "Status": {
                "EndDateDateTime": number,
                "IdleSinceDateTime": number,
                "LastModifiedDateTime": number,
                "StartDateDateTime": number,
                "State": "string",
                "StateChangeReason": "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.

**NextToken (p. 123)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String
Length Constraints: Maximum length of 2048.

**Sessions (p. 123)**

A list of sessions.

Type: Array of [SessionSummary (p. 249)] objects

Array Members: Minimum number of 0 items. Maximum number of 100 items.

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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

Lists the metadata for the tables in the specified data catalog database.

Request Syntax

```json
{
  "CatalogName": "string",
  "DatabaseName": "string",
  "Expression": "string",
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CatalogName (p. 125)**

The name of the data catalog for which table metadata should be returned.

Type: String

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

Pattern: `[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDFFF\t]*`  

Required: Yes

**DatabaseName (p. 125)**

The name of the database for which table metadata should be returned.

Type: String


Required: Yes

**Expression (p. 125)**

A regex filter that pattern-matches table names. If no expression is supplied, metadata for all tables are listed.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

Required: No

**MaxResults (p. 125)**

Specifies the maximum number of results to return.

Type: Integer
Required: No

NextToken (p. 125)

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String

Required: No

Response Syntax

```json
{
    "NextToken": "string",
    "TableMetadataList": [
        {
            "Columns": [
                {
                    "Comment": "string",
                    "Name": "string",
                    "Type": "string"
                }
            ],
            "CreateTime": number,
            "LastAccessTime": number,
            "Name": "string",
            "Parameters": {
                "string": "string"
            },
            "PartitionKeys": [
                {
                    "Comment": "string",
                    "Name": "string",
                    "Type": "string"
                }
            ],
            "TableType": "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.

NextToken (p. 126)

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String

**TableMetadataList (p. 126)**

A list of table metadata.

Type: Array of [TableMetadata](p. 251) objects

---

**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**MetadataException**

An exception that Athena received when it called a custom metastore. Occurs if the error is not caused by user input (InvalidRequestException) or from the Athena platform (InternalServerException). For example, if a user-created Lambda function is missing permissions, the Lambda 4XX exception is returned in a MetadataException.

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

---

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ListTagsForResource

Lists the tags associated with an Athena resource.

Request Syntax

```
{
   "MaxResults": number,
   "NextToken": "string",
   "ResourceARN": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

MaxResults (p. 128)

The maximum number of results to be returned per request that lists the tags for the resource.

Type: Integer

Valid Range: Minimum value of 75.

Required: No

NextToken (p. 128)

The token for the next set of results, or null if there are no additional results for this request, where the request lists the tags for the resource with the specified ARN.

Type: String


Required: No

ResourceARN (p. 128)

Lists the tags for the resource with the specified ARN.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

Response Syntax

```
{
   "NextToken": "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.

**NextToken (p. 128)**

A token to be used by the next request if this request is truncated.

Type: String


**Tags (p. 128)**

The list of tags associated with the specified resource.

Type: Array of Tag (p. 253) objects

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
ListWorkGroups
Lists available workgroups for the account.

Request Syntax

```
{
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**MaxResults (p. 131)**

The maximum number of workgroups to return in this request.

Type: Integer


Required: No

**NextToken (p. 131)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


Required: No

Response Syntax

```
{
  "NextToken": "string",
  "WorkGroups": [
    {
      "CreationTime": number,
      "Description": "string",
      "EngineVersion": {
        "EffectiveEngineVersion": "string",
        "SelectedEngineVersion": "string"
      },
      "Name": "string",
      "State": "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.

**NextToken (p. 131)**

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.

Type: String


**WorkGroups (p. 131)**

A list of WorkGroupSummary (p. 265) objects that include the names, descriptions, creation times, and states for each workgroup.

Type: Array of WorkGroupSummary (p. 265) objects

Array Members: Minimum number of 0 items. Maximum number of 50 items.

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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 C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
PutCapacityAssignmentConfiguration

Puts a new capacity assignment configuration for a specified capacity reservation. If a capacity assignment configuration already exists for the capacity reservation, replaces the existing capacity assignment configuration.

Request Syntax

```json
{
  "CapacityAssignments": [
    {
      "WorkGroupNames": [ "string" ]
    }
  ],
  "CapacityReservationName": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CapacityAssignments (p. 134)**

The list of assignments for the capacity assignment configuration.

Type: Array of CapacityAssignment (p. 190) objects

Required: Yes

**CapacityReservationName (p. 134)**

The name of the capacity reservation to put a capacity assignment configuration for.

Type: String


Pattern: [a-zA-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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.
HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
StartCalculationExecution

Submits calculations for execution within a session. You can supply the code to run as an inline code block within the request.

Request Syntax

```json
{
    "CalculationConfiguration": {
        "CodeBlock": "string",
    },
    "ClientRequestToken": "string",
    "CodeBlock": "string",
    "Description": "string",
    "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CalculationConfiguration (p. 136)**

This parameter has been deprecated.

Contains configuration information for the calculation.

Type: CalculationConfiguration (p. 182) object

Required: No

**ClientRequestToken (p. 136)**

A unique case-sensitive string used to ensure the request to create the calculation is idempotent (executes only once). If another StartCalculationExecutionRequest is received, the same response is returned and another calculation is not created. If a parameter has changed, an error is returned.

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for users. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Required: No

**CodeBlock (p. 136)**

A string that contains the code of the calculation.

Type: String

Length Constraints: Maximum length of 68000.
Required: No

**Description (p. 136)**

A description of the calculation.

Type: String


Required: No

**SessionId (p. 136)**

The session ID.

Type: String

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

Required: Yes

---

**Response Syntax**

```json
{
  "CalculationExecutionId": "string",
  "State": "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.

**CalculationExecutionId (p. 137)**

The calculation execution UUID.

Type: String


**State (p. 137)**

CREATING - The calculation is in the process of being created.

CREATED - The calculation has been created and is ready to run.

QUEUED - The calculation has been queued for processing.

RUNNING - The calculation is running.

CANCELING - A request to cancel the calculation has been received and the system is working to stop it.

CANCELED - The calculation is no longer running as the result of a cancel request.

COMPLETED - The calculation has completed without error.

FAILED - The calculation failed and is no longer running.

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Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
StartQueryExecution

Runs the SQL query statements contained in the Query. Requires you to have access to the workgroup in which the query ran. Running queries against an external catalog requires GetDataCatalog (p. 59) permission to the catalog. For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

Request Syntax

```json
{
    "ClientRequestToken": "string",
    "ExecutionParameters": [ "string" ],
    "QueryExecutionContext": {
        "Catalog": "string",
        "Database": "string"
    },
    "QueryString": "string",
    "ResultConfiguration": {
        "AclConfiguration": {
            "S3AclOption": "string"
        },
        "EncryptionConfiguration": {
            "EncryptionOption": "string",
            "KmsKey": "string"
        },
        "ExpectedBucketOwner": "string",
        "OutputLocation": "string"
    },
    "ResultReuseConfiguration": {
        "ResultReuseByAgeConfiguration": {
            "Enabled": boolean,
            "MaxAgeInMinutes": number
        }
    },
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

ClientRequestToken (p. 139)

A unique case-sensitive string used to ensure the request to create the query is idempotent (executes only once). If another StartQueryExecution request is received, the same response is returned and another query is not created. If a parameter has changed, for example, the QueryString, an error is returned.

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for users. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String

Required: No

**ExecutionParameters (p. 139)**
A list of values for the parameters in a query. The values are applied sequentially to the parameters in the query in the order in which the parameters occur.

Type: Array of strings
Array Members: Minimum number of 1 item.

Required: No

**QueryExecutionContext (p. 139)**
The database within which the query executes.

Type: QueryExecutionContext (p. 223) object

Required: No

**QueryString (p. 139)**
The SQL query statements to be executed.

Type: String


Required: Yes

**ResultConfiguration (p. 139)**
Specifies information about where and how to save the results of the query execution. If the query runs in a workgroup, then workgroup's settings may override query settings. This affects the query results location. The workgroup settings override is specified in EnforceWorkGroupConfiguration (true/false) in the WorkGroupConfiguration. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259).

Type: ResultConfiguration (p. 235) object

Required: No

**ResultReuseConfiguration (p. 139)**
Specifies the query result reuse behavior for the query.

Type: ResultReuseConfiguration (p. 240) object

Required: No

**WorkGroup (p. 139)**
The name of the workgroup in which the query is being started.

Type: String

Pattern: [a-zA-Z0-9\._-]{1,128}

Required: No

---

**Response Syntax**

```json
{

}```
"QueryExecutionId": "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.

**QueryExecutionId (p. 140)**

The unique ID of the query that ran as a result of this request.

Type: String


Pattern: \S+

Errors

For information about the errors that are common to all actions, see [Common Errors (p. 269)].

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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-dot-net)
- [AWS SDK for C++](aws-sdk-cpp)
- [AWS SDK for Go](aws-sdk-go)
- [AWS SDK for Java V2](aws-sdk-java-v2)
- [AWS SDK for JavaScript](aws-sdk-javascript)
- [AWS SDK for PHP V3](aws-sdk-php-v3)
- [AWS SDK for Python](aws-sdk-python)
- [AWS SDK for Ruby V3](aws-sdk-ruby-v3)
StartSession

Creates a session for running calculations within a workgroup. The session is ready when it reaches an IDLE state.

Request Syntax

```
{
    "ClientRequestToken": "string",
    "Description": "string",
    "EngineConfiguration": {
        "AdditionalConfigs": {
            "string": "string"
        },
        "CoordinatorDpuSize": number,
        "DefaultExecutorDpuSize": number,
        "MaxConcurrentDpus": number,
        "SparkProperties": {
            "string": "string"
        }
    },
    "NotebookVersion": "string",
    "SessionIdleTimeoutInMinutes": number,
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**ClientIdRequestToken (p. 143)**

A unique case-sensitive string used to ensure the request to create the session is idempotent (executes only once). If another StartSessionRequest is received, the same response is returned and another session is not created. If a parameter has changed, an error is returned.

