



Amazon HealthLake

Amazon HealthLake API Reference

API Version 2017-07-01



Amazon HealthLake: Amazon HealthLake API Reference

Copyright © Amazon Web Services, Inc. and/or its affiliates. All rights reserved.

Amazon's trademarks and trade dress may not be used in connection with any product or service that is not Amazon's, in any manner that is likely to cause confusion among customers, or in any manner that disparages or discredits Amazon. All other trademarks not owned by Amazon are the property of their respective owners, who may or may not be affiliated with, connected to, or sponsored by Amazon.

Table of Contents

Welcome	1
Actions	2
CreateFHIRDatastore	3
Request Syntax	3
Request Parameters	3
Response Syntax	4
Response Elements	4
Errors	5
See Also	5
DeleteFHIRDatastore	7
Request Syntax	7
Request Parameters	7
Response Syntax	7
Response Elements	7
Errors	8
See Also	9
DescribeFHIRDatastore	10
Request Syntax	10
Request Parameters	10
Response Syntax	10
Response Elements	10
Errors	11
See Also	11
DescribeFHIRExportJob	12
Request Syntax	12
Request Parameters	12
Response Syntax	12
Response Elements	13
Errors	13
See Also	13
DescribeFHIRImportJob	15
Request Syntax	15
Request Parameters	15
Response Syntax	15
Response Elements	16
Errors	16
See Also	16
ListFHIRDatastores	18
Request Syntax	18
Request Parameters	18
Response Syntax	18
Response Elements	19
Errors	19
See Also	20
ListFHIRExportJobs	21
Request Syntax	21
Request Parameters	21
Response Syntax	22
Response Elements	22
Errors	23
See Also	23
ListFHIRImportJobs	25
Request Syntax	25
Request Parameters	25

Response Syntax	26
Response Elements	27
Errors	27
See Also	27
ListTagsForResource	29
Request Syntax	29
Request Parameters	29
Response Syntax	29
Response Elements	29
Errors	30
See Also	30
StartFHIRExportJob	31
Request Syntax	31
Request Parameters	31
Response Syntax	32
Response Elements	32
Errors	33
See Also	33
StartFHIRImportJob	34
Request Syntax	34
Request Parameters	34
Response Syntax	35
Response Elements	35
Errors	36
See Also	36
TagResource	38
Request Syntax	38
Request Parameters	38
Response Elements	38
Errors	38
See Also	39
UntagResource	40
Request Syntax	40
Request Parameters	40
Response Elements	40
Errors	40
See Also	41
Data Types	42
DatastoreFilter	43
Contents	43
See Also	43
DatastoreProperties	44
Contents	44
See Also	45
ExportJobProperties	46
Contents	46
See Also	47
ImportJobProperties	48
Contents	48
See Also	49
InputDataConfig	50
Contents	50
See Also	50
KmsEncryptionConfig	51
Contents	51
See Also	51
OutputDataConfig	52

Contents	52
See Also	52
PreloadDataConfig	53
Contents	53
See Also	53
S3Configuration	54
Contents	54
See Also	54
SseConfiguration	55
Contents	55
See Also	55
Tag	56
Contents	56
See Also	56
Common Parameters	57
Common Errors	59

Welcome

Amazon HealthLake is a HIPAA eligible service that allows customers to store, transform, query, and analyze their FHIR-formatted data in a consistent fashion in the cloud.

This document was last published on October 19, 2021.

Actions

The following actions are supported:

- [CreateFHIRDatastore](#) (p. 3)
- [DeleteFHIRDatastore](#) (p. 7)
- [DescribeFHIRDatastore](#) (p. 10)
- [DescribeFHIRExportJob](#) (p. 12)
- [DescribeFHIRImportJob](#) (p. 15)
- [ListFHIRDatastores](#) (p. 18)
- [ListFHIRExportJobs](#) (p. 21)
- [ListFHIRImportJobs](#) (p. 25)
- [ListTagsForResource](#) (p. 29)
- [StartFHIRExportJob](#) (p. 31)
- [StartFHIRImportJob](#) (p. 34)
- [TagResource](#) (p. 38)
- [UntagResource](#) (p. 40)

CreateFHIRDatastore

Creates a Data Store that can ingest and export FHIR formatted data.

