Cisco Prime Network Registrar 11.2 REST APIs Quick Start Guide

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The Cisco Prime Network Registrar REST API provides access to a set of resources that can be managed by an HTTP client. It is supported on the regional server and on local DHCP, DNS, and Caching DNS servers, provided web services have been enabled.

This document helps you get started with using REST APIs in Cisco Prime Network Registrar. It describes the REST methods and endpoints to use to get information about the most commonly used objects in Cisco Prime Network Registrar. It also describes the special operations supported in the product.

Starting with 11.1, Cisco Prime Network Network Registrar supports Swagger based documentation for the REST API which covers most of the scenarios. However, it does not cover all the REST API requests, especially the special cases with actions (for example, GET the child objects like CCMHost, CCMRRSet, Lease, and Lease6). For special APIs and actions, you must refer this documentation and *Cisco Prime Network Registrar 11.2 REST APIs Reference Guide*.

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Overview

REST is an architectural style which adheres to these principles:

- client-server
- stateless
- cacheable
- uniform interface

While any API can adhere to these principles, the industry definition of a REST API is one that is built using HTTP client requests and server responses. Request and response content is defined by the HTTP media type. JSON and/or XML are generally supported content types. TEXT is also used for very simple data responses.

Client requests are formed by URLs that identify the requested resource. The HTTP primitives GET, PUT, POST, and DELETE are used for basic read, add, modify, and delete operations. Request parameters are used to further qualify the request.

For configuration management, equate a resource with a datadict class name. For example, use these URLs to request the scope list and the scope 'test' by name in the default VPN:

```
https://localhost:8443/web-services/rest/resource/Scope
https://localhost:8443/web-services/rest/resource/Scope/test
```

To request the scope list in a different VPN, include a parameter to specify the VPN in the GET request:

```
https://localhost:8443/web-services/rest/resource/Scope?vpnId=10
```

The curl examples in this document do not necessarily show all the required arguments (for example, -u to specify the username/password).

Standard Functions

The REST API services a set of standard requests for all persisted (non-transient) classes in the service definition. These support get, add, modify, or delete operations, as allowed for each class. For example, read-only classes support only get operations, and singleton classes do not support list operations. Either XML or JSON formatted objects may be specified where applicable as input or output parameters.

Add Object

POST /web-services/rest/resource/*className*

Accept: application/xml, application/json

To add a new object, the input object may be specified or individual scalar attributes may be set as form parameters, provided all required attributes are defined. Input data must be provided in object form to specify complex data types.

Example:

```
curl -X POST -H Content-type:application/xml --data
    "<Scope>
       <name>testScope1</name>
       <subnet>101.10.101.0/24</subnet>
       <rangeList><RangeItem><start>101.10.101.2</start><end>101.10.101.254</end></RangeItem>
</rangeList>
       <selectionTagList><stringItem>red</stringItem><stringItem>green</stringItem>
<stringItem>blue</stringItem></selectionTagList>
     </Scope>"
    https://localhost:8443/web-services/rest/resource/Scope


curl -v -X POST -HContent-Type:application/x-www-form-urlencoded --data
"name=testscope&subnet=11.0.0.1/24" https://localhost:8443/web-services/rest/resource/Scope

curl -v -H Accept:application/json --cacert cacert.pem -X POST -H Content-Type:application/json  --data
@scope_add.json https://localhost:8443/web-services/rest/resource/Scope
```

Here, scope_add.json is the file used to add a Scope object. The content of this file:

```
 {
      "name": "rest_scope_1",
      "policy": "default",
      "rangeList": {
         "RangeItem": [
            {
               "end": "1.0.0.100",
               "start": "1.0.0.1"
            }
         ]
      },
      "subnet": "1.0.0.0/24",
      "tenantId": "0",
      "vpnId": "0"
   }
]
```

Modify/Add Object By Name

PUT /web-services/rest/resource/*className***/***objectName*

Accept: application/xml, application/json

The PUT primitive can be used to add a new object or to modify an existing object. The complete object must always be specified in the input object. When modifying an object, attributes that are unset in the input object will be unset in the modified object, unless they are required. Note the object name is specified in the URL and must match the input object.

Example:

```
curl -X PUT -H Content-type:application/json --data
    {"objectOid": "OID-00:00:00:00:00:00:00:60",
    "name": "TestScope1",
    "policy": "testPolicy",
    "subnet": "101.10.101.0/24"}"
    https://localhost:8443/web-services/rest/resource/Scope/TestScope1

curl -v -H Accept:application/json  --cacert cacert.pem -X PUT -H Content-Type:application/json --data
@scopemod.json https://localhost:8443/web-services/rest/resource/Scope/rest_scope_1
```

Here, scopemod.json is the file used to modify/add the Scope object.

Modify/Add Object List

PUT /web-services/rest/resource/*className*

Accept: application/xml, application/json

When an object list is specified, matching objects are modified, and remaining objects are added. The complete object must always be specified in the input object. Attributes that are unset in the input object will be unset in the modified object, unless they are required.

If an error is encountered when adding objects (for example, if required attributes are missing), no objects are added or modified. However, new objects may be created when a modify error is encountered. In this case, if the client resends the entire list with the corrected data objects, all objects are processed as modify entries.

If the specified list exceeds the configured list limit (see section 8), the AX_E2BIG error is returned and no changes are made.

Example:

```
curl -X PUT -H Content-type:application/json --data
    "[{"name": "s1",
      "policy": "new2",
      "subnet": "10.1.1.0/24"},
    {"name": "s2",
```

```
      "policy": "new2",
      "subnet": "10.1.2.0/24"},
    {"name": "s3",
      "policy": "new2",
      "subnet": "10.1.3.0/24"}]"
https://localhost:8443/web-services/rest/resource/Scope

curl -v -H Accept:application/json  --cacert cacert.pem -X PUT -H Content-Type:application/json --data
@scopemod.json https://localhost:8443/web-services/rest/resource/Scope
```

Here, scopemod.json is the file used to modify/add the specified list of Scope objects.

Get Object By Name

GET /web-services/rest/resource/*className*/*objectName*

Content-Type: application/xml, application/json

A 'not found' error is returned if the requested object does not exist.