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for users. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Required: No

**Description (p. 143)**

The session description.

Type: String


Required: No
**EngineConfiguration** *(p. 143)*

Contains engine data processing unit (DPU) configuration settings and parameter mappings.

Type: **EngineConfiguration** *(p. 204)* object

Required: Yes

**NotebookVersion** *(p. 143)*

The notebook version. This value is supplied automatically for notebook sessions in the Athena console and is not required for programmatic session access. The only valid notebook version is Athena notebook version 1. If you specify a value for NotebookVersion, you must also specify a value for NotebookId. See **EngineConfiguration:AdditionalConfigs** *(p. 204)*.

Type: String


Required: No

**SessionIdleTimeoutInMinutes** *(p. 143)*

The idle timeout in minutes for the session.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 480.

Required: No

**WorkGroup** *(p. 143)*

The workgroup to which the session belongs.

Type: String

Pattern: `[a-zA-Z0-9.-] {1,128}`

Required: Yes

---

**Response Syntax**

{
   "SessionId": "string",
   "State": "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.

**SessionId** *(p. 144)*

The session ID.

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

State (p. 144)

The state of the session. A description of each state follows.

CREATING - The session is being started, including acquiring resources.
CREATED - The session has been started.
IDLE - The session is able to accept a calculation.
BUSY - The session is processing another task and is unable to accept a calculation.
TERMINATING - The session is in the process of shutting down.
TERMINATED - The session and its resources are no longer running.
DEGRADED - The session has no healthy coordinators.
FAILED - Due to a failure, the session and its resources are no longer running.

Type: String

Valid Values: CREATING | CREATED | IDLE | BUSY | TERMINATING | TERMINATED | DEGRADED | FAILED

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

ResourceNotFoundException

A resource, such as a workgroup, was not found.

HTTP Status Code: 400

SessionAlreadyExistsException

The specified session already exists.

HTTP Status Code: 400

TooManyRequestsException

Indicates that the request was throttled.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
StopCalculationExecution

Requests the cancellation of a calculation. A StopCalculationExecution call on a calculation that is already in a terminal state (for example, STOPPED, FAILED, or COMPLETED) succeeds but has no effect.

**Note**
Cancelling a calculation is done on a best effort basis. If a calculation cannot be cancelled, you can be charged for its completion. If you are concerned about being charged for a calculation that cannot be cancelled, consider terminating the session in which the calculation is running.

**Request Syntax**

```
{
  "CalculationExecutionId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**CalculationExecutionId (p. 147)**

The calculation execution UUID.

Type: String


Required: Yes

**Response Syntax**

```
{
  "State": "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 (p. 147)**

CREATING - The calculation is in the process of being created.

CREATED - The calculation has been created and is ready to run.

QUEUED - The calculation has been queued for processing.

RUNNING - The calculation is running.
CANCELING - A request to cancel the calculation has been received and the system is working to stop it.

CANCELED - The calculation is no longer running as the result of a cancel request.

COMPLETED - The calculation has completed without error.

FAILED - The calculation failed and is no longer running.

Type: String

Valid Values: CREATING | CREATED | QUEUED | RUNNING | CANCELING | CANCELED | COMPLETED | FAILED

Errors

For information about the errors that are common to all actions, see Common Errors (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

ResourceNotFoundException

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
StopQueryExecution

Stops a query execution. Requires you to have access to the workgroup in which the query ran.

For code samples using the AWS SDK for Java, see Examples and Code Samples in the Amazon Athena User Guide.

Request Syntax

```json
{
   "QueryExecutionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**QueryExecutionId (p. 149)**

- The unique ID of the query execution to stop.
- Type: String
- Pattern: `\S+`
- 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 (p. 269).

**InternalServerException**

- Indicates a platform issue, which may be due to a transient condition or outage.
- HTTP Status Code: 500

**InvalidRequestException**

- Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
- HTTP Status Code: 400

See Also

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

- AWS Command Line Interface
- AWS SDK for .NET
- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
TagResource

Adds one or more tags to an Athena resource. A tag is a label that you assign to a resource. Each tag consists of a key and an optional value, both of which you define. For example, you can use tags to categorize Athena workgroups, data catalogs, or capacity reservations by purpose, owner, or environment. Use a consistent set of tag keys to make it easier to search and filter the resources in your account. For best practices, see Tagging Best Practices. Tag keys can be from 1 to 128 UTF-8 Unicode characters, and tag values can be from 0 to 256 UTF-8 Unicode characters. Tags can use letters and numbers representable in UTF-8, and the following characters: + - = . _ : / @. Tag keys and values are case-sensitive. Tag keys must be unique per resource. If you specify more than one tag, separate them by commas.

Request Syntax

```
{
  "ResourceARN": "string",
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**ResourceARN (p. 151)**

Specifies the ARN of the Athena resource to which tags are to be added.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 1011.

Required: Yes

**Tags (p. 151)**

A collection of one or more tags, separated by commas, to be added to an Athena resource.

Type: Array of Tag (p. 253) objects

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 (p. 269).
InternalServerException

 Indicates a platform issue, which may be due to a transient condition or outage.

 HTTP Status Code: 500

InvalidRequestException

 Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

 HTTP Status Code: 400

ResourceNotFoundException

 A resource, such as a workgroup, was not found.

 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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
Terminates an active session. A TerminateSession call on a session that is already inactive (for example, in a FAILED, TERMINATED or TERMINATING state) succeeds but has no effect. Calculations running in the session when TerminateSession is called are forcefully stopped, but may display as FAILED instead of STOPPED.

Request Syntax

```json
{
   "SessionId": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**SessionId (p. 153)**

The session ID.

Type: String

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

Required: Yes

Response Syntax

```json
{
   "State": "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 (p. 153)**

The state of the session. A description of each state follows.

**CREATING** - The session is being started, including acquiring resources.

**CREATED** - The session has been started.

**IDLE** - The session is able to accept a calculation.

**BUSY** - The session is processing another task and is unable to accept a calculation.
**Errors**

For information about the errors that are common to all actions, see [Common Errors (p. 269)](#).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UntagResource

Removes one or more tags from an Athena resource.

Request Syntax

```json
{
    "ResourceARN": "string",
    "TagKeys": [ "string" ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

ResourceARN (p. 155)

- Specifies the ARN of the resource from which tags are to be removed.
- Type: String
- Required: Yes

TagKeys (p. 155)

- A comma-separated list of one or more tag keys whose tags are to be removed from the specified resource.
- Type: Array of strings
- 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 (p. 269).

InternalServerException

- Indicates a platform issue, which may be due to a transient condition or outage.
- HTTP Status Code: 500

InvalidRequestException

- Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.
HTTP Status Code: 400

ResourceNotFoundException

A resource, such as a workgroup, was not found.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateCapacityReservation

Updates the number of requested data processing units for the capacity reservation with the specified name.

Request Syntax

```json
{
   "Name": "string",
   "TargetDpus": 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.

Name (p. 157)

The name of the capacity reservation.

Type: String


Pattern: [a-zA-Z0-9_.-]+

Required: Yes

TargetDpus (p. 157)

The new number of requested data processing units.

Type: Integer

Valid Range: Minimum value of 24.

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](#).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500
InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
**UpdateDataCatalog**

Updates the data catalog that has the specified name.

**Request Syntax**

```
{
    "Description": "string",
    "Name": "string",
    "Parameters": {
        "string": "string"
    },
    "Type": "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.

**Description (p. 159)**

New or modified text that describes the data catalog.

Type: String


Required: No

**Name (p. 159)**

The name of the data catalog to update. The catalog name must be unique for the AWS account and can use a maximum of 127 alphanumeric, underscore, at sign, or hyphen characters. The remainder of the length constraint of 256 is reserved for use by Athena.

Type: String

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

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDFFF\t]*

Required: Yes

**Parameters (p. 159)**

Specifies the Lambda function or functions to use for updating the data catalog. This is a mapping whose values depend on the catalog type.

- For the HIVE data catalog type, use the following syntax. The `metadata-function` parameter is required. The `sdk-version` parameter is optional and defaults to the currently supported version.

  `metadata-function=lambda_arn, sdk-version=version_number`

- For the LAMBDA data catalog type, use one of the following sets of required parameters, but not both.
If you have one Lambda function that processes metadata and another for reading the actual data, use the following syntax. Both parameters are required.

```markdown
metadata-function=\lambda_arn, record-function=\lambda_arn
```

If you have a composite Lambda function that processes both metadata and data, use the following syntax to specify your Lambda function.

```markdown
function=\lambda_arn
```

**Type**: String to string map

- **Key Length Constraints**: Minimum length of 1. Maximum length of 255.
- **Key Pattern**: `[\u0020-\uD7FF\uE000-\uFFFD\uDC00-\uDBFF\uD800-\uDBFF\uDFFF\t]`
- **Value Length Constraints**: Maximum length of 51200.

**Required**: No

**Type (p. 159)**

- Specifies the type of data catalog to update. Specify LAMBDA for a federated catalog, HIVE for an external hive metastore, or GLUE for an AWS Glue Data Catalog.

  **Type**: String

  **Valid Values**: LAMBDA | GLUE | HIVE

  **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 (p. 269)](https://aws.amazon.com).

### InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

- **HTTP Status Code**: 500

### InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

- **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](https://aws.amazon.com)
- [AWS SDK for .NET](https://aws.amazon.com)
See Also

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateNamedQuery

Updates a NamedQuery (p. 212) object. The database or workgroup cannot be updated.

Request Syntax

```json
{
    "Description": "string",
    "Name": "string",
    "NamedQueryId": "string",
    "QueryString": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**Description (p. 162)**

The query description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

**Name (p. 162)**

The name of the query.

Type: String


Required: Yes

**NamedQueryId (p. 162)**

The unique identifier (UUID) of the query.

Type: String


Pattern: \S+

Required: Yes

**QueryString (p. 162)**

The contents of the query with all query statements.

Type: String


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 (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
- AWS SDK for Java V2
- AWS SDK for JavaScript
- AWS SDK for PHP V3
- AWS SDK for Python
- AWS SDK for Ruby V3
UpdateNotebook

Updates the contents of a Spark notebook.