Request Syntax

```
{
  "ClientToken": "string",
  "DatastoreName": "string",
  "DatastoreTypeVersion": "string",
  "PreloadDataConfig": {
    "PreloadDataType": "string"
  },
  "SseConfiguration": {
    "KmsEncryptionConfig": {
      "CmkType": "string",
      "KmsKeyId": "string"
    }
  },
  "Tags": [
    {
      "Key": "string",
      "Value": "string"
    }
  ]
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

ClientToken (p. 3)

Optional user provided token used for ensuring idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-]+$`

Required: No

DatastoreName (p. 3)

The user generated name for the Data Store.

Type: String

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

Pattern: `^([\p{L}\p{Z}\p{N}_.:/+\\-%@]*)$`

Required: No

DatastoreTypeVersion (p. 3)

The FHIR version of the Data Store. The only supported version is R4.

Type: String

Valid Values: R4

Required: Yes

PreloadDataConfig (p. 3)

Optional parameter to preload data upon creation of the Data Store. Currently, the only supported preloaded data is synthetic data generated from Synthea.

Type: [PreloadDataConfig \(p. 53\)](#) object

Required: No

SseConfiguration (p. 3)

The server-side encryption key configuration for a customer provided encryption key specified for creating a Data Store.

Type: [SseConfiguration \(p. 55\)](#) object

Required: No

Tags (p. 3)

Resource tags that are applied to a Data Store when it is created.

Type: Array of [Tag \(p. 56\)](#) objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Required: No

Response Syntax

```
{
  "DatastoreArn": "string",
  "DatastoreEndpoint": "string",
  "DatastoreId": "string",
  "DatastoreStatus": "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.

DatastoreArn (p. 4)

The datastore ARN is generated during the creation of the Data Store and can be found in the output from the initial Data Store creation call.

Type: String

Pattern: `^arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:healthlake:[a-zA-Z0-9-]+:[0-9]{12}:datastore/.+?`

DatastoreEndpoint (p. 4)

The AWS endpoint for the created Data Store.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 5000.

Pattern: `[\P{M}\p{M}]{1,5000}`

DatastoreId (p. 4)

The AWS-generated Data Store id. This id is in the output from the initial Data Store creation call.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

DatastoreStatus (p. 4)

The status of the FHIR Data Store. Possible statuses are 'CREATING', 'ACTIVE', 'DELETING', 'DELETED'.

Type: String

Valid Values: `CREATING | ACTIVE | DELETING | DELETED`

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 59\)](#).

AccessDeniedException

Access is denied. Your account is not authorized to perform this operation.

HTTP Status Code: 400

InternalServerError

Unknown error occurs in the service.

HTTP Status Code: 500

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

DeleteFHIRDatastore

Deletes a Data Store.

Request Syntax

```
{  
  "DatastoreId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 57\)](#).

The request accepts the following data in JSON format.

DatastoreId (p. 7)

The AWS-generated ID for the Data Store to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_.:/+\\-%@]*)$`

Required: No

Response Syntax

```
{  
  "DatastoreArn": "string",  
  "DatastoreEndpoint": "string",  
  "DatastoreId": "string",  
  "DatastoreStatus": "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.

DatastoreArn (p. 7)

The Amazon Resource Name (ARN) that gives Amazon HealthLake access permission.

Type: String

Pattern: `^arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:healthlake:[a-zA-Z0-9-]+:[0-9]{12}:datastore/.+?`

DatastoreEndpoint (p. 7)

The AWS endpoint for the Data Store the user has requested to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 5000.

Pattern: `[\P{M}\p{M}]{1,5000}`

DatastoreId (p. 7)

The AWS-generated ID for the Data Store to be deleted.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_\.:/+\\-%@]*)$`

DatastoreStatus (p. 7)

The status of the Data Store that the user has requested to be deleted.

Type: String

Valid Values: `CREATING | ACTIVE | DELETING | DELETED`

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 59\)](#).

AccessDeniedException

Access is denied. Your account is not authorized to perform this operation.

HTTP Status Code: 400

ConflictException

The Data Store is in a transition state and the user requested action can not be performed.

HTTP Status Code: 400

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

DescribeFHIRDatastore

Gets the properties associated with the FHIR Data Store, including the Data Store ID, Data Store ARN, Data Store name, Data Store status, created at, Data Store type version, and Data Store endpoint.