Example:

```
curl -H "Accept:application/json" https://localhost:8443/web-services/rest/resource/Scope/s1

{"objectOid":"OID-00:00:00:00:00:00:00:60",
 "name":"s1",
 "policy":"test2",
 "vpnId":"0",
 "subnet":"10.1.1.0/24",
 "tenantId":"0"}
```

Get Object List

GET /web-services/rest/resource/*className*

Content-Type: application/xml, application/json

You may include additional parameters to specify the filter criteria for the list. These may be specified as an exact match or regular expression for any attribute in the class. String comparisons are case-insensitive.

Specifying an invalid attribute name results in a 'bad request' error with a message stating the attribute is not valid for that class. For classes where vpnId or viewId applies, the default (0) is used when the parameter is omitted.

Result lists will be limited to 20 entries by default. When results exceed the limit, the return set will be truncated, and link will be provided to allow the client to retrieve the next chunk of data. For example, localhost:8443/web-services/rest/collection/56a7e561. The default limit is 20, but this is configurable using the 'cnr.rs-list-size' property. By default, client cursors are discarded after 5 minutes of inactivity. The timeout value is configurable using the 'cnr.rs-user-timeout' property. If the connection is closed, a 'not found' error is returned indicating the collection has expired.

Example:

```
curl -H "Accept:application/json" https://localhost:8443/web-services/rest/resource/Policy

[{"objectOid":"OID-00:00:00:00:00:00:00:04",
  "name":"default",
  "offerTimeout":"2m",
  "gracePeriod":"5m",
  "optionList":{"OptionItem":[{"number":"51","value":"00:09:3a:80"}]},
  "tenantId":"0"},
 {"objectOid":"OID-00:00:00:00:00:00:00:03",
  "name":"system_default_policy",
  "offerTimeout":"2m",
  "gracePeriod":"5m",
  "optionList":{"OptionItem":[{"number":"51","value":"00:09:3a:80"}]},
  "tenantId":"0"}]
```

```
curl -H "Accept:application/json" https://localhost:8443/web-services/rest/resource/Scope?name="s\[0-
9\].*"

[{"objectOid":"OID-00:00:00:00:00:00:01:b4",
  "name":"s1",
  "policy":"test2",
  "vpnId":"0",
  "subnet":"10.1.1.0/24",
  "description":"first test",
  "tenantId":"0"},
 {"objectOid":"OID-00:00:00:00:00:00:01:b5",
  "name":"s2",
  "policy":"",
  "vpnId":"0",
  "subnet":"20.2.2.0/24",
  "description":"my test",
  "tenantId":"0"}]
```

Delete Object By Name

DELETE /web-services/rest/resource/*className***/***objectName*

A 'not found' error is returned if the requested object does not exist.

Example:

```
curl -X DELETE https://localhost:8443/web-services/rest/resource/Scope/TestScope1
```

Delete Object List

DELETE /web-services/rest/resource/*className*

Accept: application/xml, application/json

DELETE /web-services/rest/resource/*className***?nrOidList=OIDs**

To delete a list of objects, most classes only require the object OID to be specified for each object in the list. Exceptions are the DnsEnumDomain, DnsEnumEntrySet, and CCMRRSet classes. These classes require the object name and view Id, if applicable. Because the CCMRRSet is a child class, it also requires the parent zone, which can be specified in the object, or as an input parameter.

If the specified list exceeds the configured list limit, the AX_E2BIG error is returned and no changes are made.

Example:

```
curl -X DELETE -H Content-type:application/json --data
    "[{"objectOid": "OID-00:00:00:00:00:00:00:14"},
    {"objectOid": "OID-00:00:00:00:00:00:00:23"}]"
https://localhost:8443/web-services/rest/resource/Prefix

curl -v -H Accept:application/json  --cacert cacert.pem -X DELETE -H Content-Type:application/json --data
@scope_delete_all.json  https://localhost:8443/web-services/rest/resource/Scope
```

Here, scope_delete_all.json is the file used to delete the specified list of Scope objects.

Because Java clients that use the java.net.HttpURLConnection class cannot specify any content with a DELETE request, Cisco Prime Network Registrar also supports the 'nrOidList' parameter to specify the object list. The list may be specified as a single comma-separated parameter entry, or by multiple parameter entries.

Example:

```
curl -X DELETE https://localhost:8443/web-services/rest/resource/Prefix?nrOidList=OID-
00:00:00:00:00:00:00:14,OID-00:00:00:00:00:00:00:23

curl -X DELETE https://localhost:8443/web-services/rest/resource/Prefix?nrOidList=OID-
00:00:00:00:00:00:00:14&nrOidList=OID-00:00:00:00:00:00:00:23
```

For the DnsEnumDomain, DnsEnumEntrySet, and CCMRRSet classes, where the OID cannot be used to identify the object, these clients can only delete the objects individually by name.

Child List Functions

Object and list functions are supported for the following child classes:

Child Class	Parent Class	Parent Attribute
Lease (read-only)	Scope	scope-name (ref)
Lease6 (read-only)	Prefix	prefix-name (ref)
Reservation	Scope	scope (ref)
Reservation6	Prefix	prefix (name)
CCMRRSet	CCMZone, CCMReverseZone, CCMSecondaryZone	zone (oid ref), zone-origin (name ref)
CCMHost	CCMZone	zone (oid ref)

These classes support the same set of standard functions, but work under different usage constraints. For example, a new child object cannot be added if the parent does not exist.

For the Lease, Lease6, Reservation, and Reservation6 objects, the parent can always be identified from the address and the vpnId qualifier, if applicable. No additional parameters are required to identify the child objects.

Example:

```
Return the lease list for Scope 'test':
https://localhost:8443/web-services/resource/Lease?scopeName=test

Get a lease:
https://localhost:8443/web-services/resource/Lease/10.10.1.1

Return the reservation list for Scope 'test':
https://localhost:8443/web-services/rest/resource/Reservation?scope=test
Get a Reservation:
https://localhost:8443/web-services/resource/Reservation/10.10.1.1?vpnId=2
```

For CCMRRSet objects, the parent zone OID can be specified in the object, or the zoneOrigin attribute, combined with the viewId qualifier, if applicable, can be used to find the parent. For CCMHost objects, however, the parent zone OID must always be specified with the relative host name. For this release, we will add support for a zoneOrigin attribute, to allow consistent naming options for both. For these classes, an error is returned if the parent zone is not specified, or the parent zone cannot be found.