Request Syntax

```
{
  "ClientRequestToken": "string",
  "NotebookId": "string",
  "Payload": "string",
  "SessionId": "string",
  "Type": "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.

**ClientRequestToken (p. 164)**

A unique case-sensitive string used to ensure the request to create the notebook is idempotent (executes only once).

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for you. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: No

**NotebookId (p. 164)**

The ID of the notebook to update.

Type: String


Pattern: `[a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}`

Required: Yes

**Payload (p. 164)**

The updated content for the notebook.

Type: String


Required: Yes
SessionId (p. 164)

The active notebook session ID. Required if the notebook has an active session.

Type: String

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

Required: No

Type (p. 164)

The notebook content type. Currently, the only valid type is IPYNB.

Type: String

Valid Values: IPYNB

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 (p. 269).

InternalServerException

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

InvalidRequestException

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

TooManyRequestsException

Indicates that the request was throttled.

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
• AWS SDK for Java V2
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
UpdateNotebookMetadata

Updates the metadata for a notebook.

**Request Syntax**

```json
{
    "ClientRequestToken": "string",
    "Name": "string",
    "NotebookId": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see Common Parameters (p. 267).

The request accepts the following data in JSON format.

**ClientRequestToken (p. 167)**

A unique case-sensitive string used to ensure the request to create the notebook is idempotent (executes only once).

**Important**

This token is listed as not required because AWS SDKs (for example the AWS SDK for Java) auto-generate the token for you. If you are not using the AWS SDK or the AWS CLI, you must provide this token or the action will fail.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: No

**Name (p. 167)**

The name to update the notebook to.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: [ -퟿-�𐀀-􏿿	]+

Required: Yes

**NotebookId (p. 167)**

The ID of the notebook to update the metadata for.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**TooManyRequestsException**

Indicates that the request was throttled.

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

Updates a prepared statement.

Request Syntax

```
{
    "Description": "string",
    "QueryStatement": "string",
    "StatementName": "string",
    "WorkGroup": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**Description (p. 169)**

The description of the prepared statement.

Type: String


Required: No

**QueryStatement (p. 169)**

The query string for the prepared statement.

Type: String


Required: Yes

**StatementName (p. 169)**

The name of the prepared statement.

Type: String

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

Pattern: [a-zA-Z_][a-zA-Z0-9_@:]\{1,256\}

Required: Yes

**WorkGroup (p. 169)**

The workgroup for the prepared statement.

Type: String

Pattern: [a-zA-Z0-9_.-]\{1,128\}

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 (p. 269).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

HTTP Status Code: 400

**ResourceNotFoundException**

A resource, such as a workgroup, was not found.

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

Updates the workgroup with the specified name. The workgroup's name cannot be changed. Only `ConfigurationUpdates` can be specified.

**Request Syntax**

