



CHAPTER 17

ObjectTrackingApp Service

This chapter describes the DCNM web services' API methods for the ObjectTrackingApp service.

Information About ObjectTrackingApp Service

Object tracking allows you to track the state of an interface or an IP route that will be used by client processes such as HSRP or the Gateway Local Balancing Protocol (GLBP). A client process, such as GLBP, can register an interest in tracking objects and request notification when the tracked object changes its state. This feature increases the availability and recovery speed of a routing system and decreases outages and the outage duration. The API categories are as follows:

- Query/Get APIs—Query data from the persistent database.
- Modify APIs—Modify existing Network Interface Tracking and Route Tracking settings.
- Delete APIs—Delete a tracking instance in the device.

createTrackedObjectsInNetworkElements

Creates a list object Tracking setting in the given network element.

ValidationException is thrown if any of the following situations occurs:

- If objectTrackingCol is null or empty or it is not of type ObjectTrackingSetting.

Parameters

opContext—Operational context

neInstanceId—InstanceId of AbstractNetworkElement

objectTrackingCol—List of ObjectTrackingSetting objects

Return Value

List of InstanceNameIds of ObjectTrackingSetting

deleteTrackedObjects

Deletes one or more Object Tracking Setting given instanceNameIds of ObjectTrackingSetting

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ValidationException is thrown if any of the following situations occurs:

- If trackingObjInstanceNameIdsCol is null or it is not of type InstanceNameId.
- If trackingObjInstanceNameIdsCol is not a valid object tracking InstanceNameId.

Parameters

opContext—Operational context

trackingObjInstanceNameIdsCol—InstanceNameIds of one or more ObjectTrackingSetting

Return Value

void

getTrackedClients

Returns a list of GlbpGroupSetting Objects processing the given trackingId.

ValidationException is thrown if any of the following situations occurs:

- If trackingId is null or it is not of type InstanceNameId.
- If trackingId is not a valid object tracking InstanceNameId.

Parameters

opContext—Operational context

trackingId—InstanceNameId of ObjectTrackingSetting

Return Value

A collection of GlbpGroupSetting objects. The returned objects will have their corresponding IpNetworkInterface reference. But If that IpNetworkInterface has any other associations, those will be cleared except NetworkInterfaceName.

getTrackedObjects

Returns the one or more ObjectTrackingSetting setting. Given the InstanceNameId of one or more ObjectTrackingSetting, returns the corresponding object tracking setting.

ValidationException is thrown if any of the following situations occurs:

- If trackingInstanceNameIdCol is null or it is not of type InstanceNameId.
- If trackingInstanceNameIdCol is not a valid object tracking InstanceNameId.

Parameters

opContext—Operational context

trackingInstanceNameIdCol—InstanceNameId of one or more ObjectTrackingSetting

Return Value

List of ObjectTrackingSetting. In the returned list of objects, only the following associations will be present and all other associations will be cleared.

- AbstractNetworkElement for ObjectTrackingSetting

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- NetworkInterface association for NetworkInterfaceTrackingSetting
- Vrf association for RouteTrackingSetting
- ObjectTrackingStatus association for ObjectTrackingSetting

getTrackedObjectsInNetworkElement

Returns a collection of ObjectTrackingSetting configured in the specified network elements.

ValidationException is thrown if any of the following situations occurs:

- If neInstanceIdCol is null or it is not of type InstanceNameId.
- If neInstanceIdCol is not a valid object tracking InstanceNameId.

Parameters

opContext—Operational context

neInstanceIdCol—InstanceNameId of one or more AbstractNetworkElement

Return Value

A collection of ObjectTrackingSetting. In the returned list of objects, only the following associations will be present and all other associations will be cleared.

- AbstractNetworkElement for ObjectTrackingSetting
- NetworkInterface association for NetworkInterfaceTrackingSetting
- Vrf association for RouteTrackingSetting
- ObjectTrackingStatus association for ObjectTrackingSetting

modifyTrackedObjects

Modifies one or more existing Tracked Objects.

ValidationException is thrown if any of the following situations occurs:

- If trackedObjCol is null or empty or it is not of type ObjectTrackingSetting.
- Only existing object tracking setting (exist in database) can be modified.

Parameters

opContext—Operational context

trackedObjCol—List of modified ObjectTrackingSetting objects

Return Value

List of modified ObjectTrackingSetting persisted in the database. In the returned list of objects, only the following associations will be present and all other associations will be cleared.

- AbstractNetworkElement for ObjectTrackingSetting
- NetworkInterface association for NetworkInterfaceTrackingSetting
- Vrf association for RouteTrackingSetting
- ObjectTrackingStatus association for ObjectTrackingSetting

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