Example:

```
Return the RR set 'sample' in the zone 'a.tst.':
https://localhost:8443/web-services/resource/CCMRRSet/sample?zoneOrigin=a.tst.

Return the host list for zone 'a.tst.':
https://localhost:8443/web-services/rest/resource/CCMHost?zoneOrigin=a.tst.
```

Commonly Used Classes in Cisco Prime Network Registrar

Following sections describe the most commonly used classes in Cisco Prime Network Registrar and the basic operations that can be performed on them:

Scope

A DHCP Scope object. A scope defines a set of dynamic address pools on a subnet that share its configuration attributes. A scope can also contain reserved addresses on the specified subnet that should use the configuration.

Create Scope Object

Creates a Cisco Prime Network Registrar Scope object.

Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Scope
Header:	Content-Type:application/json

Request Body:	{
	"name": "rest_scope_1",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "1.0.0.100",
	"start": "1.0.0.1"
	}
	]
	},
	"subnet": "1.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	}

Get Scope Object List

Gets the list of Cisco Prime Network Registrar Scope objects.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/Scope
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:5b",
	"name": "rest_scope_1",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "1.0.0.100",
	"start": "1.0.0.1"
	}
	]
	},
	"subnet": "1.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:57",
	"name": "test",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "2.0.0.100",
	"start": "2.0.0.1"
	}
	]
	},
	"subnet": "2.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	}
	]

Get Scope Object By Name

Gets the Cisco Prime Network Registrar Scope object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/Scope/rest_scope_1
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:5b",
	"name": "rest_scope_1",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "1.0.0.100",
	"start": "1.0.0.1"
	}
	]
	},
	"subnet": "1.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	}

Modify Scope Object By Name

Modifies or creates the specified Cisco Prime Network Registrar Scope object.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Scope/rest_scope_1
Header:	Content-Type:application/json

Request Body:	{
	"name": "rest_scope_1",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "1.0.0.200",
	"start": "1.0.0.1"
	}
	]
	},
	"subnet": "1.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	}

Modify Scope Object List

Modifies or creates the specified list of Cisco Prime Network Registrar Scope objects.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Scope
Header:	Content-Type:application/json

Request Body:	[
	{
	"name": "rest_scope_1",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "1.0.0.100",
	"start": "1.0.0.1"
	}
	]
	},
	"subnet": "1.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	},
	{
	"name": "rest_scope_2",
	"policy": "default",
	"rangeList": {
	"RangeItem": [
	{
	"end": "2.0.0.100",
	"start": "2.0.0.1"
	}
	]
	},
	"subnet": "2.0.0.0/24",
	"tenantId": "0",
	"vpnId": "0"
	}
	]

Delete Scope Object By Name

Deletes the specified Cisco Prime Network Registrar Scope object.

Method:	DELETE

Endpoint:	https://localhost:8443/web-services/rest/resource/Scope/rest_scope_1
Delete Scope Object List Deletes the specified list of Cisco Prime Network Registrar Scope objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Scope
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:62"}, {"objectOid":"OID-00:00:00:00:00:00:00:57"}]

Prefix

An IPv6 prefix. A prefix defines the DHCPv6 configuration for the given address pool.

Create Prefix Object Creates a Cisco Prime Network Registrar Prefix object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix
Header:	Content-Type:application/json

Request Body:	{
	"address": "2001::/64",
	"name": "rest_prefix_1",
	"tenantId": "0",
	"vpnId": "0"
	}

Get Prefix Object List Gets the list of Cisco Prime Network Registrar Prefix objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:61",
	"address": "2001::/64",
	"name": "rest_prefix_1",
	"tenantId": "0",
	"vpnId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:60",
	"address": "1001::/64",
	"name": "test",
	"tenantId": "0",
	"vpnId": "0"
	}
	]

Get Prefix Object By Name Gets the Cisco Prime Network Registrar Prefix object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix/rest_prefix_1
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:61",
	"address": "2001::/64",
	"name": "rest_prefix_1",
	"tenantId": "0",
	"vpnId": "0"
	}

Modify Prefix Object By Name Modifies or creates the specified Cisco Prime Network Registrar Prefix object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix/rest_prefix_1
Header:	Content-Type:application/json

Request Body:	{
	"address": "2001::/64",
	"name": "rest_prefix_1",
	"description":"rest",
	"tenantId": "0",
	"vpnId": "0"
	}

Modify Prefix Object List Modifies or creates the specified list of Cisco Prime Network Registrar Prefix objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix
Header:	Content-Type:application/json

Request Body:	<pre>[
	  {
	  "objectOid": "OID-00:00:00:00:00:00:00:61",
	  "address": "2001::/64",
	  "description": "created via rest",
	  "name": "rest_prefix_1",
	  "tenantId": "0",
	  "vpnId": "0"
	  },
	  {
	  "objectOid": "OID-00:00:00:00:00:00:00:60",
	  "address": "1001::/64",
	  "description": "created via manually",
	  "name": "test",
	  "tenantId": "0",
	  "vpnId": "0"
	  }
	]</pre>

Delete Prefix Object By Name Deletes the specified Cisco Prime Network Registrar Prefix object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix/rest_prefix_1
Delete Prefix Object List Deletes the specified list of Cisco Prime Network Registrar Prefix objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Prefix
Header:	Content-Type:application/json

Request Body:	<pre>[
	  {"objectOid": "OID-00:00:00:00:00:00:00:61"},
	  {"objectOid": "OID-00:00:00:00:00:00:00:60"}
	]</pre>

CCMScopeTemplate

A template for creating a Scope object from a subnet address. Most attributes are copied literally from the template to the newly created scope.