```json
{
    "ConfigurationUpdates": {
        "AdditionalConfiguration": "string",
        "BytesScannedCutoffPerQuery": number,
        "CustomerContentEncryptionConfiguration": {
            "KmsKey": "string"
        },
        "EnableMinimumEncryptionConfiguration": boolean,
        "EnforceWorkGroupConfiguration": boolean,
        "EngineVersion": {
            "EffectiveEngineVersion": "string",
            "SelectedEngineVersion": "string"
        },
        "ExecutionRole": "string",
        "PublishCloudWatchMetricsEnabled": boolean,
        "RemoveBytesScannedCutoffPerQuery": boolean,
        "RemoveCustomerContentEncryptionConfiguration": boolean,
        "RequesterPaysEnabled": boolean,
        "ResultConfigurationUpdates": {
            "AclConfiguration": {
                "S3AclOption": "string"
            },
            "EncryptionConfiguration": {
                "EncryptionOption": "string",
                "KmsKey": "string"
            },
            "ExpectedBucketOwner": "string",
            "OutputLocation": "string",
            "RemoveAclConfiguration": boolean,
            "RemoveEncryptionConfiguration": boolean,
            "RemoveExpectedBucketOwner": boolean,
            "RemoveOutputLocation": boolean
        }
    },
    "Description": "string",
    "State": "string",
    "WorkGroup": "string"
}
```

**Request Parameters**

For information about the parameters that are common to all actions, see [Common Parameters](p. 267).

The request accepts the following data in JSON format.

**ConfigurationUpdates** *(p. 171)*

Contains configuration updates for an Athena SQL workgroup.

Type: `WorkGroupConfigurationUpdates` *(p. 262)* object

Required: No
**Description (p. 171)**

The workgroup description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

**State (p. 171)**

The workgroup state that will be updated for the given workgroup.

Type: String

Valid Values: ENABLED | DISABLED

Required: No

**WorkGroup (p. 171)**

The specified workgroup that will be updated.

Type: String

Pattern: [a-zA-Z0-9._-]{1,128}

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 (p. 269)](#).

**InternalServerException**

Indicates a platform issue, which may be due to a transient condition or outage.

HTTP Status Code: 500

**InvalidRequestException**

Indicates that something is wrong with the input to the request. For example, a required parameter may be missing or out of range.

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
• AWS SDK for Java V2
• AWS SDK for JavaScript
• AWS SDK for PHP V3
• AWS SDK for Python
• AWS SDK for Ruby V3
Data Types

The Amazon Athena 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:

- AclConfiguration (p. 176)
- ApplicationDPUSizes (p. 177)
- AthenaError (p. 178)
- BatchGetNamedQueryInput (p. 180)
- BatchGetQueryExecutionInput (p. 181)
- CalculationConfiguration (p. 182)
- CalculationResult (p. 183)
- CalculationStatistics (p. 185)
- CalculationStatus (p. 186)
- CalculationSummary (p. 188)
- CapacityAllocation (p. 189)
- CapacityAssignment (p. 190)
- CapacityAssignmentConfiguration (p. 191)
- CapacityReservation (p. 192)
- Column (p. 194)
- ColumnInfo (p. 195)
- CustomerContentEncryptionConfiguration (p. 197)
- Database (p. 198)
- DataCatalog (p. 199)
- DataCatalogSummary (p. 201)
- Datum (p. 202)
- EncryptionConfiguration (p. 203)
- EngineConfiguration (p. 204)
- EngineVersion (p. 206)
- ExecutorsSummary (p. 207)
- FilterDefinition (p. 209)
- ListNamedQueriesInput (p. 210)
- ListQueryExecutionsInput (p. 211)
-NamedQuery (p. 212)
- NotebookMetadata (p. 214)
- NotebookSessionSummary (p. 216)
- PreparedStatement (p. 217)
- PreparedStatementSummary (p. 219)
- QueryExecution (p. 220)
- QueryExecutionContext (p. 223)
- **QueryExecutionStatistics** (p. 224)
- **QueryExecutionStatus** (p. 226)
- **QueryRuntimeStatistics** (p. 228)
- **QueryRuntimeStatisticsRows** (p. 229)
- **QueryRuntimeStatisticsTimeline** (p. 230)
- **QueryStage** (p. 232)
- **QueryStagePlanNode** (p. 234)
- **ResultConfiguration** (p. 235)
- **ResultConfigurationUpdates** (p. 237)
- **ResultReuseByAgeConfiguration** (p. 239)
- **ResultReuseConfiguration** (p. 240)
- **ResultReuseInformation** (p. 241)
- **ResultSet** (p. 242)
- **ResultSetMetadata** (p. 243)
- **Row** (p. 244)
- **SessionConfiguration** (p. 245)
- **SessionStatistics** (p. 246)
- **SessionStatus** (p. 247)
- **SessionSummary** (p. 249)
- **TableMetadata** (p. 251)
- **Tag** (p. 253)
- **UnprocessedNamedQueryId** (p. 254)
- **UnprocessedPreparedStatementName** (p. 255)
- **UnprocessedQueryExecutionId** (p. 256)
- **WorkGroup** (p. 257)
- **WorkGroupConfiguration** (p. 259)
- **WorkGroupConfigurationUpdates** (p. 262)
- **WorkGroupSummary** (p. 265)
AclConfiguration

Indicates that an Amazon S3 canned ACL should be set to control ownership of stored query results. When Athena stores query results in Amazon S3, the canned ACL is set with the x-amz-acl request header. For more information about S3 Object Ownership, see Object Ownership settings in the Amazon S3 User Guide.

Contents

S3AclOption

The Amazon S3 canned ACL that Athena should specify when storing query results. Currently the only supported canned ACL is BUCKET_OWNER_FULL_CONTROL. If a query runs in a workgroup and the workgroup overrides client-side settings, then the Amazon S3 canned ACL specified in the workgroup's settings is used for all queries that run in the workgroup. For more information about Amazon S3 canned ACLs, see Canned ACL in the Amazon S3 User Guide.

Type: String

Valid Values: BUCKET_OWNER_FULL_CONTROL

Required: Yes

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ApplicationDPUSizes

Contains the application runtime IDs and their supported DPU sizes.

Contents

**ApplicationRuntimeId**

The name of the supported application runtime (for example, Athena notebook version 1).

Type: String


Required: No

**SupportedDPUSizes**

A list of the supported DPU sizes that the application runtime supports.

Type: Array of integers

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 Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
AthenaError

Provides information about an Athena query error. The AthenaError feature provides standardized error information to help you understand failed queries and take steps after a query failure occurs. AthenaError includes an ErrorCategory field that specifies whether the cause of the failed query is due to system error, user error, or other error.

Contents

ErrorCategory

An integer value that specifies the category of a query failure error. The following list shows the category for each integer value.

1 - System
2 - User
3 - Other

Type: Integer
Required: No

ErrorMessage

Contains a short description of the error that occurred.

Type: String
Required: No

ErrorType

An integer value that provides specific information about an Athena query error. For the meaning of specific values, see the Error Type Reference in the Amazon Athena User Guide.

Type: Integer
Valid Range: Minimum value of 0. Maximum value of 9999.
Required: No

Retryable

True if the query might succeed if resubmitted.

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 Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
BatchGetNamedQueryInput

Contains an array of named query IDs.

Contents

NamedQueryIds

An array of query IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: \S+

Required: Yes

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
BatchGetQueryExecutionInput

Contains an array of query execution IDs.

Contents

QueryExecutionIds

An array of query execution IDs.

Type: Array of strings

Array Members: Minimum number of 1 item. Maximum number of 50 items.


Pattern: \S+

Required: Yes

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CalculationConfiguration

Contains configuration information for the calculation.

Contents

CodeBlock

A string that contains the code for the calculation.

Type: String

Length Constraints: Maximum length of 68000.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CalculationResult

Contains information about an application-specific calculation result.

Contents

**ResultS3Uri**

The Amazon S3 location of the folder for the calculation results.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^\(https|s3|S3\)://(\^[^/]+)/?(\.*/)?$`

Required: No

**ResultType**

The data format of the calculation result.

Type: String

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

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

Required: No

**StdErrorS3Uri**

The Amazon S3 location of the stderr error messages file for the calculation.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^\(https|s3|S3\)://(\^[^/]+)/?(\.*/)?$`

Required: No

**StdOutS3Uri**

The Amazon S3 location of the stdout file for the calculation.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `^\(https|s3|S3\)://(\^[^/]+)/?(\.*/)?$`

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++](https://aws.amazon.com/sdk-for-cpp/)
- [AWS SDK for Go](https://aws.amazon.com/sdk-for-golang/)

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See Also

- AWS SDK for Java V2
- AWS SDK for Ruby V3
CalculationStatistics

Contains statistics for a notebook calculation.

Contents

DpuExecutionInMillis

The data processing unit execution time in milliseconds for the calculation.

Type: Long

Required: No

Progress

The progress of the calculation.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CalculationStatus

Contains information about the status of a notebook calculation.

Contents

**CompletionDateTime**

The date and time the calculation completed processing.

Type: Timestamp

Required: No

**State**

The state of the calculation execution. A description of each state follows.

CREATING - The calculation is in the process of being created.

CREATED - The calculation has been created and is ready to run.

QUEUED - The calculation has been queued for processing.

RUNNING - The calculation is running.

CANCELING - A request to cancel the calculation has been received and the system is working to stop it.

CANCELED - The calculation is no longer running as the result of a cancel request.

COMPLETED - The calculation has completed without error.

FAILED - The calculation failed and is no longer running.

Type: String

Valid Values: CREATING | CREATED | QUEUED | RUNNING | CANCELING | CANCELED | COMPLETED | FAILED

Required: No

**StateChangeReason**

The reason for the calculation state change (for example, the calculation was canceled because the session was terminated).

Type: String


Required: No

**SubmissionDateTime**

The date and time the calculation was submitted for processing.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CalculationSummary

Summary information for a notebook calculation.

Contents

CalculationExecutionId

The calculation execution UUID.

Type: String


Required: No

Description

A description of the calculation.

Type: String


Required: No

Status

Contains information about the status of the calculation.

Type: CalculationStatus (p. 186) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CapacityAllocation

Contains the submission time of a single allocation request for a capacity reservation and the most recent status of the attempted allocation.

Contents

RequestTime

The time when the capacity allocation was requested.

Type: Timestamp

Required: Yes

Status

The status of the capacity allocation.

Type: String

Valid Values: PENDING | SUCCEEDED | FAILED

Required: Yes

RequestCompletionTime

The time when the capacity allocation request was completed.

Type: Timestamp

Required: No

StatusMessage

The status message of the capacity allocation.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CapacityAssignment

A mapping between one or more workgroups and a capacity reservation.

Contents

WorkGroupNames

The list of workgroup names for the capacity assignment.

Type: Array of strings

Pattern: [a-zA-Z0-9._-]{1,128}

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CapacityAssignmentConfiguration

Assigns Athena workgroups (and hence their queries) to capacity reservations. A capacity reservation can have only one capacity assignment configuration, but the capacity assignment configuration can be made up of multiple individual assignments. Each assignment specifies how Athena queries can consume capacity from the capacity reservation that their workgroup is mapped to.

Contents

CapacityAssignments

The list of assignments that make up the capacity assignment configuration.

Type: Array of `CapacityAssignment` objects

Required: No

CapacityReservationName

The name of the reservation that the capacity assignment configuration is for.

Type: String


Pattern: `[a-zA-Z0-9._-]+`

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CapacityReservation

A reservation for a specified number of data processing units (DPUs). When a reservation is initially created, it has no DPUs. Athena allocates DPUs until the allocated amount equals the requested amount.

Contents

AllocatedDpus

The number of data processing units currently allocated.

Type: Integer

Valid Range: Minimum value of 0.

Required: Yes

CreationTime

The time in UTC epoch millis when the capacity reservation was created.

Type: Timestamp

Required: Yes

Name

The name of the capacity reservation.

Type: String


Pattern: [a-zA-Z0-9._-]+

Required: Yes

Status

The status of the capacity reservation.

Type: String

Valid Values: PENDING | ACTIVE | CANCELING | CANCELLED | FAILED | UPDATE_PENDING

Required: Yes

TargetDpus

The number of data processing units requested.

Type: Integer

Valid Range: Minimum value of 24.

Required: Yes

LastAllocation

Contains the submission time of a single allocation request for a capacity reservation and the most recent status of the attempted allocation.
Type: CapacityAllocation (p. 189) object

Required: No

**LastSuccessfulAllocationTime**

The time of the most recent capacity allocation that succeeded.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Column

Contains metadata for a column in a table.

Contents

Name

The name of the column.

Type: String


Required: Yes

Comment

Optional information about the column.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDC00-\uDBFF\uDFFF\t]*

Required: No

Type

The data type of the column.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 4096.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDC00-\uDBFF\uDFFF\t]*

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ColumnInfo

Information about the columns in a query execution result.

Contents

Name
The name of the column.
Type: String
Required: Yes

Type
The data type of the column.
Type: String
Required: Yes

CaseSensitive
Indicates whether values in the column are case-sensitive.
Type: Boolean
Required: No

CatalogName
The catalog to which the query results belong.
Type: String
Required: No

Label
A column label.
Type: String
Required: No

Nullable
Indicates the column's nullable status.
Type: String
Valid Values: NOT_NULL | NULLABLE | UNKNOWN
Required: No

Precision
For DECIMAL data types, specifies the total number of digits, up to 38. For performance reasons, we recommend up to 18 digits.
Type: Integer
Required: No
Scale
For DECIMAL data types, specifies the total number of digits in the fractional part of the value. Defaults to 0.
Type: Integer
Required: No

SchemaName
The schema name (database name) to which the query results belong.
Type: String
Required: No

TableName
The table name for the query results.
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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
CustomerContentEncryptionConfiguration

Specifies the KMS key that is used to encrypt the user's data stores in Athena. This setting does not apply to Athena SQL workgroups.

Contents

KmsKey

The KMS key that is used to encrypt the user's data stores in Athena.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: ^arn:aws[a-z\-]*:kms:[(a-z0-9\-]+):\d\{12\}:key/?[a-zA-Z\-0-9+=,\@\-_\/]+$|^arn:aws[a-z\-]*:kms:[(a-z0-9\-]+):\d\{12\}:alias/?[a-zA-Z\-0-9+=,\@\-_\/]+$|^alias/[a-zA-Z0-9/_-]+\[a-f0-9\{8\}-[a-f0-9\{4\}-[a-f0-9\{4\}-[a-f0-9\{4\}-[a-f0-9\{12\}

Required: Yes

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Database

Contains metadata information for a database in a data catalog.

Contents

Name

The name of the database.

Type: String


Required: Yes

Description

An optional description of the database.

Type: String


Required: No

Parameters

A set of custom key/value pairs.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Key Pattern: \[\u0020-\uD7FF\uE000-\uFFFF\uD800-\uDBFF\uDFFF\t\]*

Value Length Constraints: Maximum length of 51200.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
DataCatalog

Contains information about a data catalog in an AWS account.

Note
In the Athena console, data catalogs are listed as "data sources" on the Data sources page under the Data source name column.

Contents

Name
The name of the data catalog. The catalog name must be unique for the AWS account and can use a maximum of 127 alphanumeric, underscore, at sign, or hyphen characters. The remainder of the length constraint of 256 is reserved for use by Athena.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Pattern: \[\u0020-\uD7FF\uE000-\uFFFF\uD800-\uDC00-\uDBFF-\uDFFF]*
Required: Yes

Type
The type of data catalog to create: LAMBDA for a federated catalog, HIVE for an external hive metastore, or GLUE for an AWS Glue Data Catalog.

Type: String
Valid Values: LAMBDA | GLUE | HIVE
Required: Yes

Description
An optional description of the data catalog.

Type: String
Required: No

Parameters
Specifies the Lambda function or functions to use for the data catalog. This is a mapping whose values depend on the catalog type.

- For the HIVE data catalog type, use the following syntax. The metadata-function parameter is required. The sdk-version parameter is optional and defaults to the currently supported version.

  metadata-function=lambda_arn, sdk-version=version_number

- For the LAMBDA data catalog type, use one of the following sets of required parameters, but not both.
  - If you have one Lambda function that processes metadata and another for reading the actual data, use the following syntax. Both parameters are required.

    metadata-function=lambda_arn, record-function=lambda_arn
• If you have a composite Lambda function that processes both metadata and data, use the following syntax to specify your Lambda function.

```javascript
function=lambda_arn
```

• The GLUE type takes a catalog ID parameter and is required. The `catalog_id` is the account ID of the AWS account to which the AWS Glue catalog belongs.

