



CHAPTER 11

Policy Management Functions

This chapter provides information about the following policy management functions:

- [create_policy](#), page 11-1
- [delete_policy](#), page 11-2
- [enumerate_device_filter_attribute](#), page 11-3
- [enumerate_sku_filter_attribute](#), page 11-3
- [execute_policy](#), page 11-4
- [list_all_policies](#), page 11-4
- [list_filtered_devices](#), page 11-5
- [list_filtered_skus](#), page 11-5
- [read_policy](#), page 11-6
- [write_policy](#), page 11-7

create_policy

Synopsis

```
create_policy ($token, $name,$sku_filter, $dev_filter)
```

Description

This function creates a `Cisco::CLM::Common::Policy` object that represents a set of rules for selecting SKUs and devices from the inventory.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
name	String, mandatory	—	Name of the Policy object.

Parameter	Type	Value	Description
sku_filter	SKUFilter, mandatory	—	The input SKUFilter object specifies the criteria for searching the interested devices. If the filter is set to null, filtering is not performed.
dev_filter	DeviceFilter, mandatory	—	The input DeviceFilter object specifies the criteria for searching the interested devices. If the filter is set to null, filtering is not performed.

Return

This function returns a Cisco::CLM::Common::PolicyStatus object. The Status and the Policy object are contained in PolicyStatus.

Error and Exception

When an error occurs, this function returns null.

delete_policy

Synopsis

```
delete_policy ($token, $policy_id)
```

Description

This function deletes from the system the policy object identified by the given name.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
policy_id	String, mandatory	ID can be a string containing up to 64 ASCII characters in the range of x21 to x7A	ID of the Policy object.

Return

This function returns a Cisco::CLM::Common::Status object.

Error and Exception

When an error occurs, the information is contained in the returned status object.

enumerate_device_filter_attribute

Synopsis

```
enumerate_device_filter_attribute ($token, $attrib)
```

Description

This function returns a list of all possible values for the given attribute in DeviceFilter.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
attrib	Cisco::CLM::Common::Policy::DeviceAttribute, mandatory	—	This attribute name can be one of the following: <ul style="list-style-type: none"> • MODEL • GROUP

Return

This function returns an array of string representing all possible values for the attribute.

Error and Exception

When an error occurs, this function returns null.

enumerate_sku_filter_attribute

Synopsis

```
enumerate_sku_filter_attribute ($token, $attrib)
```

Description

This function returns a list of all possible values for the given attribute in SKUFilter.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
attrib	SKUAttribute, mandatory	—	The attribute name can be Policy.SKUAttribute.FEATURE_NAME.

Return

This function returns an array of string representing all possible values for the attribute.

Error and Exception

When an error occurs, this function returns null.

execute_policy

Synopsis

```
execute_policy ($token, $policy_id)
```

Description

This function executes the given policy by using the policy filters to select devices and stock-keeping units (SKUs), and obtain and deploy licenses for those devices.

This function blocks until the call completes. It returns a `Cisco::CLM::Common::IDStatus` object containing the status of the operation

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents the user's authorization pass, which is obtained after the user invokes the login function and is authenticated by the back-end server.
policy_id	String, mandatory	ID can be a string containing up to 64 ASCII characters in the range from x21 to x7A	ID of the Policy object.

Return

The function returns a `Cisco::CLM::Common::IDStatus` on completion.

Error and Exception

More than one error code and message may be contained in the `IDStatus` object. Each ID in the status object represents a device ID that participates in the execution of the policy.

list_all_policies

Synopsis

```
list_all_policies ($token)
```

Description

This function returns a list of all policies that can be accessed by the user, including both the private policies owned by this user and all public policies.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents the user's authorization pass, which is obtained after the user invokes the login function and is authenticated by the back-end server.

Return

This function returns an array of string representing the IDs of the policies.

Error and Exception

When an error occurs, this function returns null.

list_filtered_devices

Synopsis

```
list_filtered_devices ($token, $dev_filter)
```

Description

This function generates a list of devices obtained by running the device filter in the policy.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
dev_filter	DeviceFilter, mandatory	—	The input DeviceFilter object specifies the criteria for searching the list of devices.

Return

This function returns an array of string representing the IDs of the devices.

Error and Exception

When an error occurs, this function returns null.

list_filtered_skus

Synopsis

```
list_filtered_skus ($token, $sku_filter)
```

Description

This function returns a list of SKU identifiers obtained by running the SKU filter in the policy.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
sku_filter	SKUFilter, mandatory	—	The input SKUFilter object specifies the criteria for searching the list of devices.

Return

This function returns an array of Cisco::CLM::Common::SKUIdentifier objects.

Error and Exception

When an error occurs, this function returns null.

read_policy

Synopsis

```
read_policy ($token, $name)
```

Description

This function retrieves the Cisco::CLM::Common::Policy object from data storage using the given name.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
name	String, mandatory	Name is a string containing up to 64 ASCII characters in the range from x21 to x7A	Name of the Policy object.

Return

This function returns a Cisco::CLM::Common::PolicyStatus object. The status and the policy object are contained in the PolicyStatus object.

Error and Exception

When an error occurs, the error code is present in the PolicyStatus object.

write_policy

Synopsis

```
write_policy ($token, $policy)
```

Description

This function writes the given Cisco::CLM::Common::Policy objects into data storage. The input Policy objects can be new instances of Policy returned by the create_policy function or existing ones retrieved from the data storage by the read_policy function.

Input Parameters

Parameter	Type	Value	Description
token	UserToken, mandatory	—	A token that represents your authorization pass, which is obtained after you invoke the login function and are authenticated by the back-end server.
policy	Policy, mandatory	—	Policy objects, which can be new instances of Policy class or existing ones retrieved from the inventory by the read_policy function.

Return

This function returns a Cisco::CLM::Common::Status object.

Error and Exception

When an error occurs, the information is contained in the returned status object.