Create CCMScopeTemplate Object Creates a Cisco Prime Network Registrar CCMScopeTemplate object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMScopeTemplate
Header:	Content-Type:application/json

Request Body:	<pre>{
	  "name": "Rest_Scope_template",
	  "policy": "default",
	  "rangesExpr": "(create-range 1 10)",
	  "scopeName": "(concat \"ISP-\" subnet)",
	  "tenantId": "0"
	}</pre>

Get CCMScopeTemplate Object List

Gets the list of Cisco Prime Network Registrar CCMScopeTemplate objects.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMScopeTemplate
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:53",
	"name": "Rest_Scope_template",
	"policy": "default",
	"rangesExpr": "(create-range 1 10)",
	"scopeName": "(concat \"ISP-\" subnet)",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:52",
	"name": "ST",
	"policy": "default",
	"rangesExpr": "(create-range 1 10)",
	"scopeName": "(concat \"ISP-\" subnet)",
	"tenantId": "0"
	}
	]

Get CCMScopeTemplate Object By Name

Gets the Cisco Prime Network Registrar CCMScopeTemplate object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-serviceeTemplate/Rest_Scope_template
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:53",
	"name": "Rest_Scope_template",
	"policy": "default",
	"rangesExpr": "(create-range 1 10)",
	"scopeName": "(concat \"ISP-\" subnet)",
	"tenantId": "0"
	}

Modify CCMScopeTemplate Object By Name

Modifies or creates the specified Cisco Prime Network Registrar CCMScopeTemplate object.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMScopeTemplate/Rest_Scope_template
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:53",
	"name": "Rest_Scope_template",
	"policy": "default",
	"rangesExpr": "(create-range 1 100)",
	"scopeName": "(concat \"REST-\" subnet)",
	"tenantId": "0"
	}

Modify CCMScopeTemplate Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMScopeTemplate objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMScopeTemplate
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:53",
	"name": "Rest_Scope_template",
	"policy": "default",
	"rangesExpr": "(create-range 1 10)",
	"scopeName": "(concat \"REST-\" subnet)",
	"tenantId": "0"
	},
	{
	"name": "Rest_Scope_template_for_delete",
	"policy": "default",
	"rangesExpr": "(create-range 1 10)",
	"scopeName": "(concat \"ISP-\" subnet)",
	"tenantId": "0"
	}
	]

Delete CCMScopeTemplate Object By Name Deletes the specified Cisco Prime Network Registrar CCMScopeTemplate object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMScopeTemplate/Rest_Scope_template_for_delete
Delete CCMScopeTemplate Object List Deletes the specified list of Cisco Prime Network Registrar CCMScopeTemplate objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMScopeTemplate
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:52"}, {"objectOid":"OID-00:00:00:00:00:00:00:53"}]

PrefixTemplate

A template to create IPv6 prefixes.

Create PrefixTemplate Object Creates a Cisco Prime Network Registrar PrefixTemplate object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate

Header:	Content-Type:application/json

Request Body:	{
	"name": "rest_pt_1",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CM-\" prefix)",
	"tenantId": "0"
	}

Get PrefixTemplate Object List Gets the list of Cisco Prime Network Registrar PrefixTemplate objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6b",
	"description": "ss",
	"name": "pt",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CM-\" prefix)",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6d",
	"description": "rest_put_by_name",
	"name": "rest_pt_1",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CM-\" prefix)",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6c",
	"name": "Rest_Scope_template_1",
	"policy": "default",
	"tenantId": "0"
	}
	]

Get PrefixTemplate Object By Name Gets the Cisco Prime Network Registrar PrefixTemplate object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate/rest_pt_1
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:6d",
	"name": "rest_pt_1",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CM-\" prefix)",
	"tenantId": "0"
	}

Modify PrefixTemplate Object By Name Modifies or creates the specified Cisco Prime Network Registrar PrefixTemplate object.	
Method:	PUT

Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate/rest_pt_1
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:6d",
	"name": "rest_pt_1",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CM-\" prefix)",
	"tenantId": "0",
	"description": "rest_put_by_name"
	}

Modify PrefixTemplate Object List Modifies or creates the specified list of Cisco Prime Network Registrar PrefixTemplate objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate
Header:	Content-Type:application/json

Request Body:	[
	{
	"name": "rest_pt_2",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CPE-\" prefix)",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6d",
	"description": "rest_put_by_all",
	"name": "rest_pt_1",
	"policy": "default",
	"prefixDescriptionExpr": "(concat \"CM-\" prefix)",
	"tenantId": "0"
	}
	]

Delete PrefixTemplate Object By Name Deletes the specified Cisco Prime Network Registrar PrefixTemplate object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate/rest_pt_2
Delete PrefixTemplate Object List Deletes the specified list of Cisco Prime Network Registrar PrefixTemplate objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/PrefixTemplate
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:6b"}, {"objectOid":"OID-00:00:00:00:00:00:00:6c"}]

Link

A physical network link. Multiple logical IP networks may be running concurrently on the same link.

<table>
<tr><td colspan="2">Create Link Object

Creates a Cisco Prime Network Registrar Link object.</td></tr>
<tr><td>Method:</td><td>POST</td></tr>
<tr><td>Endpoint:</td><td>https://localhost:8443/web-services/rest/resource/Link</td></tr>
<tr><td>Header:</td><td>Content-Type:application/json</td></tr>
<tr><td>Request Body:</td><td><pre>{
      "description": "rest_link",
      "name":"rest_link_1",
      "tenantId": "0",
      "vpnId": "0"
}</pre></td></tr>
<tr><td colspan="2">Get Link Object List

Gets the list of Cisco Prime Network Registrar Link objects.</td></tr>
<tr><td>Method:</td><td>GET</td></tr>
<tr><td>Endpoint:</td><td>https://localhost:8443/web-services/rest/resource/Link</td></tr>
<tr><td>Header:</td><td>Accept:application/json</td></tr>
<tr><td>Response Body:</td><td><pre>[
   {
      "objectOid": "OID-00:00:00:00:00:00:00:6f",
      "description": "test",
      "name": "11",
      "tenantId": "0",
      "vpnId": "0"
   },
   {
      "objectOid": "OID-00:00:00:00:00:00:00:70",
      "description": "rest_link",
      "name": "rest_link_1",
      "tenantId": "0",
      "vpnId": "0"
   }
]</pre></td></tr>
<tr><td colspan="2">Get Link Object By Name