```javascript
catalog-id=catalog_id
```

• The GLUE data catalog type also applies to the default AwsDataCatalog that already exists in your account, of which you can have only one and cannot modify.

• Queries that specify a AWS Glue Data Catalog other than the default AwsDataCatalog must be run on Athena engine version 2.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Key Pattern: `[ -퟿-�𐀀-􏿿\t]*`

Value Length Constraints: Maximum length of 51200.

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 Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
DataCatalogSummary

The summary information for the data catalog, which includes its name and type.

Contents

CatalogName

The name of the data catalog. The catalog name is unique for the AWS account and can use a maximum of 127 alphanumeric, underscore, at sign, or hyphen characters. The remainder of the length constraint of 256 is reserved for use by Athena.

Type: String

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

Pattern: \[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDC00-\uDBFF\uDFFF\t\]*

Required: No

Type

The data catalog type.

Type: String

Valid Values: LAMBDA | GLUE | HIVE

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Datum

A piece of data (a field in the table).

Contents

VarCharValue

The value of the datum.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
EncryptionConfiguration

If query and calculation results are encrypted in Amazon S3, indicates the encryption option used (for example, SSE_KMS or CSE_KMS) and key information.

Contents

EncryptionOption

Indicates whether Amazon S3 server-side encryption with Amazon S3-managed keys (SSE_S3), server-side encryption with KMS-managed keys (SSE_KMS), or client-side encryption with KMS-managed keys (CSE_KMS) is used.

If a query runs in a workgroup and the workgroup overrides client-side settings, then the workgroup's setting for encryption is used. It specifies whether query results must be encrypted, for all queries that run in this workgroup.

Type: String

Valid Values: SSE_S3 | SSE_KMS | CSE_KMS

Required: Yes

KmsKey

For SSE_KMS and CSE_KMS, this is the KMS key ARN or ID.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
EngineConfiguration

Contains data processing unit (DPU) configuration settings and parameter mappings for a notebook engine.

Contents

MaxConcurrentDpus

The maximum number of DPUs that can run concurrently.

Type: Integer


Required: Yes

AdditionalConfigs

Contains additional notebook engine MAP<string, string> parameter mappings in the form of key-value pairs. To specify an Athena notebook that the Jupyter server will download and serve, specify a value for the `StartSession:NotebookVersion` field, and then add a key named `NotebookId` to `AdditionalConfigs` that has the value of the Athena notebook ID.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Key Pattern: "[\u0020-\u0020\u000D-\u000D\u000A-\u000A\u0080-\uD7FF\uE000-\uFFFD\u0000-\u001F\uD800-\uDCFF\uDFFF]+"*

Value Length Constraints: Maximum length of 51200.

Required: No

CoordinatorDpuSize

The number of DPUs to use for the coordinator. A coordinator is a special executor that orchestrates processing work and manages other executors in a notebook session. The default is 1.

Type: Integer

Valid Range: Fixed value of 1.

Required: No

DefaultExecutorDpuSize

The default number of DPUs to use for executors. An executor is the smallest unit of compute that a notebook session can request from Athena. The default is 1.

Type: Integer

Valid Range: Fixed value of 1.

Required: No

SparkProperties

Specifies custom jar files and Spark properties for use cases like cluster encryption, table formats, and general Spark tuning.

Type: String to string map
Key Length Constraints: Minimum length of 1. Maximum length of 255.

Key Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800\uDC00-\uDBFF\uDFFF\t]*

Value Length Constraints: Maximum length of 51200.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
EngineVersion

The Athena engine version for running queries, or the PySpark engine version for running sessions.

Contents

EffectiveEngineVersion

Read only. The engine version on which the query runs. If the user requests a valid engine version other than Auto, the effective engine version is the same as the engine version that the user requested. If the user requests Auto, the effective engine version is chosen by Athena. When a request to update the engine version is made by a CreateWorkGroup or UpdateWorkGroup operation, the EffectiveEngineVersion field is ignored.

Type: String
Required: No

SelectedEngineVersion

The engine version requested by the user. Possible values are determined by the output of ListEngineVersions, including AUTO. The default is AUTO.

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 Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
ExecutorsSummary

Contains summary information about an executor.

Contents

ExecutorId

The UUID of the executor.

Type: String

Length Constraints: Maximum length of 100000.

Pattern: .*

Required: Yes

ExecutorSize

The smallest unit of compute that a session can request from Athena. Size is measured in data processing unit (DPU) values, a relative measure of processing power.

Type: Long

Required: No

ExecutorState

The processing state of the executor. A description of each state follows.

CREATING - The executor is being started, including acquiring resources.

CREATED - The executor has been started.

REGISTERED - The executor has been registered.

TERMINATING - The executor is in the process of shutting down.

TERMINATED - The executor is no longer running.

FAILED - Due to a failure, the executor is no longer running.

Type: String

Valid Values: CREATING | CREATED | REGISTERED | TERMINATING | TERMINATED | FAILED

Required: No

ExecutorType

The type of executor used for the application (COORDINATOR, GATEWAY, or WORKER).

Type: String

Valid Values: COORDINATOR | GATEWAY | WORKER

Required: No

StartDateTime

The date and time that the executor started.
TerminationDateTime

The date and time that the executor was terminated.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
FilterDefinition

A string for searching notebook names.

Contents

Name

The name of the notebook to search for.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uDC00-\uDFFF\t]+

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ListNamedQueriesInput

Contents

MaxResults

The maximum number of queries to return in this request.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 50.
Required: No

NextToken

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.
Type: String
Required: No

WorkGroup

The name of the workgroup from which the named queries are being returned. If a workgroup is not specified, the saved queries for the primary workgroup are returned.
Type: String
Pattern: [a-zA-Z0-9\._-]{1,128}
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 Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
ListQueryExecutionsInput

Contents

MaxResults

The maximum number of query executions to return in this request.
Type: Integer
Valid Range: Minimum value of 0. Maximum value of 50.
Required: No

NextToken

A token generated by the Athena service that specifies where to continue pagination if a previous request was truncated. To obtain the next set of pages, pass in the NextToken from the response object of the previous page call.
Type: String
Required: No

WorkGroup

The name of the workgroup from which queries are being returned. If a workgroup is not specified, a list of available query execution IDs for the queries in the primary workgroup is returned.
Type: String
Pattern: [a-zA-Z0-9.-]{1,128}
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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
NamedQuery

A query, where QueryString contains the SQL statements that make up the query.

Contents

Database

The database to which the query belongs.
Type: String
Length Constraints: Minimum length of 1. Maximum length of 255.
Required: Yes

Name

The query name.
Type: String
Required: Yes

QueryString

The SQL statements that make up the query.
Type: String
Required: Yes

Description

The query description.
Type: String
Required: No

NamedQueryId

The unique identifier of the query.
Type: String
Pattern: \S+
Required: No

WorkGroup

The name of the workgroup that contains the named query.
Type: String
Pattern: \[a-zA-Z0-9\-\._\-]\{1,128\}

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
NotebookMetadata

Contains metadata for notebook, including the notebook name, ID, workgroup, and time created.

Contents

**CreationTime**

The time when the notebook was created.

Type: Timestamp

Required: No

**LastModifiedTime**

The time when the notebook was last modified.

Type: Timestamp

Required: No

**Name**

The name of the notebook.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

Pattern: \[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDFFF\t\]+

Required: No

**NotebookId**

The notebook ID.

Type: String


Pattern: [a-f0-9]{8}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{4}-[a-f0-9]{12}

Required: No

**Type**

The type of notebook. Currently, the only valid type is IPYNB.

Type: String

Valid Values: IPYNB

Required: No

**WorkGroup**

The name of the Spark enabled workgroup to which the notebook belongs.

Type: String

Pattern: [a-zA-Z0-9.\-]{1,128}
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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
NotebookSessionSummary

Contains the notebook session ID and notebook session creation time.

Contents

CreationTime

The time when the notebook session was created.

Type: Timestamp

Required: No

SessionId

The notebook session ID.

Type: String

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

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 Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
PreparedStatement

A prepared SQL statement for use with Athena.

Contents

Description

The description of the prepared statement.

Type: String


Required: No

LastModifiedTime

The last modified time of the prepared statement.

Type: Timestamp

Required: No

QueryStatement

The query string for the prepared statement.

Type: String


Required: No

StatementName

The name of the prepared statement.

Type: String

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

Pattern: \[a-zA-Z_\][a-zA-Z0-9_:]{1,256}

Required: No

WorkGroupName

The name of the workgroup to which the prepared statement belongs.

Type: String

Pattern: \[a-zA-Z0-9_.-\]{1,128}

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++
See Also

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
PreparedStatementSummary

The name and last modified time of the prepared statement.

Contents

LastModifiedTime

The last modified time of the prepared statement.

Type: Timestamp

Required: No

StatementName

The name of the prepared statement.

Type: String

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

Pattern: [a-zA-Z_][a-zA-Z0-9_@:]\{1,256\}

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryExecution

Information about a single instance of a query execution.

**Contents**

**EngineVersion**

The engine version that executed the query.

Type: [EngineVersion](p. 206) object

Required: No

**ExecutionParameters**

A list of values for the parameters in a query. The values are applied sequentially to the parameters in the query in the order in which the parameters occur. The list of parameters is not returned in the response.

Type: Array of strings

Array Members: Minimum number of 1 item.


Required: No

**Query**

The SQL query statements which the query execution ran.

Type: String


Required: No

**QueryExecutionContext**

The database in which the query execution occurred.

Type: [QueryExecutionContext](p. 223) object

Required: No

**QueryExecutionId**

The unique identifier for each query execution.

Type: String


Pattern: \\S+

Required: No

**ResultConfiguration**

The location in Amazon S3 where query and calculation results are stored and the encryption option, if any, used for query results. These are known as "client-side settings". If workgroup settings override client-side settings, then the query uses the location for the query results and the encryption configuration that are specified for the workgroup.
ResultConfiguration

Specifies the query result reuse behavior that was used for the query.

Required: No

StatementType

The type of query statement that was run. DDL indicates DDL query statements. DML indicates DML (Data Manipulation Language) query statements, such as CREATE TABLE AS SELECT. UTILITY indicates query statements other than DDL and DML, such as SHOW CREATE TABLE, or DESCRIBE TABLE.