Request Syntax

```
{  
  "DatastoreId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

DatastoreId (p. 10)

The AWS-generated Data Store id. This is part of the 'CreateFHIRDatastore' output.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: ^([\p{L}\p{Z}\p{N}_./=+\-%@]*)\$

Required: No

Response Syntax

```
{  
  "DatastoreProperties": {  
    "CreatedAt": number,  
    "DatastoreArn": "string",  
    "DatastoreEndpoint": "string",  
    "DatastoreId": "string",  
    "DatastoreName": "string",  
    "DatastoreStatus": "string",  
    "DatastoreTypeVersion": "string",  
    "PreloadDataConfig": {  
      "PreloadDataType": "string"  
    },  
    "SseConfiguration": {  
      "KmsEncryptionConfig": {  
        "CmkType": "string",  
        "KmsKeyId": "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.

DatastoreProperties (p. 10)

All properties associated with a Data Store, including the Data Store ID, Data Store ARN, Data Store name, Data Store status, created at, Data Store type version, and Data Store endpoint.

Type: [DatastoreProperties](#) (p. 44) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

DescribeFHIRExportJob

Displays the properties of a FHIR export job, including the ID, ARN, name, and the status of the job.

Request Syntax

```
{  
  "DatastoreId": "string",  
  "JobId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

DatastoreId (p. 12)

The AWS generated ID for the Data Store from which files are being exported from for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

Required: Yes

JobId (p. 12)

The AWS generated ID for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

Required: Yes

Response Syntax

```
{  
  "ExportJobProperties": {  
    "DataAccessRoleArn": "string",  
    "DatastoreId": "string",  
    "EndTime": number,  
    "JobId": "string",  
    "JobName": "string",  
    "JobStatus": "string",  
    "Message": "string",  
    "OutputDataConfig": {  
      "S3Configuration": {  
        "KmsKeyId": "string",  
        "S3Uri": "string"  
      }  
    }  
  }  
}
```

```
    },  
    "SubmitTime": 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.

ExportJobProperties (p. 12)

Displays the properties of the export job, including the ID, Arn, Name, and the status of the job.

Type: [ExportJobProperties](#) (p. 46) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

DescribeFHIRImportJob

Displays the properties of a FHIR import job, including the ID, ARN, name, and the status of the job.

Request Syntax

```
{  
  "DatastoreId": "string",  
  "JobId": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 57\)](#).

The request accepts the following data in JSON format.

DatastoreId (p. 15)

The AWS-generated ID of the Data Store.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_./=+\-%@]*)$`

Required: Yes

JobId (p. 15)

The AWS-generated job ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_./=+\-%@]*)$`

Required: Yes

Response Syntax

```
{  
  "ImportJobProperties": {  
    "DataAccessRoleArn": "string",  
    "DatastoreId": "string",  
    "EndTime": number,  
    "InputDataConfig": {  
      "S3Uri": "string"  
    },  
    "JobId": "string",  
    "JobName": "string",  
    "JobOutputDataConfig": {  
      "S3Configuration": {  
        "KmsKeyId": "string",  

```

```
        "S3Uri": "string"  
    },  
    "JobStatus": "string",  
    "Message": "string",  
    "SubmitTime": 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.

ImportJobProperties (p. 15)

The properties of the Import job request, including the ID, ARN, name, and the status of the job.

Type: [ImportJobProperties](#) (p. 48) object

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

ListFHIRDatastores

Lists all FHIR Data Stores that are in the user's account, regardless of Data Store status.

Request Syntax

```
{
  "Filter": {
    "CreatedAfter": number,
    "CreatedBefore": number,
    "DatastoreName": "string",
    "DatastoreStatus": "string"
  },
  "MaxResults": number,
  "NextToken": "string"
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

Filter (p. 18)

Lists all filters associated with a FHIR Data Store request.

Type: [DatastoreFilter](#) (p. 43) object

Required: No

MaxResults (p. 18)

The maximum number of Data Stores returned in a single page of a ListFHIRDatastoresRequest call.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 500.

Required: No

NextToken (p. 18)

Fetches the next page of Data Stores when results are paginated.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: `\p{ASCII}{0,8192}`

Required: No

Response Syntax

```
{
  "DatastorePropertiesList": [
```

```
{
  "CreatedAt": number,
  "DatastoreArn": "string",
  "DatastoreEndpoint": "string",
  "DatastoreId": "string",
  "DatastoreName": "string",
  "DatastoreStatus": "string",
  "DatastoreTypeVersion": "string",
  "PreloadDataConfig": {
    "PreloadDataType": "string"
  },
  "SseConfiguration": {
    "KmsEncryptionConfig": {
      "CmkType": "string",
      "KmsKeyId": "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.