Gets the Cisco Prime Network Registrar Link object by name.</td></tr>
<tr><td>Method:</td><td>GET</td></tr>
<tr><td>Endpoint:</td><td>https://localhost:8443/web-services/rest/resource/Link/rest_link_1</td></tr>
<tr><td>Header:</td><td>Accept:application/json</td></tr>
<tr><td>Response Body:</td><td><pre>{
   "objectOid": "OID-00:00:00:00:00:00:00:70",
   "description": "rest_link",
   "name": "rest_link_1",
   "tenantId": "0",
   "vpnId": "0"
}</pre></td></tr>
</table>

Modify Link Object By Name Modifies or creates the specified Cisco Prime Network Registrar Link object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Link/rest_link_1
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:70",
	"description": "rest_put_byname",
	"name": "rest_link_1",
	"tenantId": "0",
	"vpnId": "0"
	}

Modify Link Object List Modifies or creates the specified list of Cisco Prime Network Registrar Link objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Link
Header:	Content-Type:application/json

Request Body:	[
	{
	"name": "rest_link_2",
	"tenantId": "0",
	"vpnId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:70",
	"description": "rest_put_all",
	"name": "rest_link_1",
	"tenantId": "0",
	"vpnId": "0"
	}
	]

Delete Link Object By Name Deletes the specified Cisco Prime Network Registrar Link object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Link/rest_link_2
Delete Link Object List Deletes the specified list of Cisco Prime Network Registrar Link objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Link
Header:	Content-Type:application/json
Request Body:	[{"objectOid": "OID-00:00:00:00:00:00:00:6f"}, {"objectOid": "OID-00:00:00:00:00:00:00:70"}]

LinkTemplate

A template to create IPv6 links and associated prefixes.

Create LinkTemplate Object

Creates a Cisco Prime Network Registrar LinkTemplate object.

Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate
Header:	Content-Type:application/json

Request Body:	{
	"description": "rest_create",
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "rest_lt_1",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	}

Get LinkTemplate Object List

Gets the list of Cisco Prime Network Registrar LinkTemplate objects.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:72",
	"description": "lt",
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "lt",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:73",
	"description": "rest_create",
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "rest_lt_1",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	}
	]

Get LinkTemplate Object By Name

Gets the Cisco Prime Network Registrar LinkTemplate object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate/rest_lt_1
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:73",
	"description": "rest_create",
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "rest_lt_1",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	}

Modify LinkTemplate Object By Name Modifies or creates the specified Cisco Prime Network Registrar LinkTemplate object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate/rest_lt_1
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:73",
	"description": "rest_put_byname",
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "rest_lt_1",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	}

Modify LinkTemplate Object List Modifies or creates the specified list of Cisco Prime Network Registrar LinkTemplate objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate
Header:	Content-Type:application/json

Request Body:	[
	{
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "rest_l_2",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:73",
	"description": "rest_put_all",
	"linkNameExpr": "(concat \"link-\" prefix)",
	"name": "rest_lt_1",
	"prefixExpr": "(list\n (create-prefix \"cm-prefix\" (create-prefix-range 32 1))\n (create-prefix \"cpe-address-prefix\" (create-prefix-range 32 2))\n (create-prefix \"cpe-pd-prefix\" (create-prefix-range 16 1)))",
	"tenantId": "0"
	}
	]

Delete LinkTemplate Object By Name Deletes the specified Cisco Prime Network Registrar LinkTemplate object.	

Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate/rest_lt_1
Delete LinkTemplate Object List Deletes the specified list of Cisco Prime Network Registrar LinkTemplate objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/LinkTemplate
Header:	Content-Type:application/json

Request Body:	`[`
	`{"objectOid": "OID-00:00:00:00:00:00:00:72"},`
	`{"objectOid": "OID-00:00:00:00:00:00:00:74"}`
	`]`

Policy

A DHCP Policy object. The policy defines the set of DHCP Options and server policy settings that should be applied when granting a lease.

Create Policy Object Creates a Cisco Prime Network Registrar Policy object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy
Header:	Content-Type:application/json

Request Body:	`{`
	`"name": "rest_policy1"`
	`}`

Get Policy Object List Gets the list of Cisco Prime Network Registrar Policy objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:04",
	"gracePeriod": "5m",
	"name": "default",
	"offerTimeout": "2m",
	"optionList": {
	"OptionItem": [
	{
	"number": "51",
	"value": "1w"
	}
	]
	},
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6e",
	"forwardDnsupdate": "update1",
	"forwardZoneName": "zone1.com.",
	"name": "p1",
	"optionList": {
	"OptionItem": [
	{
	"number": "51",
	"optionDefinitionSetName": "dhcp-config",
	"value": "2w"
	},
	{
	"number": "5",
	"optionDefinitionSetName": "dhcp-config",
	"value": "10.104.245.212"
	}
	]
	},
	"tenantId": "0",
	"vendorOptions": {
	"OptionItem": [
	{
	"number": "1",
	"optionDefinitionSetName": "rest-vend-op1",
	"value": "(suboption1 10 1.1.1.1)"
	}
	]

Get Policy Object By Name Gets the Cisco Prime Network Registrar Policy object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy/rest_policy1
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:99",
	"name": "rest_policy1",
	"optionList": {
	"OptionItem": [
	{
	"number": "51",
	"optionDefinitionSetName": "dhcp-config",
	"value": "2w"
	},
	{
	"number": "5",
	"optionDefinitionSetName": "dhcp-config",
	"value": "10.104.245.212"
	}
	]
	},
	"tenantId": "0"
	}

Modify Policy Object By Name Modifies or creates the specified Cisco Prime Network Registrar Policy object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy/rest_policy1
Header:	Content-Type:application/json

Request Body:	{
	"objectOid":"OID-00:00:00:00:00:00:00:99",
	"name": "rest_policy1",
	"optionList": {
	"OptionItem": [
	{
	"number": "51",
	"optionDefinitionSetName": "dhcp-config",
	"value": "2w"
	},
	{
	"number": "5",
	"optionDefinitionSetName": "dhcp-config",
	"value": "10.104.245.212"
	}
	]
	}
	}