Required: No

Statistics

Query execution statistics, such as the amount of data scanned, the amount of time that the query took to process, and the type of statement that was run.

Required: No

Status

The completion date, current state, submission time, and state change reason (if applicable) for the query execution.

Required: No

SubstatementType

The kind of query statement that was run.

Required: No

WorkGroup

The name of the workgroup in which the query ran.

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 Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
QueryExecutionContext

The database and data catalog context in which the query execution occurs.

Contents

Catalog

The name of the data catalog used in the query execution.

Type: String

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

Pattern: [\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDFFF\uDBFF\uDFFF\t]*

Required: No

Database

The name of the database used in the query execution. The database must exist in the catalog.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 255.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryExecutionStatistics

The amount of data scanned during the query execution and the amount of time that it took to execute, and the type of statement that was run.

Contents

DataManifestLocation

The location and file name of a data manifest file. The manifest file is saved to the Athena query results location in Amazon S3. The manifest file tracks files that the query wrote to Amazon S3. If the query fails, the manifest file also tracks files that the query intended to write. The manifest is useful for identifying orphaned files resulting from a failed query. For more information, see Working with Query Results, Output Files, and Query History in the Amazon Athena User Guide.

Type: String
Required: No

DataScannedInBytes

The number of bytes in the data that was queried.

Type: Long
Required: No

EngineExecutionTimeInMillis

The number of milliseconds that the query took to execute.

Type: Long
Required: No

QueryPlanningTimeInMillis

The number of milliseconds that Athena took to plan the query processing flow. This includes the time spent retrieving table partitions from the data source. Note that because the query engine performs the query planning, query planning time is a subset of engine processing time.

Type: Long
Required: No

QueryQueueTimeInMillis

The number of milliseconds that the query was in your query queue waiting for resources. Note that if transient errors occur, Athena might automatically add the query back to the queue.

Type: Long
Required: No

ResultReuseInformation

Contains information about whether previous query results were reused for the query.

Type: ResultReuseInformation object
Required: No
ServiceProcessingTimeInMillis

The number of milliseconds that Athena took to finalize and publish the query results after the query engine finished running the query.

Type: Long

Required: No

TotalExecutionTimeInMillis

The number of milliseconds that Athena took to run the query.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryExecutionStatus

The completion date, current state, submission time, and state change reason (if applicable) for the query execution.

Contents

AthenaError

Provides information about an Athena query error.

Type: AthenaError (p. 178) object

Required: No

CompletionDateTime

The date and time that the query completed.

Type: Timestamp

Required: No

State

The state of query execution. QUEUED indicates that the query has been submitted to the service, and Athena will execute the query as soon as resources are available. RUNNING indicates that the query is in execution phase. SUCCEEDED indicates that the query completed without errors. FAILED indicates that the query experienced an error and did not complete processing. CANCELLED indicates that a user input interrupted query execution.

Note
Athena automatically retries your queries in cases of certain transient errors. As a result, you may see the query state transition from RUNNING or FAILED to QUEUED.

Type: String

Valid Values: QUEUED | RUNNING | SUCCEEDED | FAILED | CANCELLED

Required: No

StateChangeReason

Further detail about the status of the query.

Type: String

Required: No

SubmissionDateTime

The date and time that the query was submitted.

Type: Timestamp

Required: No

See Also

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

- AWS SDK for C++
- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryRuntimeStatistics

The query execution timeline, statistics on input and output rows and bytes, and the different query stages that form the query execution plan.

Contents

OutputStage

Stage statistics such as input and output rows and bytes, execution time, and stage state. This information also includes substages and the query stage plan.

Type: QueryStage (p. 232) object

Required: No

Rows

Statistics such as input rows and bytes read by the query, rows and bytes output by the query, and the number of rows written by the query.

Type: QueryRuntimeStatisticsRows (p. 229) object

Required: No

Timeline

Timeline statistics such as query queue time, planning time, execution time, service processing time, and total execution time.

Type: QueryRuntimeStatisticsTimeline (p. 230) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryRuntimeStatisticsRows

Statistics such as input rows and bytes read by the query, rows and bytes output by the query, and the number of rows written by the query.

Contents

InputBytes
- The number of bytes read to execute the query.
- Type: Long
- Required: No

InputRows
- The number of rows read to execute the query.
- Type: Long
- Required: No

OutputBytes
- The number of bytes returned by the query.
- Type: Long
- Required: No

OutputRows
- The number of rows returned by the query.
- 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryRuntimeStatisticsTimeline

Timeline statistics such as query queue time, planning time, execution time, service processing time, and total execution time.

Contents

**EngineExecutionTimeInMillis**

The number of milliseconds that the query took to execute.

Type: Long

Required: No

**QueryPlanningTimeInMillis**

The number of milliseconds that Athena took to plan the query processing flow. This includes the time spent retrieving table partitions from the data source. Note that because the query engine performs the query planning, query planning time is a subset of engine processing time.

Type: Long

Required: No

**QueryQueueTimeInMillis**

The number of milliseconds that the query was in your query queue waiting for resources. Note that if transient errors occur, Athena might automatically add the query back to the queue.

Type: Long

Required: No

**ServiceProcessingTimeInMillis**

The number of milliseconds that Athena took to finalize and publish the query results after the query engine finished running the query.

Type: Long

Required: No

**TotalExecutionTimeInMillis**

The number of milliseconds that Athena took to run the query.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryStage

Stage statistics such as input and output rows and bytes, execution time and stage state. This information also includes substages and the query stage plan.

Contents

ExecutionTime

Time taken to execute this stage.

Type: Long

Required: No

InputBytes

The number of bytes input into the stage for execution.

Type: Long

Required: No

InputRows

The number of rows input into the stage for execution.

Type: Long

Required: No

OutputBytes

The number of bytes output from the stage after execution.

Type: Long

Required: No

OutputRows

The number of rows output from the stage after execution.

Type: Long

Required: No

QueryStagePlan

Stage plan information such as name, identifier, sub plans, and source stages.

Type: QueryStagePlanNode (p. 234) object

Required: No

StageId

The identifier for a stage.

Type: Long

Required: No
State

State of the stage after query execution.
Type: String
Required: No

SubStages

List of sub query stages that form this stage execution plan.
Type: Array of QueryStage (p. 232) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
QueryStagePlanNode

Stage plan information such as name, identifier, sub plans, and remote sources.

Contents

Children

Stage plan information such as name, identifier, sub plans, and remote sources of child plan nodes/

Type: Array of QueryStagePlanNode (p. 234) objects

Required: No

Identifier

Information about the operation this query stage plan node is performing.

Type: String

Required: No

Name

Name of the query stage plan that describes the operation this stage is performing as part of query
execution.

Type: String

Required: No

RemoteSources

Source plan node IDs.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResultConfiguration

The location in Amazon S3 where query and calculation results are stored and the encryption option, if any, used for query and calculation results. These are known as "client-side settings". If workgroup settings override client-side settings, then the query uses the workgroup settings.

Contents

AclConfiguration

Indicates that an Amazon S3 canned ACL should be set to control ownership of stored query results. Currently the only supported canned ACL is BUCKET_OWNER_FULL_CONTROL. This is a client-side setting. If workgroup settings override client-side settings, then the query uses the ACL configuration that is specified for the workgroup, and also uses the location for storing query results specified in the workgroup. For more information, see WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259) and Workgroup Settings Override Client-Side Settings.

Type: AclConfiguration (p. 176) object

Required: No

EncryptionConfiguration

If query and calculation results are encrypted in Amazon S3, indicates the encryption option used (for example, SSE_KMS or CSE_KMS) and key information. This is a client-side setting. If workgroup settings override client-side settings, then the query uses the encryption configuration that is specified for the workgroup, and also uses the location for storing query results specified in the workgroup. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259) and Workgroup Settings Override Client-Side Settings.

Type: EncryptionConfiguration (p. 203) object

Required: No

ExpectedBucketOwner

The AWS account ID that you expect to be the owner of the Amazon S3 bucket specified by ResultConfiguration:OutputLocation (p. 235). If set, Athena uses the value for ExpectedBucketOwner when it makes Amazon S3 calls to your specified output location. If the ExpectedBucketOwner AWS account ID does not match the actual owner of the Amazon S3 bucket, the call fails with a permissions error.

This is a client-side setting. If workgroup settings override client-side settings, then the query uses the ExpectedBucketOwner setting that is specified for the workgroup, and also uses the location for storing query results specified in the workgroup. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259) and Workgroup Settings Override Client-Side Settings.

Type: String

Length Constraints: Fixed length of 12.

Pattern: ^\[0-9]+$

Required: No

OutputLocation

The location in Amazon S3 where your query and calculation results are stored, such as s3://path/to/query/bucket/. To run the query, you must specify the query results
location using one of the ways: either for individual queries using either this setting (client-side), or in the workgroup, using `WorkGroupConfiguration (p. 259)`. If none of them is set, Athena issues an error that no output location is provided. For more information, see `Working with query results, recent queries, and output files`. If workgroup settings override client-side settings, then the query uses the settings specified for the workgroup. See `WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259)`.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResultConfigurationUpdates

The information about the updates in the query results, such as output location and encryption configuration for the query results.

Contents

AclConfiguration

The ACL configuration for the query results.

Type: AclConfiguration (p. 176) object

Required: No

EncryptionConfiguration

The encryption configuration for query and calculation results.

Type: EncryptionConfiguration (p. 203) object

Required: No

ExpectedBucketOwner