DatastorePropertiesList (p. 18)

All properties associated with the listed Data Stores.

Type: Array of [DatastoreProperties](#) (p. 44) objects

NextToken (p. 18)

Pagination token that can be used to retrieve the next page of results.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: `\p{ASCII}{0, 8192}`

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

ListFHIRExportJobs

Lists all FHIR export jobs associated with an account and their statuses.

Request Syntax

```
{  
  "DatastoreId": "string",  
  "JobName": "string",  
  "JobStatus": "string",  
  "MaxResults": number,  
  "NextToken": "string",  
  "SubmittedAfter": number,  
  "SubmittedBefore": number  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

DatastoreId (p. 21)

This parameter limits the response to the export job with the specified Data Store ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L} \p{Z} \p{N} _ . : / = + \ - % @] *) $`

Required: Yes

JobName (p. 21)

This parameter limits the response to the export job with the specified job name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[\p{L} \p{Z} \p{N} _ . : / = + \ - % @] *) $`

Required: No

JobStatus (p. 21)

This parameter limits the response to the export jobs with the specified job status.

Type: String

Valid Values: SUBMITTED | IN_PROGRESS | COMPLETED_WITH_ERRORS | COMPLETED | FAILED

Required: No

MaxResults (p. 21)

This parameter limits the number of results returned for a ListFHIRExportJobs to a maximum quantity specified by the user.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 500.

Required: No

NextToken (p. 21)

A pagination token used to identify the next page of results to return for a ListFHIRExportJobs query.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: `\p{ASCII}{0,8192}`

Required: No

SubmittedAfter (p. 21)

This parameter limits the response to FHIR export jobs submitted after a user specified date.

Type: Timestamp

Required: No

SubmittedBefore (p. 21)

This parameter limits the response to FHIR export jobs submitted before a user specified date.

Type: Timestamp

Required: No

Response Syntax

```
{
  "ExportJobPropertiesList": [
    {
      "DataAccessRoleArn": "string",
      "DatastoreId": "string",
      "EndTime": number,
      "JobId": "string",
      "JobName": "string",
      "JobStatus": "string",
      "Message": "string",
      "OutputDataConfig": {
        "S3Configuration": {
          "KmsKeyId": "string",
          "S3Uri": "string"
        }
      },
      "SubmitTime": 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.

ExportJobPropertiesList (p. 22)

The properties of listed FHIR export jobs, including the ID, ARN, name, and the status of the job.

Type: Array of [ExportJobProperties](#) (p. 46) objects

NextToken (p. 22)

A pagination token used to identify the next page of results to return for a ListFHIRExportJobs query.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: `\p{ASCII}{0,8192}`

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

AccessDeniedException

Access is denied. Your account is not authorized to perform this operation.

HTTP Status Code: 400

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

ListFHIRImportJobs

Lists all FHIR import jobs associated with an account and their statuses.

Request Syntax

```
{  
  "DatastoreId": "string",  
  "JobName": "string",  
  "JobStatus": "string",  
  "MaxResults": number,  
  "NextToken": "string",  
  "SubmittedAfter": number,  
  "SubmittedBefore": number  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

[DatastoreId](#) (p. 25)

This parameter limits the response to the import job with the specified Data Store ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L} \p{Z} \p{N} _ . : / = + \ - % @] *) $`

Required: Yes

[JobName](#) (p. 25)

This parameter limits the response to the import job with the specified job name.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[\p{L} \p{Z} \p{N} _ . : / = + \ - % @] *) $`

Required: No

[JobStatus](#) (p. 25)

This parameter limits the response to the import job with the specified job status.

Type: String

Valid Values: `SUBMITTED | IN_PROGRESS | COMPLETED_WITH_ERRORS | COMPLETED | FAILED`

Required: No

[MaxResults](#) (p. 25)

This parameter limits the number of results returned for a ListFHIRImportJobs to a maximum quantity specified by the user.

Type: Integer

Valid Range: Minimum value of 1. Maximum value of 500.

Required: No

NextToken (p. 25)

A pagination token used to identify the next page of results to return for a ListFHIRImportJobs query.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: \p{ASCII}{0, 8192}

Required: No

SubmittedAfter (p. 25)

This parameter limits the response to FHIR import jobs submitted after a user specified date.

Type: Timestamp

Required: No

SubmittedBefore (p. 25)

This parameter limits the response to FHIR import jobs submitted before a user specified date.

Type: Timestamp

Required: No

Response Syntax