Modify Policy Object List Modifies or creates the specified list of Cisco Prime Network Registrar Policy objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy
Header:	Content-Type:application/json

Request Body:	[
	{
	"forwardDnsupdate": "update1",
	"forwardZoneName": "zone1.com.",
	"name": "rest_policy2",
	"optionList": {
	"OptionItem": [
	{
	"number": "51",
	"optionDefinitionSetName": "dhcp-config",
	"value": "2w"
	},
	{
	"number": "5",
	"optionDefinitionSetName": "dhcp-config",
	"value": "10.104.245.212"
	}
	]
	},
	"tenantId": "0",
	"vendorOptions": {
	"OptionItem": [
	{
	"number": "1",
	"optionDefinitionSetName": "rest-vend-op1",
	"value": "(suboption1 10 1.1.1.1)"
	},
	{
	"number": "125",
	"optionDefinitionSetName": "rest-vend-opt-125",
	"value": "(1 (2 test))"
	}
	]
	}
	},
	{
	"name": "rest_policy3"
	}
	]

Delete Policy Object By Name Deletes the specified Cisco Prime Network Registrar Policy object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy/rest_policy1
Delete Policy Object List Deletes the specified list of Cisco Prime Network Registrar Policy objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Policy
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:9b"}, {"objectOid":"OID-00:00:00:00:00:00:00:9a"}]

OptionDefinitionSet

Contains sets of DHCP option definitions. Define one set for DHCPv4, and another set for DHCPv6. Option definitions override a server's corresponding built-in definitions. Also use this class for vendor option definition sets. You can have as many vendor option definition sets as required.

Create OptionDefinitionSet Object

Creates a Cisco Prime Network Registrar OptionDefinitionSet object.

Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/OptionDefinitionSet
Header:	Content-Type:application/json

Request Body:	{
	"desc": "",
	"flags": "customized,vendor",
	"idRange": "1",
	"name": "rest-vend-opt-125",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_VENDOR_OPTS",
	"flags": "",
	"id": "125",
	"name": "rest_option1",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_IPADDR",
	"flags": "",
	"id": "1",
	"name": "giaddr",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_STRING",
	"flags": "",
	"id": "2",
	"name": "domainname",
	"repeat": "0"
	}
	]
	},
	"repeat": "0"
	}
	]
	},
	"repeat": "0"
	}
	]
	},
	"vendorOptionEnterpriseId": "100"
	}

Get OptionDefinitionSet Object List

Gets the list of Cisco Prime Network Registrar OptionDefinitionSet objects.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/OptionDefinitionSet

Header:	Accept:application/json

Response Body:	[
	{
	"desc": "CableLabs v4 DOCSIS 3.0",
	"flags": "builtin,vendor",
	"idRange": "1",
	"name": "dhcp-cablelabs-config",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_BLOB",
	"flags": "AF_NO_CONFIG_OPTION,AF_IMMUTABLE",
	"id": "82",
	"name": "relay-agent-info",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_VENDOR_OPTS",
	"flags": "AF_NO_CONFIG_OPTION,AF_IMMUTABLE",
	"id": "9",
	"name": "v-i-vendor-opts",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_BLOB",
	"flags": "AF_NO_CONFIG_OPTION,AF_IMMUTABLE",
	"id": "1",
	"name": "cmts-capabilities",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_BLOB",
	"flags":
	"AF_NO_CONFIG_OPTION,AF_IMMUTABLE",
	"id": "1",
	"name": "docsis-version",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_INT8",
	"flags":
	"AF_NO_CONFIG_OPTION,AF_IMMUTABLE",
	"id": "0",
	"name": "docsis-major-
	version",
	"repeat": "0"
	},
	. . . . . .

Get OptionDefinitionSet Object By Name

Gets the Cisco Prime Network Registrar OptionDefinitionSet object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/OptionDefinitionSet/rest-vend-opt-125
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:91",
	"desc": "",
	"flags": "customized,vendor",
	"idRange": "1",
	"name": "rest-vend-opt-125",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_VENDOR_OPTS",
	"flags": "",
	"id": "125",
	"name": "ven-opt",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_IPADDR",
	"flags": "",
	"id": "1",
	"name": "giaddr",
	"optionList": {
	"AttrDescItem": [
	{
	"baseType": "AT_STRING",
	"flags": "",
	"id": "2",
	"name": "domainname",
	"repeat": "0"
	}
	]
	},
	"repeat": "0"
	}
	]
	},
	"repeat": "0"
	}
	]
	},
	"vendorOptionEnterpriseId": "100"
	}

Modify OptionDefinitionSet Object By Name Modifies or creates the specified Cisco Prime Network Registrar OptionDefinitionSet object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/OptionDefinitionSet/rest-vend-opt-2
Header:	Content-Type:application/json

Request Body:	{
	"flags": "customized,vendor",
	"idRange": "2",
	"name": "rest-vend-opt-2",
	"vendorOptionEnterpriseId": "100"
	}

Delete OptionDefinitionSet Object By Name Deletes the specified Cisco Prime Network Registrar OptionDefinitionSet object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/OptionDefinitionSet/rest-vend-opt-125

CCMZone

A forward primary DNS zone. Describes the configuration for a primary DNS zone.

<table>
<tr><td colspan="2">Create CCMZone Object

Creates a Cisco Prime Network Registrar CCMZone object.</td></tr>
<tr><td>Method:</td><td>POST</td></tr>
<tr><td>Endpoint:</td><td>https://localhost:8443/web-services/rest/resource/CCMZone</td></tr>
<tr><td>Header:</td><td>Content-Type:application/json</td></tr>
<tr><td>Request Body:</td><td><pre>{
      "defttl": "24h",
      "expire": "1w",
      "minttl": "10m",
      "nameservers": {
         "stringItem": [
            "ns.cisco.com."
         ]
      },
      "ns": "ns.cisco.com.",
      "origin": "cisco.com.",
      "person": "mail1.cisco.com.",
      "refresh": "3h",
      "retry": "60m",
      "serial": "1",
      "tenantId": "0",
      "viewId": "0"
}</pre></td></tr>
<tr><td colspan="2">Get CCMZone Object List