The AWS account ID that you expect to be the owner of the Amazon S3 bucket specified by ResultConfiguration:OutputLocation (p. 235). If set, Athena uses the value for ExpectedBucketOwner when it makes Amazon S3 calls to your specified output location. If the ExpectedBucketOwner AWS account ID does not match the actual owner of the Amazon S3 bucket, the call fails with a permissions error.

If workgroup settings override client-side settings, then the query uses the ExpectedBucketOwner setting that is specified for the workgroup, and also uses the location for storing query results specified in the workgroup. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259) and Workgroup Settings Override Client-Side Settings.

Type: String

Length Constraints: Fixed length of 12.

Pattern: ^[0-9]+$

Required: No

OutputLocation

The location in Amazon S3 where your query and calculation results are stored, such as s3://path/to/query/bucket/. For more information, see Working with query results, recent queries, and output files. If workgroup settings override client-side settings, then the query uses the location for the query results and the encryption configuration that are specified for the workgroup. The "workgroup settings override" is specified in EnforceWorkGroupConfiguration (true/false) in the WorkGroupConfiguration. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259).

Type: String

Required: No

RemoveAclConfiguration

If set to true, indicates that the previously-specified ACL configuration for queries in this workgroup should be ignored and set to null. If set to false or not set, and a value is present in

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the AclConfiguration of ResultConfigurationUpdates, the AclConfiguration in the workgroup's ResultConfiguration is updated with the new value. For more information, see Workgroup Settings Override Client-Side Settings.

Type: Boolean
Required: No

RemoveEncryptionConfiguration

If set to "true", indicates that the previously-specified encryption configuration (also known as the client-side setting) for queries in this workgroup should be ignored and set to null. If set to "false" or not set, and a value is present in the EncryptionConfiguration in ResultConfigurationUpdates (the client-side setting), the EncryptionConfiguration in the workgroup's ResultConfiguration will be updated with the new value. For more information, see Workgroup Settings Override Client-Side Settings.

Type: Boolean
Required: No

RemoveExpectedBucketOwner

If set to "true", removes the AWS account ID previously specified for ResultConfiguration:ExpectedBucketOwner (p. 235). If set to "false" or not set, and a value is present in the ExpectedBucketOwner in ResultConfigurationUpdates (the client-side setting), the ExpectedBucketOwner in the workgroup's ResultConfiguration is updated with the new value. For more information, see Workgroup Settings Override Client-Side Settings.

Type: Boolean
Required: No

RemoveOutputLocation

If set to "true", indicates that the previously-specified query results location (also known as a client-side setting) for queries in this workgroup should be ignored and set to null. If set to "false" or not set, and a value is present in the OutputLocation in ResultConfigurationUpdates (the client-side setting), the OutputLocation in the workgroup's ResultConfiguration will be updated with the new value. For more information, see Workgroup Settings Override Client-Side Settings.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResultReuseByAgeConfiguration

Specifies whether previous query results are reused, and if so, their maximum age.

**Contents**

**Enabled**

True if previous query results can be reused when the query is run; otherwise, false. The default is false.

Type: Boolean

Required: Yes

**MaxAgeInMinutes**

Specifies, in minutes, the maximum age of a previous query result that Athena should consider for reuse. The default is 60.

Type: Integer

Valid Range: Minimum value of 0. Maximum value of 10080.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResultReuseConfiguration

Specifies the query result reuse behavior for the query.

Contents

ResultReuseByAgeConfiguration

Specifies whether previous query results are reused, and if so, their maximum age.

Type: ResultReuseByAgeConfiguration (p. 239) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResultReuseInformation

Contains information about whether the result of a previous query was reused.

Contents

ReusedPreviousResult

True if a previous query result was reused; false if the result was generated from a new run of the query.

Type: Boolean

Required: Yes

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**ResultSet**

The metadata and rows that make up a query result set. The metadata describes the column structure and data types. To return a ResultSet object, use `GetQueryResults (p. 70)`.

**Contents**

**ResultSetMetadata**

The metadata that describes the column structure and data types of a table of query results.

Type: `ResultSetMetadata (p. 243)` object

Required: No

**Rows**

The rows in the table.

Type: Array of `Row (p. 244)` 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
ResultSetMetadata

The metadata that describes the column structure and data types of a table of query results. To return a ResultSetMetadata object, use GetQueryResults (p. 70).

Contents

ColumnInfo

Information about the columns returned in a query result metadata.

Type: Array of ColumnInfo (p. 195) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Row

The rows that make up a query result table.

Contents

Data

The data that populates a row in a query result table.

Type: Array of Datum (p. 202) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SessionConfiguration

Contains session configuration information.

Contents

EncryptionConfiguration

If query and calculation results are encrypted in Amazon S3, indicates the encryption option used (for example, SSE_KMS or CSE_KMS) and key information.

Type: EncryptionConfiguration (p. 203) object

Required: No

ExecutionRole

The ARN of the execution role used in a Spark session to access user resources. This property applies only to Spark-enabled workgroups.

Type: String


Pattern: ^arn:aws[a-z\-]*:iam::\d{12}:role/\?[a-zA-Z0-9=+/\@\-_/]+$

Required: No

IdleTimeoutSeconds

The idle timeout in seconds for the session.

Type: Long

Required: No

WorkingDirectory

The Amazon S3 location that stores information for the notebook.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SessionStatistics

Contains statistics for a session.

Contents

DpuExecutionInMillis

The data processing unit execution time for a session in milliseconds.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SessionStatus

Contains information about the status of a session.

Contents

**EndDateTime**

The date and time that the session ended.

Type: Timestamp

Required: No

**IdleSinceDateTime**

The date and time starting at which the session became idle. Can be empty if the session is not currently idle.

Type: Timestamp

Required: No

**LastModifiedDateTime**

The most recent date and time that the session was modified.

Type: Timestamp

Required: No

**StartDateTime**

The date and time that the session started.

Type: Timestamp

Required: No

**State**

The state of the session. A description of each state follows.

- **CREATING** - The session is being started, including acquiring resources.
- **CREATED** - The session has been started.
- **IDLE** - The session is able to accept a calculation.
- **BUSY** - The session is processing another task and is unable to accept a calculation.
- **TERMINATING** - The session is in the process of shutting down.
- **TERMINATED** - The session and its resources are no longer running.
- **DEGRADED** - The session has no healthy coordinators.
- **FAILED** - Due to a failure, the session and its resources are no longer running.

Type: String

Valid Values: CREATING | CREATED | IDLE | BUSY | TERMINATING | TERMINATED | DEGRADED | FAILED
**Required:** No

**StateChangeReason**

The reason for the session state change (for example, canceled because the session was terminated).

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
SessionSummary

Contains summary information about a session.

Contents

Description

The session description.

Type: String


Required: No

EngineVersion

The engine version used by the session (for example, PySpark engine version 3).

Type: EngineVersion (p. 206) object

Required: No

NotebookVersion

The notebook version.

Type: String


Required: No

SessionId

The session ID.

Type: String

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

Required: No

Status

Contains information about the session status.

Type: SessionStatus (p. 247) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
TableMetadata

Contains metadata for a table.

Contents

Name

The name of the table.

Type: String


Required: Yes

Columns

A list of the columns in the table.

Type: Array of Column (p. 194) objects

Required: No

CreateTime

The time that the table was created.

Type: Timestamp

Required: No

LastAccessTime

The last time the table was accessed.

Type: Timestamp

Required: No

Parameters

A set of custom key/value pairs for table properties.

Type: String to string map

Key Length Constraints: Minimum length of 1. Maximum length of 255.

Key Pattern: \[\u0020-\uD7FF\uE000-\uFFFD\uD800-\uDBFF\uDC00-\uDBFF\uDFFF\t\]*

Value Length Constraints: Maximum length of 51200.

Required: No

PartitionKeys

A list of the partition keys in the table.

Type: Array of Column (p. 194) objects

Required: No

TableType

The type of table. In Athena, only EXTERNAL_TABLE is supported.
Type: String
Length Constraints: Maximum length of 255.
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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
Tag

A label that you assign to a resource. Athena resources include workgroups, data catalogs, and capacity reservations. Each tag consists of a key and an optional value, both of which you define. For example, you can use tags to categorize Athena resources by purpose, owner, or environment. Use a consistent set of tag keys to make it easier to search and filter the resources in your account. For best practices, see Tagging Best Practices. Tag keys can be from 1 to 128 UTF-8 Unicode characters, and tag values can be from 0 to 256 UTF-8 Unicode characters. Tags can use letters and numbers representable in UTF-8, and the following characters: + - = . _ : / @. Tag keys and values are case-sensitive. Tag keys must be unique per resource. If you specify more than one tag, separate them by commas.

Contents

Key

A tag key. The tag key length is from 1 to 128 Unicode characters in UTF-8. You can use letters and numbers representable in UTF-8, and the following characters: + - = . _ : / @. Tag keys are case-sensitive and must be unique per resource.

Type: String


Required: No

Value

A tag value. The tag value length is from 0 to 256 Unicode characters in UTF-8. You can use letters and numbers representable in UTF-8, and the following characters: + - = . _ : / @. Tag values are case-sensitive.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 256.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
UnprocessedNamedQueryId

Information about a named query ID that could not be processed.

Contents

**ErrorCode**

The error code returned when the processing request for the named query failed, if applicable.

Type: String
Length Constraints: Minimum length of 1. Maximum length of 256.
Required: No

**ErrorMessage**

The error message returned when the processing request for the named query failed, if applicable.

Type: String
Required: No

**NamedQueryId**

The unique identifier of the named query.

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 Go](#)
- [AWS SDK for Java V2](#)
- [AWS SDK for Ruby V3](#)
UnprocessedPreparedStatementName

The name of a prepared statement that could not be returned.

Contents

ErrorCode

The error code returned when the request for the prepared statement failed.

Type: String

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

Required: No

ErrorMessage

The error message containing the reason why the prepared statement could not be returned. The following error messages are possible:

- INVALID_INPUT - The name of the prepared statement that was provided is not valid (for example, the name is too long).
- STATEMENT_NOT_FOUND - A prepared statement with the name provided could not be found.
- UNAUTHORIZED - The requester does not have permission to access the workgroup that contains the prepared statement.

Type: String

Required: No

StatementName

The name of a prepared statement that could not be returned due to an error.

Type: String

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

Pattern: \[a-zA-Z_\][a-zA-Z0-9_@:]{1,256}