```
{
  "ImportJobPropertiesList": [
    {
      "DataAccessRoleArn": "string",
      "DatastoreId": "string",
      "EndTime": number,
      "InputDataConfig": {
        "S3Uri": "string"
      },
      "JobId": "string",
      "JobName": "string",
      "JobOutputDataConfig": {
        "S3Configuration": {
          "KmsKeyId": "string",
          "S3Uri": "string"
        }
      },
      "JobStatus": "string",
      "Message": "string",
      "SubmitTime": 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.

ImportJobPropertiesList (p. 26)

The properties of a listed FHIR import jobs, including the ID, ARN, name, and the status of the job.

Type: Array of [ImportJobProperties](#) (p. 48) objects

NextToken (p. 26)

A pagination token used to identify the next page of results to return for a ListFHIRImportJobs query.

Type: String

Length Constraints: Maximum length of 8192.

Pattern: `\p{ASCII}{0,8192}`

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

AccessDeniedException

Access is denied. Your account is not authorized to perform this operation.

HTTP Status Code: 400

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

ListTagsForResource

Returns a list of all existing tags associated with a Data Store.

Request Syntax

```
{  
  "ResourceARN": "string"  
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 57\)](#).

The request accepts the following data in JSON format.

ResourceARN (p. 29)

The Amazon Resource Name(ARN) of the Data Store for which tags are being added.

Type: String

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

Pattern: `^arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:healthlake:[a-z0-9-]+:\d{12}:datastore/fhir/.{32}`

Required: Yes

Response Syntax

```
{  
  "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.

Tags (p. 29)

Returns a list of tags associated with a Data Store.

Type: Array of [Tag \(p. 56\)](#) objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 59\)](#).

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

StartFHIRExportJob

Begins a FHIR export job.

Request Syntax

```
{
  "ClientToken": "string",
  "DataAccessRoleArn": "string",
  "DatastoreId": "string",
  "JobName": "string",
  "OutputDataConfig": {
    "S3Configuration": {
      "KmsKeyId": "string",
      "S3Uri": "string"
    }
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters](#) (p. 57).

The request accepts the following data in JSON format.

ClientToken (p. 31)

An optional user provided token used for ensuring idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-]+$`

Required: Yes

DataAccessRoleArn (p. 31)

The Amazon Resource Name used during the initiation of the job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws(-[^:]+)?:iam:[0-9]{12}:role/.+`

Required: Yes

DatastoreId (p. 31)

The AWS generated ID for the Data Store from which files are being exported for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_.:/+~%@]*)$`

Required: Yes

JobName (p. 31)

The user generated name for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

Required: No

OutputDataConfig (p. 31)

The output data configuration that was supplied when the export job was created.

Type: [OutputDataConfig \(p. 52\)](#) object

Required: Yes

Response Syntax

```
{
  "DatastoreId": "string",
  "JobId": "string",
  "JobStatus": "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.

DatastoreId (p. 32)

The AWS generated ID for the Data Store from which files are being exported for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

JobId (p. 32)

The AWS generated ID for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

JobStatus (p. 32)

The status of a FHIR export job. Possible statuses are SUBMITTED, IN_PROGRESS, COMPLETED, or FAILED.

Type: String

Valid Values: SUBMITTED | IN_PROGRESS | COMPLETED_WITH_ERRORS | COMPLETED | FAILED

Errors

For information about the errors that are common to all actions, see [Common Errors \(p. 59\)](#).

AccessDeniedException

Access is denied. Your account is not authorized to perform this operation.

HTTP Status Code: 400

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

StartFHIRImportJob

Begins a FHIR Import job.

Request Syntax

```
{
  "ClientToken": "string",
  "DataAccessRoleArn": "string",
  "DatastoreId": "string",
  "InputDataConfig": {
    "S3Uri": "string"
  },
  "JobName": "string",
  "JobOutputDataConfig": {
    "S3Configuration": {
      "KmsKeyId": "string",
      "S3Uri": "string"
    }
  }
}
```

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 57\)](#).

The request accepts the following data in JSON format.

