C H A P T E R 18

Asynchronous Job Management Functions

This chapter provides information about the following job management functions:

addPersistentIDStatus

Synopsis

```
public PersistentIDStatus addPersistentIDStatus(UserToken token,PersistentIDStatus
pidStatus) throws RemoteException;
```

Description

This function adds a PersistenIDStatus object into the data store.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
pidStatus	DataObject, mandatory	—	The object to be added.

Return

This function returns a Status object that contains an error code and error message when operation error occurs.

Error and Exception

If a system error prevents the operation from completing, a RemoteException is thrown.

deleteAsyncOperationJobRecords

Synopsis

```
IDStatus deleteAsyncOperationJobRecords(UserToken token, String[] job_ids) throws
RemoteException;
```

Description

This function allows you to delete job records that are associated with your username.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_ids	Array of string, mandatory	—	Array of job IDs. Each job ID is the request ID that is returned from an asynchronous function call.

Return

This function returns an IDStatus object. If the operation is not successful, the IDStatus returns a non ClmErrors.SUCCESS error code. If the operation is successful, the IDStatus contains an IDStatusItem array, and each IDStatusItem contains the job ID and the error status of the delete operation.

Error and Exception

When an overall function error occurs, this function returns none ClmErrors.SUCCESS value in the IDStatus. The job ID and the error code can be retrieved from the IDStatusItem array.

If a system error prevents the operation from completing, a RemoteException is thrown.

getAsyncOperationJobRecords

Synopsis

```
ClmJob getAsyncOperationJobRecords(UserToken token, String job_id) throws RemoteException;
```

Description

This function returns the ClmJob that is associated with the asynchronous function. The job_id is the request ID that is returned from the asynchronous call.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_id	String, mandatory	—	Job ID returned from asynchronous operation.

Return

This function returns ClmJob. If job_id does not exist, this function returns null. Otherwise it returns the ClmJob for the specific job_id.

Error and Exception

If a system error prevents the operation from completing, a RemoteException is thrown.

getAsyncOperationStatus

Synopsis

```
ProgressStatus getAsyncOperationStatus(UserToken token,String taskID)  throws
RemoteException;
```

Description

This function provides information about the progress of an asynchronous function. The job _id is essential to track the progress. If the job_id is not provided, an error in the ProgressStatus is returned.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_id	String, mandatory	—	Job ID returned from asynchronous operation.
taskID			Job ID returned from asynchronous operation.

Return

This function returns ProgressStatus, and it includes the overall status indicating if this function has completed successfully or not. The detail of the ProgressStatus contains an array of target IDs and an array of integers indicating the progress of the individual targets. The get getOverallPercentage() function in ProgressStatus provide details of the percentage of the task being executed.

Error and Exception

When an overall function error occurs, this function returns none 0 in the ProgressStatus. If the asynchronous task is completed, the entry of the task is removed and the overall status returns a job_id not found error. You have to check if the callback has been returned to determine if the job_id that is passed is incorrect.

If a system error prevents the operation from completing, a RemoteException is thrown.

getAsyncOperationJobRecords

Synopsis

```
ClmJob getAsyncOperationJobRecords(UserToken token, String job_id) throws RemoteException;
```

Description

This function returns the ClmJob that is associated with the asynchronous function. The job_id is the request ID that is returned from the asynchronous call.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_id	String, mandatory	—	Job ID returned from asynchronous operation.

Return

This function returns ClmJob. If job_id does not exist, this function returns null. Otherwise it returns the ClmJob for the specific job_id.

Error and Exception

If a system error prevents the operation from completing, a RemoteException is thrown.

getAsyncOperationStatus

Synopsis

```
ProgressStatus getAsyncOperationStatus(UserToken token,String taskID)  throws
RemoteException;
```

Description

This function provides information about the progress of an asynchronous function. The job _id is essential to track the progress. If the job_id is not provided, an error in the ProgressStatus is returned.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_id	String, mandatory	—	Job ID returned from asynchronous operation.
taskID	String, mandatory	—	Job ID returned from asynchronous operation.

