



# Manage SMI-S Provider advanced settings

NetApp SMI-S Provider

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# Manage SMI-S Provider advanced settings

## Overview

You can manage advanced settings for SMI-S Provider, such as specifying the SMI-S cache refresh interval, ONTAPI timeout, and maximum number of threads per message service queue.

## Specify the SMI-S Provider automatic cache refresh interval

By default, SMI-S Provider automatically retrieves information from storage systems every five minutes (300 seconds). You can set the automatic cache refresh interval (`CACHE_REFRESH_SEC` environment variable) to a value from 300 through 86400 seconds (24 hours).

### Before you begin

- You must already have login credentials as Administrator.
- You must already have logged in to the host system as Administrator.

### About this task

If you want to manually refresh the state of the storage system at any time, you can use the `smis refresh` command.

### Steps

1. Access NetApp SMI-S Provider.
2. Create a system or user environment variable named `CACHE_REFRESH_SEC` with the new refresh interval value (in seconds).

For information about creating environment variables, see your Windows documentation.

3. Restart the CIM server:

```
smis cimserver restart
```

## Specify the concrete job lifetime value

SMI-S Provider tracks the progress of asynchronous operations by creating *concrete jobs*. You can increase the concrete job lifetime from the default of 60 minutes (3600 seconds) to a value through 86400 seconds (24 hours).

### Before you begin

- You must already have login credentials as Administrator.
- You must already have logged in to the host system as Administrator.

### Step

1. Create a system or user environment variable named `JOB_LIFETIME_SEC` with the new lifetime value (in

seconds).

For information about creating environment variables, see your Windows documentation.

## Specify the ONTAPI timeout value

SMI-S Provider makes ONTAP API (ONTAPI) calls to storage systems. By default, the ONTAPI timeout is 300 seconds. You can set the timeout to a value from 60 to 300 seconds.

### Before you begin

- You must already have login credentials as Administrator.
- You must already have logged in to the host system as Administrator.

### Step

1. Create a system or user environment variable named `ONTAPI_TIMEOUT_SEC` with the new timeout value (in seconds).

For information about creating environment variables, see your Windows documentation.

## Specify the maximum number of threads per message service queue

By default, SMI-S Provider allows 80 threads per message service queue. You can specify the maximum thread value as 1 through 5000. Increasing the maximum number of threads can impact the SMI-S Provider machine's performance, so carefully consider whether you need to increase this value.

### Before you begin

- You must already have login credentials as Administrator.
- You must already have logged in to the host system as Administrator.

### About this task

If your trace file shows many lines of `insufficient resources` output, you must increase the number of threads in increments of 500.

If you set the maximum number of threads to fewer than 20, using the `cimcli -n root/ontap niall` command, the provider becomes unresponsive and returns the `Insufficient threadpool` message in the trace file. If this occurs, you must increase the number of threads in increments of 500 and then restart the provider.

### Steps

1. Access NetApp SMI-S Provider.
2. Create a system or user environment variable named `PEGASUS_MAX_THREADS_PER_SVC_QUEUE` with the new maximum thread value.

For information about creating environment variables, see your Windows documentation.

3. Restart the CIM server:

```
smis cimserver restart
```

## Enable or disable authentication for NetApp SMI-S Provider

By default, authentication is enabled for SMI-S Provider. If authentication causes errors on your system, you can optionally disable it. If authentication has been disabled and you want to reenable it, you can do so.

### Before you begin

- You must already have login credentials as Administrator.
- You must already have logged in as Administrator.
- Any client, including System Center Virtual Machine Manager (SCVMM), must be connected to the provider using cimuser and cimpassword.

### Steps

1. Access NetApp SMI-S Provider.
2. Set the authentication for SMI-S Provider:

Action	Command
Enable authentication if previously disabled	<pre>cimconfig -p -s enableAuthentication=true</pre>
Disable authentication	<pre>cimconfig -p -s enableAuthentication=false</pre>

CIMOM does not use Windows authentication.

3. Restart NetApp SMI-S Provider:

```
smis cimserver restart
```

## Enable indications in SMI-S Provider

Alert, FileSystem Quota, and Lifecycle indications are disabled by default. You can enable these indications by setting the environment variable `PEGASUS_DISABLE_INDICATIONS` to `false`.

### Before you begin

- You must already have login credentials as Administrator.
- You must already have logged in to the host system as Administrator.

### About this task

When `PEGASUS_DISABLE_INDICATIONS` is set to `false`, then Alert (`ONTAP_AlertIndication`),

FileSystem Quota (ONTAP\_FSQuotaIndication), and Lifecycle indications are enabled on NetApp SMI-S Provider.

### Steps

1. Access NetApp SMI-S Provider.
2. Set the PEGASUS\_DISABLE\_INDICATIONS environment variable to false.
3. Restart the CIM server:

```
smis cimserver restart
```

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