ClientToken (p. 34)

Optional user provided token used for ensuring idempotency.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[a-zA-Z0-9-]+$`

Required: Yes

DataAccessRoleArn (p. 34)

The Amazon Resource Name (ARN) that gives Amazon HealthLake access permission.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws(-[^:]+)?:iam:[0-9]{12}:role/.+`

Required: Yes

DatastoreId (p. 34)

The AWS-generated Data Store ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L}\p{Z}\p{N}_.:/=+\-%@]*$`

Required: Yes

InputDataConfig (p. 34)

The input properties of the FHIR Import job in the StartFHIRImport job request.

Type: [InputDataConfig \(p. 50\)](#) object

Required: Yes

JobName (p. 34)

The name of the FHIR Import job in the StartFHIRImport job request.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[\p{L}\p{Z}\p{N}_.:/=+\-%@]*$`

Required: No

JobOutputDataConfig (p. 34)

The output data configuration that was supplied when the export job was created.

Type: [OutputDataConfig \(p. 52\)](#) object

Required: Yes

Response Syntax

```
{
  "DatastoreId": "string",
  "JobId": "string",
  "JobStatus": "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.

DatastoreId (p. 35)

The AWS-generated Data Store ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^[\p{L}\p{Z}\p{N}_.:/=+\-%@]*$`

JobId (p. 35)

The AWS-generated job ID.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

JobStatus (p. 35)

The status of an import job.

Type: String

Valid Values: SUBMITTED | IN_PROGRESS | COMPLETED_WITH_ERRORS | COMPLETED | FAILED

Errors

For information about the errors that are common to all actions, see [Common Errors](#) (p. 59).

AccessDeniedException

Access is denied. Your account is not authorized to perform this operation.

HTTP Status Code: 400

InternalServerErrorException

Unknown error occurs in the service.

HTTP Status Code: 500

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ThrottlingException

The user has exceeded their maximum number of allowed calls to the given API.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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](#)

TagResource

Adds a user specified key and value tag to a Data Store.

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 \(p. 57\)](#).

The request accepts the following data in JSON format.

ResourceARN (p. 38)

The Amazon Resource Name(ARN)that gives Amazon HealthLake access to the Data Store which tags are being added to.

Type: String

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

Pattern: `^arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:healthlake:[a-z0-9-]+:\d{12}:datastore/fhir/.{32}`

Required: Yes

Tags (p. 38)

The user specified key and value pair tags being added to a Data Store.

Type: Array of [Tag \(p. 56\)](#) objects

Array Members: Minimum number of 0 items. Maximum number of 200 items.

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 \(p. 59\)](#).

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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 tags from a Data Store.

Request Syntax

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

Request Parameters

For information about the parameters that are common to all actions, see [Common Parameters \(p. 57\)](#).

The request accepts the following data in JSON format.

ResourceARN (p. 40)

The Amazon Resource Name(ARN) of the Data Store for which tags are being removed

Type: String

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

Pattern: `^arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:healthlake:[a-z0-9-]+:\d{12}:datastore\/fhir\/.{32}`

Required: Yes

TagKeys (p. 40)

The keys for the tags to be removed from the Healthlake Data Store.

Type: Array of strings

Array Members: Minimum number of 0 items. Maximum number of 200 items.

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^([\p{L}\p{Z}\p{N}_\./=+\-@]*)$`

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 \(p. 59\)](#).

ResourceNotFoundException

The requested Data Store was not found.

HTTP Status Code: 400

ValidationException

The user input parameter was invalid.

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 HealthLake 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:

- [DatastoreFilter](#) (p. 43)
- [DatastoreProperties](#) (p. 44)
- [ExportJobProperties](#) (p. 46)
- [ImportJobProperties](#) (p. 48)
- [InputDataConfig](#) (p. 50)
- [KmsEncryptionConfig](#) (p. 51)
- [OutputDataConfig](#) (p. 52)
- [PreloadDataConfig](#) (p. 53)
- [S3Configuration](#) (p. 54)
- [SseConfiguration](#) (p. 55)
- [Tag](#) (p. 56)

DatastoreFilter

The filters applied to Data Store query.

Contents

CreatedAfter

A filter that allows the user to set cutoff dates for records. All Data Stores created after the specified date will be included in the results.

Type: Timestamp

Required: No

CreatedBefore

A filter that allows the user to set cutoff dates for records. All Data Stores created before the specified date will be included in the results.