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
UnprocessedQueryExecutionId

Describes a query execution that failed to process.

Contents

ErrorCode

The error code returned when the query execution failed to process, if applicable.

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

Required: No

ErrorMessage

The error message returned when the query execution failed to process, if applicable.

Type: String

Required: No

QueryExecutionId

The unique identifier of the query execution.

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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
A workgroup, which contains a name, description, creation time, state, and other configuration, listed under WorkGroup:Configuration (p. 257). Each workgroup enables you to isolate queries for you or your group of users from other queries in the same account, to configure the query results location and the encryption configuration (known as workgroup settings), to enable sending query metrics to Amazon CloudWatch, and to establish per-query data usage control limits for all queries in a workgroup. The workgroup settings override is specified in EnforceWorkGroupConfiguration (true/false) in the WorkGroupConfiguration. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259).

### Contents

#### Name

The workgroup name.

- Type: String
- Pattern: [a-zA-Z0-9._-]{1,128}
- Required: Yes

#### Configuration

The configuration of the workgroup, which includes the location in Amazon S3 where query and calculation results are stored, the encryption configuration, if any, used for query and calculation results; whether the Amazon CloudWatch Metrics are enabled for the workgroup; whether workgroup settings override client-side settings; and the data usage limits for the amount of data scanned per query or per workgroup. The workgroup settings override is specified in EnforceWorkGroupConfiguration (true/false) in the WorkGroupConfiguration. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259).

- Type: WorkGroupConfiguration (p. 259) object
- Required: No

#### CreationTime

The date and time the workgroup was created.

- Type: Timestamp
- Required: No

#### Description

The workgroup description.

- Type: String
- Length Constraints: Minimum length of 0. Maximum length of 1024.
- Required: No

#### State

The state of the workgroup: ENABLED or DISABLED.

- Type: String
- Valid Values: ENABLED | DISABLED

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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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
WorkGroupConfiguration

The configuration of the workgroup, which includes the location in Amazon S3 where query and calculation results are stored, the encryption option, if any, used for query and calculation results, whether the Amazon CloudWatch Metrics are enabled for the workgroup and whether workgroup settings override query settings, and the data usage limits for the amount of data scanned per query or per workgroup. The workgroup settings override is specified in EnforceWorkGroupConfiguration (true/false) in the WorkGroupConfiguration. See WorkGroupConfiguration:EnforceWorkGroupConfiguration (p. 259).

Contents

AdditionalConfiguration

- Specifies a user defined JSON string that is passed to the notebook engine.
  - Type: String
  - Required: No

BytesScannedCutoffPerQuery

- The upper data usage limit (cutoff) for the amount of bytes a single query in a workgroup is allowed to scan.
  - Type: Long
  - Valid Range: Minimum value of 10000000.
  - Required: No

CustomerContentEncryptionConfiguration

- Specifies the KMS key that is used to encrypt the user's data stores in Athena. This setting does not apply to Athena SQL workgroups.
  - Type: CustomerContentEncryptionConfiguration (p. 197) object
  - Required: No

EnableMinimumEncryptionConfiguration

- Enforces a minimal level of encryption for the workgroup for query and calculation results that are written to Amazon S3. When enabled, workgroup users can set encryption only to the minimum level set by the administrator or higher when they submit queries.
  - The EnforceWorkGroupConfiguration setting takes precedence over the EnableMinimumEncryptionConfiguration flag. This means that if EnforceWorkGroupConfiguration is true, the EnableMinimumEncryptionConfiguration flag is ignored, and the workgroup configuration for encryption is used.
  - Type: Boolean
  - Required: No

EnforceWorkGroupConfiguration

- If set to "true", the settings for the workgroup override client-side settings. If set to "false", client-side settings are used. For more information, see Workgroup Settings Override Client-Side Settings.
  - Type: Boolean
  - Required: No
Type: Boolean
Required: No

**EngineVersion**

The engine version that all queries running on the workgroup use. Queries on the AmazonAthenaPreviewFunctionality workgroup run on the preview engine regardless of this setting.

Type: [EngineVersion](p. 206) object
Required: No

**ExecutionRole**

Role used in a Spark session for accessing the user's resources. This property applies only to Spark-enabled workgroups.

Type: String


Pattern: ^arn:aws[a-z-]+:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@-_/]+$

Required: No

**PublishCloudWatchMetricsEnabled**

Indicates that the Amazon CloudWatch metrics are enabled for the workgroup.

Type: Boolean
Required: No

**RequesterPaysEnabled**

If set to true, allows members assigned to a workgroup to reference Amazon S3 Requester Pays buckets in queries. If set to false, workgroup members cannot query data from Requester Pays buckets, and queries that retrieve data from Requester Pays buckets cause an error. The default is false. For more information about Requester Pays buckets, see [Requester Pays Buckets](https://docs.aws.amazon.com/AmazonS3/latest/dev/requester-pays-buckets.html) in the [Amazon Simple Storage Service Developer Guide](https://docs.aws.amazon.com/s3/developerguide/)

Type: Boolean
Required: No

**ResultConfiguration**

The configuration for the workgroup, which includes the location in Amazon S3 where query and calculation results are stored and the encryption option, if any, used for query and calculation results. To run the query, you must specify the query results location using one of the ways: either in the workgroup using this setting, or for individual queries (client-side), using ResultConfiguration:OutputLocation (p. 235). If none of them is set, Athena issues an error that no output location is provided. For more information, see [Working with query results, recent queries, and output files](https://docs.aws.amazon.com/AmazonS3/latest/dev/working-with-query-results.html).

Type: [ResultConfiguration](p. 235) 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 Go
• AWS SDK for Java V2
• AWS SDK for Ruby V3
WorkGroupConfigurationUpdates

The configuration information that will be updated for this workgroup, which includes the location in Amazon S3 where query and calculation results are stored, the encryption option, if any, used for query results, whether the Amazon CloudWatch Metrics are enabled for the workgroup, whether the workgroup settings override the client-side settings, and the data usage limit for the amount of bytes scanned per query, if it is specified.

Contents

AdditionalConfiguration

Contains a user defined string in JSON format for a Spark-enabled workgroup.

Type: String


Required: No

BytesScannedCutoffPerQuery

The upper limit (cutoff) for the amount of bytes a single query in a workgroup is allowed to scan.

Type: Long

Valid Range: Minimum value of 1000000.

Required: No

CustomerContentEncryptionConfiguration

Specifies the KMS key that is used to encrypt the user's data stores in Athena. This setting does not apply to Athena SQL workgroups.

Type: CustomerContentEncryptionConfiguration (p. 197) object

Required: No

EnableMinimumEncryptionConfiguration

Enforces a minimal level of encryption for the workgroup for query and calculation results that are written to Amazon S3. When enabled, workgroup users can set encryption only to the minimum level set by the administrator or higher when they submit queries. This setting does not apply to Spark-enabled workgroups.

The EnforceWorkGroupConfiguration setting takes precedence over the EnableMinimumEncryptionConfiguration flag. This means that if EnforceWorkGroupConfiguration is true, the EnableMinimumEncryptionConfiguration flag is ignored, and the workgroup configuration for encryption is used.

Type: Boolean

Required: No

EnforceWorkGroupConfiguration

If set to "true", the settings for the workgroup override client-side settings. If set to "false" client-side settings are used. For more information, see Workgroup Settings Override Client-Side Settings.

Type: Boolean
Required: No

**EngineVersion**

The engine version requested when a workgroup is updated. After the update, all queries on the workgroup run on the requested engine version. If no value was previously set, the default is Auto. Queries on the `AmazonAthenaPreviewFunctionality` workgroup run on the preview engine regardless of this setting.

Type: [EngineVersion](p. 206) object

Required: No

**ExecutionRole**

The ARN of the execution role used to access user resources. This property applies only to Spark-enabled workgroups.

Type: String


Pattern: `^arn:aws[a-z\-]*:iam::\d{12}:role/?[a-zA-Z_0-9+=,.@\-_\/%]+$`

Required: No

**PublishCloudWatchMetricsEnabled**

Indicates whether this workgroup enables publishing metrics to Amazon CloudWatch.

Type: Boolean

Required: No

**RemoveBytesScannedCutoffPerQuery**

Indicates that the data usage control limit per query is removed. [WorkGroupConfiguration:BytesScannedCutoffPerQuery](p. 259)

Type: Boolean

Required: No

**RemoveCustomerContentEncryptionConfiguration**

Removes content encryption configuration from an Apache Spark-enabled Athena workgroup.

Type: Boolean

Required: No

**RequesterPaysEnabled**

If set to `true`, allows members assigned to a workgroup to specify Amazon S3 Requester Pays buckets in queries. If set to `false`, workgroup members cannot query data from Requester Pays buckets, and queries that retrieve data from Requester Pays buckets cause an error. The default is `false`. For more information about Requester Pays buckets, see [Requester Pays Buckets](in the Amazon Simple Storage Service Developer Guide).

Type: Boolean

Required: No

**ResultConfigurationUpdates**

The result configuration information about the queries in this workgroup that will be updated. Includes the updated results location and an updated option for encrypting query results.
Type: ResultConfigurationUpdates (p. 237) 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 Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
**WorkGroupSummary**

The summary information for the workgroup, which includes its name, state, description, and the date and time it was created.

**Contents**

**CreationTime**

The workgroup creation date and time.

Type: Timestamp

Required: No

**Description**

The workgroup description.

Type: String

Length Constraints: Minimum length of 0. Maximum length of 1024.

Required: No

**EngineVersion**

The engine version setting for all queries on the workgroup. Queries on the AmazonAthenaPreviewFunctionality workgroup run on the preview engine regardless of this setting.

Type: [EngineVersion (p. 206)](api-version-2017-05-18) object

Required: No

**Name**

The name of the workgroup.

Type: String

Pattern: [a-zA-Z0-9-9.\-_]{1,128}

Required: No

**State**

The state of the workgroup.

Type: String

Valid Values: ENABLED | DISABLED

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++](api-version-2017-05-18)
See Also

- AWS SDK for Go
- AWS SDK for Java V2
- AWS SDK for Ruby V3
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

**InvalidParameterCombination**

Parameters that must not be used together were used together.

HTTP Status Code: 400

**InvalidParameterValue**

An invalid or out-of-range value was supplied for the input parameter.

HTTP Status Code: 400

**InvalidQueryParameter**

The AWS query string is malformed or does not adhere to AWS standards.

HTTP Status Code: 400

**MalformedQueryString**

The query string contains a syntax error.

HTTP Status Code: 404

**MissingAction**

The request is missing an action or a required parameter.

HTTP Status Code: 400
MissingAuthenticationToken

The request must contain either a valid (registered) AWS access key ID or X.509 certificate.

HTTP Status Code: 403

MissingParameter

A required parameter for the specified action is not supplied.

HTTP Status Code: 400

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