Return

This function returns ProgressStatus, and it includes the overall status indicating if this function has completed successfully or not. The detail of the ProgressStatus contains an array of target IDs and an array of integers indicating the progress of the individual targets. The getOverallPercentage() function in ProgressStatus provides details of the percentage of the task being executed.

Error and Exception

When an overall function error occurs, this function returns none 0 in the ProgressStatus. If the asynchronous task is completed, the entry of the task is removed and the overall status returns a job_id not found error. You have to check if the callback has been returned to determine if the job_id that is passed is incorrect.

If a system error prevents the operation from completing, a RemoteException is thrown.

killAsyncOperation

Synopsis

```
Status killAsyncOperation(UserToken token, String job_id) throws RemoteException;
```

Description

This function kills the asynchronous operation.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_id	String, mandatory	—	Job ID, which is the same as the request ID, returned from asynchronous operation.

Return

This function returns a Status object.

Error and Exception

When an overall function error occurs, this function returns a none SUCCESS value in Status.

If a system error prevents the operation from completing, a RemoteException is thrown.

listAllAsyncOperationJobRecords

Synopsis

```
ClmJobStatus listAllAsyncOperationJobRecords(UserToken token, boolean include_all_user)
throws RemoteException;
```

Description

This function returns all of the Cisco License Manager jobs that contain information about the asynchronous operation stored in the inventory that you initiated. This function returns all complete, incomplete, and running Cisco License Manager jobs.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
Include_all_user	Boolean, mandatory	True, False	If true, this parameter returns all records. If false, this parameter returns only records with the username.

Return

This function returns a ClmStatus object.

Error and Exception

When an overall function error occurs, this function returns a none SUCCESS value in the ClmJobStatus object. The ClmJob can be retrieved from the ClmJobStatusItem array.

If a system error prevents the operation from completing, a RemoteException is thrown.

listPersistentIDStatus

Synopsis

```
listPersistentIDStatus(UserToken token,String id,Pagination pageinfo) throws
RemoteException;
```

Description

This function returns an array of PersistentIDStatus Objects.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
id	String, mandatory	—	The job ID that identifies the associated records.
pageinfo	String, mandatory	—	Pagination Object includes offset and max. Offset specifies offset relative to the first record in result set to return. Max specifies the maximum number of records to return. If max is set to -1, all records are returned.

Return

This function returns a persistent id status paging info object. If offset is greater than the number of records, it returns an array of zero size.

Error and Exception

If there is an operation error, the Status Object contains error code and message.

If a system error prevents the operation from completing, a RemoteException is thrown.

listPersistentIDStatusByGroup

Synopsis

```
public PersistentIDStatusPagingInfo listPersistentIDStatusByGroup(UserToken token, String
jobGroup,Pagination pageinfo)throws RemoteException;
```

Description

This function returns an array of PersistentIDStatus Objects belonging to the given job group.

Input Parameters

Parameter	Type	Value	Description
jobgroup	String, mandatory	—	Name of job group.

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
pageinfo	String, mandatory	—	Pagination Object includes offset and max. Offset specifies offset relative to the first record in result set to return. Max specifies the maximum number of records to return. If max is set to -1, all records are returned.

Return

This function returns a persistent id status paging info object. If offset is greater than the number of records, it returns an array of zero size.

Error and Exception

If there is operation error, the Status Object contains error code and message.

If a system error prevents the operation from completing, a RemoteException is thrown.

setAsyncOperationJobComment

Synopsis

```
Status setAsyncOperationJobComment(UserToken token, String job_id, String comment) throws
RemoteException;
```

Description

This function allows you to set the comment in job records that are associated with your username.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	Token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
job_id	String, mandatory	—	Job ID. Each job ID is the request ID that is returned from an asynchronous function call.
comment	String, mandatory	—	Comment that describes the job.

Return

This function returns the Status object. If the operation is not successful, Status returns the none ClmErrors.SUCCESS error code.

Error and Exception

When an overall function error occurs, this function returns none ClmErrors.SUCCESS in the Status.

If a system error prevents the operation from completing, a RemoteException is thrown.

setAsyncOperationJobComment