Gets the list of Cisco Prime Network Registrar CCMZone objects.</td></tr>
<tr><td>Method:</td><td>GET</td></tr>
<tr><td>Endpoint:</td><td>https://localhost:8443/web-services/rest/resource/CCMZone?viewId=3</td></tr>
<tr><td>Header:</td><td>Accept:application/json</td></tr>
</table>

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:76",
	"defttl": "10h",
	"description": "external",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.cisco.com."
	]
	},
	"ns": "ns.cisco.com.",
	"origin": "cisco.com.",
	"person": "mail1.cisco.com.",
	"refresh": "3h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "3"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:70",
	"defttl": "24h",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.test.com."
	]
	},
	"ns": "ns.test.com.",
	"origin": "test.com.",
	"person": "mail1.test.com.",
	"refresh": "3h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "3"
	}
	]

Get CCMZone Object By Name

Gets the Cisco Prime Network Registrar CCMZone object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZone/cisco.com.
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:77",
	"defttl": "24h",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.cisco.com."
	]
	},
	"ns": "ns.cisco.com.",
	"origin": "cisco.com.",
	"person": "mail1.cisco.com.",
	"refresh": "3h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "0"
	}

Modify CCMZone Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMZone object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZone/cisco.com.
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:7e",
	"defttl": "14h",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.cisco.com."
	]
	},
	"ns": "ns.cisco.com.",
	"origin": "cisco.com.",
	"person": "mail1.cisco.com.",
	"refresh": "1h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "0"
	}

Modify CCMZone Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMZone objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZone
Header:	Content-Type:application/json

Request Body:


```
[
    {
       "defttl": "10h",
       "description": "external",
       "expire": "1w",
       "minttl": "10m",
       "nameservers": {
          "stringItem": [
             "ns.isco.com."
          ]
       },
       "ns": "ns.isco.com.",
       "origin": "isco.com.",
       "person": "mail1.isco.com.",
       "refresh": "3h",
       "retry": "60m",
       "serial": "1",
       "tenantId": "0",
       "viewId": "3"
    },
    {
       "defttl": "24h",
       "expire": "1w",
       "minttl": "10m",
       "nameservers": {
          "stringItem": [
             "ns.csco.com."
          ]
       },
       "ns": "ns.csco.com.",
       "origin": "csco.com.",
       "person": "mail1.csco.com.",
       "refresh": "3h",
       "retry": "60m",
       "serial": "1",
       "tenantId": "0",
       "viewId": "2"
    },
    {
       "objectOid": "OID-00:00:00:00:00:00:00:7e",
       "defttl": "24h",
       "expire": "1w",
       "minttl": "10m",
       "nameservers": {
          "stringItem": [
             "ns.cisco.com."
          ]
       },
       "ns": "ns.cisco.com.",
       "origin": "cisco.com.",
       "person": "mail1.cisco.com.",
       "refresh": "3h",
       "retry": "60m",
       "serial": "1",
       "tenantId": "0",
       "viewId": "0"
    }
]
```


Delete CCMZone Object By Name

Deletes the specified Cisco Prime Network Registrar CCMZone object.

Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZone/cisco.com.

Delete CCMZone Object List Deletes the specified list of Cisco Prime Network Registrar CCMZone objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZone
Header:	Content-Type:application/json

Request Body:	<pre>[
	  {
	  "objectOid": "OID-00:00:00:00:00:00:00:7f",
	  "viewId": "3"
	  },
	  {
	  "objectOid": "OID-00:00:00:00:00:00:00:81",
	  "viewId": "2"
	  }
	]</pre>

CCMReverseZone

A reverse primary DNS zone.

Create CCMReverseZone Object Creates a Cisco Prime Network Registrar CCMReverseZone object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone
Header:	Content-Type:application/json

Request Body:	<pre>{
	  "defttl": "24h",
	  "expire": "1w",
	  "minttl": "10m",
	  "nameservers": {
	  "stringItem": [
	  "ns.1.in-addr.arpa."
	  ]
	  },
	  "ns": "ns.1.in-addr.arpa.",
	  "origin": "1.in-addr.arpa.",
	  "person": "mail1.1.in-addr.arpa.",
	  "refresh": "3h",
	  "retry": "60m",
	  "serial": "1",
	  "tenantId": "0",
	  "viewId": "0"
	}</pre>

Get CCMReverseZoneObject List Gets the list of Cisco Prime Network Registrar CCMReverseZone objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:85",
	"defttl": "24h",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.1.in-addr.arpa."
	]
	},
	"ns": "ns.1.in-addr.arpa.",
	"origin": "1.in-addr.arpa.",
	"person": "mail1.1.in-addr.arpa.",
	"refresh": "3h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:02",
	"defttl": "24h",
	"distMap": "OID-00:00:00:00:00:00:00:00",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"localhost.127.in-addr.arpa."
	]
	},
	"ns": "localhost.127.in-addr.arpa.",
	"origin": "127.in-addr.arpa.",
	"person": "loopback.127.in-addr.arpa.",
	"refresh": "3h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0"
	}
	]

Get CCMReverseZone Object By Name

Gets the Cisco Prime Network Registrar CCMReverseZone object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone/30.in-addr.arpa.?viewId=3
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8a",
	"defttl": "10h",
	"description": "external",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.30.in-addr.arpa."
	]
	},
	"ns": "ns.30.in-addr.arpa.",
	"origin": "30.in-addr.arpa.",
	"person": "mail1.30.in-addr.arpa.",
	"refresh": "3h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "3"
	}

Modify CCMReverseZone Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMReverseZone object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone/1.in-addr.arpa.
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:85",
	"defttl": "14h",
	"expire": "1w",
	"minttl": "10m",
	"nameservers": {
	"stringItem": [
	"ns.1.in-addr.arpa."
	]
	},
	"ns": "ns.1.in-addr.arpa.",
	"origin": "1.in-addr.arpa.",
	"person": "mail1.1.in-addr.arpa.",
	"refresh": "1h",
	"retry": "60m",
	"serial": "1",
	"tenantId": "0",
	"viewId": "0"
	}

Modify CCMReverseZone Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMReverseZone objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone
Header:	Content-Type:application/json