Type: Timestamp

Required: No

DatastoreName

Allows the user to filter Data Store results by name.

Type: String

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

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - % @] *) $`

Required: No

DatastoreStatus

Allows the user to filter Data Store results by status.

Type: String

Valid Values: `CREATING | ACTIVE | DELETING | DELETED`

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](#)

DatastoreProperties

Displays the properties of the Data Store, including the ID, Arn, name, and the status of the Data Store.

Contents

CreatedAt

The time that a Data Store was created.

Type: Timestamp

Required: No

DatastoreArn

The Amazon Resource Name used in the creation of the Data Store.

Type: String

Pattern: `^arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:healthlake:[a-zA-Z0-9-]+:[0-9]{12}:datastore/.+?`

Required: Yes

DatastoreEndpoint

The AWS endpoint for the Data Store. Each Data Store will have it's own endpoint with Data Store ID in the endpoint URL.

Type: String

Length Constraints: Maximum length of 10000.

Pattern: `[\P{M}\p{M}]{0,10000}`

Required: Yes

DatastoreId

The AWS-generated ID number for the Data Store.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-%@]*)$`

Required: Yes

DatastoreName

The user-generated name for the Data Store.

Type: String

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

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-%@]*)$`

Required: No

DatastoreStatus

The status of the Data Store. Possible statuses are 'CREATING', 'ACTIVE', 'DELETING', or 'DELETED'.

Type: String

Valid Values: CREATING | ACTIVE | DELETING | DELETED

Required: Yes

DatastoreTypeVersion

The FHIR version. Only R4 version data is supported.

Type: String

Valid Values: R4

Required: Yes

PreloadDataConfig

The preloaded data configuration for the Data Store. Only data preloaded from Synthea is supported.

Type: [PreloadDataConfig](#) (p. 53) object

Required: No

SseConfiguration

The server-side encryption key configuration for a customer provided encryption key (CMK).

Type: [SseConfiguration](#) (p. 55) 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](#)

ExportJobProperties

The properties of a FHIR export job, including the ID, ARN, name, and the status of the job.

Contents

DataAccessRoleArn

The Amazon Resource Name used during the initiation of the job.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws(-[[:^:]]+)?:iam:[0-9]{12}:role/.+`

Required: No

DatastoreId

The AWS generated ID for the Data Store from which files are being exported for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_:/+=\-%@]*)$`

Required: Yes

EndTime

The time an export job completed.

Type: Timestamp

Required: No

JobId

The AWS generated ID for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_:/+=\-%@]*)$`

Required: Yes

JobName

The user generated name for an export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^([\p{L}\p{Z}\p{N}_:/+=\-%@]*)$`

Required: No

JobStatus

The status of a FHIR export job. Possible statuses are SUBMITTED, IN_PROGRESS, COMPLETED, or FAILED.

Type: String

Valid Values: SUBMITTED | IN_PROGRESS | COMPLETED_WITH_ERRORS | COMPLETED | FAILED

Required: Yes

Message

An explanation of any errors that may have occurred during the export job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: ^([\p{L}\p{Z}\p{N}_.: /+=\-%@]*)\$

Required: No

OutputDataConfig

The output data configuration that was supplied when the export job was created.

Type: [OutputDataConfig](#) (p. 52) object

Required: Yes

SubmitTime

The time an export job was initiated.

Type: Timestamp

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](#)

ImportJobProperties

Displays the properties of the import job, including the ID, Arn, Name, and the status of the Data Store.

Contents

DataAccessRoleArn

The Amazon Resource Name (ARN) that gives Amazon HealthLake access to your input data.

Type: String

Length Constraints: Minimum length of 20. Maximum length of 2048.

Pattern: `arn:aws(-[^:]+)?:iam:[0-9]{12}:role/.+`

Required: No

DatastoreId

The datastore id used when the Import job was created.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-%@]*)$`

Required: Yes

EndTime

The time that the Import job was completed.

Type: Timestamp

Required: No

InputDataConfig

The input data configuration that was supplied when the Import job was created.

Type: [InputDataConfig](#) (p. 50) object

Required: Yes

JobId

The AWS-generated id number for the Import job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 32.

Pattern: `^([\p{L}\p{Z}\p{N}_.:/=+\-%@]*)$`

Required: Yes

JobName

The user-generated name for an Import job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 64.

Pattern: `^[\\p{L}\\p{Z}\\p{N}_.:/=+\\-%@]*$`

Required: No

JobOutputDataConfig

The output data configuration that was supplied when the export job was created.

Type: [OutputDataConfig](#) (p. 52) object

Required: No

JobStatus

The job status for an Import job. Possible statuses are SUBMITTED, IN_PROGRESS, COMPLETED_WITH_ERRORS, COMPLETED, FAILED.

Type: String

Valid Values: SUBMITTED | IN_PROGRESS | COMPLETED_WITH_ERRORS | COMPLETED | FAILED

Required: Yes

Message

An explanation of any errors that may have occurred during the FHIR import job.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 2048.

Pattern: `^[\\p{L}\\p{Z}\\p{N}_.:/=+\\-%@]*$`

Required: No

SubmitTime

The time that the Import job was submitted for processing.

Type: Timestamp

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](#)

InputDataConfig

The input properties for an import job.

Contents

S3Uri

The S3Uri is the user specified S3 location of the FHIR data to be imported into Amazon HealthLake.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-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](#)

KmsEncryptionConfig

The customer-managed-key(CMK) used when creating a Data Store. If a customer owned key is not specified, an AWS owned key will be used for encryption.

Contents

CmkType

The type of customer-managed-key(CMK) used for encryption. The two types of supported CMKs are customer owned CMKs and AWS owned CMKs.

Type: String

Valid Values: `CUSTOMER_MANAGED_KMS_KEY` | `AWS_OWNED_KMS_KEY`

Required: Yes

KmsKeyId

The KMS encryption key id/alias used to encrypt the Data Store contents at rest.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 400.

Pattern: `(arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:kms:)?([a-z]{2}-[a-z]+(-[a-z]+)?-\d:)?(\d{12}:)?((key/)?[a-zA-Z0-9-_.]+)|(alias/[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](#)

OutputDataConfig

The output data configuration that was supplied when the export job was created.

Contents

S3Configuration

The output data configuration that was supplied when the export job was created.

Type: [S3Configuration](#) (p. 54) 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](#)

PreloadDataConfig

The input properties for the preloaded Data Store. Only data preloaded from Synthea is supported.

Contents

PreloadDataType

The type of preloaded data. Only Synthea preloaded data is supported.

Type: String

Valid Values: `SYNTHEA`

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](#)

S3Configuration

The configuration of the S3 bucket for either an import or export job. This includes assigning permissions for access.

Contents

KmsKeyId

The KMS key ID used to access the S3 bucket.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 400.

Pattern: `(arn:aws((-us-gov)|(-iso)|(-iso-b)|(-cn))?:kms:)?([a-z]{2}-[a-z]+(-[a-z]+)?-\d:)?(\d{12}:)?((key/)?[a-zA-Z0-9-_\+]?)|(alias/[a-zA-Z0-9:/_\+]?)`

Required: Yes

S3Uri

The S3Uri is the user specified S3 location of the FHIR data to be imported into Amazon HealthLake.

Type: String

Length Constraints: Maximum length of 1024.

Pattern: `s3://[a-z0-9][\.\-a-z0-9]{1,61}[a-z0-9](/*)?`

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](#)

SseConfiguration

The server-side encryption key configuration for a customer provided encryption key.

Contents

KmsEncryptionConfig

The KMS encryption configuration used to provide details for data encryption.

Type: [KmsEncryptionConfig](#) (p. 51) object

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](#)

Tag

A tag is a label consisting of a user-defined key and value. The form for tags is {"Key", "Value"}

Contents

Key

The key portion of a tag. Tag keys are case sensitive.

Type: String

Length Constraints: Minimum length of 1. Maximum length of 128.

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - @] *) $`

Required: Yes

Value

The value portion of tag. Tag values are case sensitive.

Type: String

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

Pattern: `^[\p{L}\p{Z}\p{N}_ . : / = + \ - @] *) $`

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](#)

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 [Signature Version 4 Signing Process](#) in the *Amazon Web Services General Reference*.

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 [Task 2: Create a String to Sign for Signature Version 4](#) in the *Amazon Web Services General Reference*.

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'THHMMSS'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 [Handling Dates in Signature Version 4](#) in the *Amazon Web Services General Reference*.

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 Security Token Service, go to [AWS Services That Work with IAM](#) in the *IAM User Guide*.

Condition: If you're using temporary security credentials from the AWS Security Token Service, 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 [Task 1: Create a Canonical Request For Signature Version 4](#) in the *Amazon Web Services General Reference*.

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