Request Body:


```
[
    {
       "defttl": "10h",
       "description": "external",
       "expire": "1w",
       "minttl": "10m",
       "nameservers": {
          "stringItem": [
             "ns.30.in-addr.arpa."
          ]
       },
       "ns": "ns.30.in-addr.arpa.",
       "origin": "30.in-addr.arpa.",
       "person": "mail1.30.in-addr.arpa.",
       "refresh": "3h",
       "retry": "60m",
       "serial": "1",
       "tenantId": "0",
       "viewId": "3"
    },
    {
       "defttl": "24h",
       "expire": "1w",
       "minttl": "10m",
       "nameservers": {
          "stringItem": [
             "ns.20.in-addr.arpa."
          ]
       },
       "ns": "ns.20.in-addr.arpa.",
       "origin": "20.in-addr.arpa.",
       "person": "mail1.20.in-addr.arpa.",
       "refresh": "3h",
       "retry": "60m",
       "serial": "1",
       "tenantId": "0",
       "viewId": "2"
    },
    {
       "objectOid": "OID-00:00:00:00:00:00:00:85",
       "defttl": "24h",
       "expire": "1w",
       "minttl": "10m",
       "nameservers": {
          "stringItem": [
             "ns.1.in-addr.arpa."
          ]
       },
       "ns": "ns.1.in-addr.arpa.",
       "origin": "1.in-addr.arpa.",
       "person": "mail1.1.in-addr.arpa.",
       "refresh": "3h",
       "retry": "60m",
       "serial": "1",
       "tenantId": "0",
       "viewId": "0"
    }
]
```


Delete CCMReverseZone Object By Name

Deletes the specified Cisco Prime Network Registrar CCMReverseZone object.

Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone/20.in-addr.arpa.?viewId=2

Delete CCMReverseZone Object List Deletes the specified list of Cisco Prime Network Registrar CCMReverseZone objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMReverseZone
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:8a",
	"viewId": "3"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:87",
	"viewId": "0"
	}
	]

CCMRRSet

Specifies the set of DNS RRs in a single nameset. All RRs in the set must have the same name, but differ in type or data.

Create CCMRRSet Object Creates a Cisco Prime Network Registrar CCMRRSet object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json

Request Body:	{
	"hostHealthCheck": "ping",
	"lastAccessTime": "none",
	"lastResetTime": "none",
	"name": "rest_p_host1",
	"protectedState": "protected",
	"rrList": {
	"CCMRRItem": [
	{
	"order": "1",
	"rdata": "2.2.2.2",
	"rrClass": "IN",
	"rrType": "A",
	"weight": "1"
	},

```
            {
               "order": "2",
               "rdata": "10.104.245.105",
               "rrClass": "IN",
               "rrType": "A",
               "weight": "2"
            }
         ]
      },
      "tenantId": "0",
      "zone": "OID-00:00:00:00:00:00:00:82",
      "zoneOrigin": "cisco2.com."
}
```


Get CCMRRSet List

Gets the list of Cisco Prime Network Registrar CCMRRSet objects.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Accept:application/json
Response Body:	


```
[
   {
      "objectOid": "OID-00:00:00:00:00:00:00:1b",
      "axfrVersion": "0",
      "hits": "0",
      "hostHealthCheck": "off",
      "lastAccessTime": "none",
      "lastResetTime": "none",
      "name": "@",
      "protectedState": "protected",
      "rrList": {
         "CCMRRItem": [
            {
               "axfrVersion": "0",
               "order": "0",
               "rdata": "ns.cisco2.com. mail1.cisco2.com. 28 10800 3600 604800
600",
               "rrClass": "IN",
               "rrType": "SOA",
               "timestamp": "Sat Jan 16 15:44:21 2021",
               "ttl": "-1",
               "weight": "1"
            },
```

```
                  {
                     "axfrVersion": "0",
                     "order": "0",
                     "rdata": "ns.cisco2.com.",
                     "rrClass": "IN",
                     "rrType": "NS",
                     "timestamp": "Sat Jan 16 15:44:21 2021",
                     "ttl": "-1",
                     "weight": "1"
                  }
               ]
            },
            "tenantId": "0",
            "zone": "OID-00:00:00:00:00:00:00:82",
            "zoneOrigin": "cisco2.com."
         },{
            "objectOid": "OID-00:00:00:00:00:00:00:2a",
            "axfrVersion": "0",
            "hits": "0",
            "hostHealthCheck": "ping",
            "lastAccessTime": "none",
            "lastResetTime": "none",
            "name": "p_h1",
            "protectedState": "protected",
            "rrList": {
               "CCMRRItem": [
                  {
                     "axfrVersion": "0",
                     "order": "0",
                     "rdata": "10.104.245.110",
                     "rrClass": "IN",
                     "rrType": "A",
                     "timestamp": "Sat Jan 16 21:28:52 2021",
                     "ttl": "-1",
                     "weight": "1"
                  },
                  {
                     "axfrVersion": "0",
                     "order": "2",
                     "rdata": "1.1.1.1",
                     "rrClass": "IN",
                     "rrType": "A",
                     "timestamp": "Sat Jan 16 21:31:48 2021",
                     "ttl": "-1",
                     "weight": "2"
                  },
                  {
                     "axfrVersion": "0",
                     "order": "0",
                     "rdata": "1001::",
                     "rrClass": "IN",
                     "rrType": "AAAA",
                     "timestamp": "Sat Jan 16 21:29:09 2021",
                     "ttl": "-1",
                     "weight": "1"
                  }
               ]
            },
            "tenantId": "0",
            "zone": "OID-00:00:00:00:00:00:00:82",
            "zoneOrigin": "cisco2.com."
      }
]
```

Get CCMRRSet Object By Name

Gets the Cisco Prime Network Registrar CCMRRSet object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet/rest_up_host2?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:31",
	"axfrVersion": "0",
	"hits": "0",
	"hostHealthCheck": "ping",
	"lastAccessTime": "none",
	"lastResetTime": "none",
	"name": "rest_up_host2",
	"protectedState": "unprotected",
	"rrList": {
	"CCMRRItem": [
	{
	"axfrVersion": "0",
	"order": "1",
	"rdata": "2.2.2.2",
	"rrClass": "IN",
	"rrType": "A",
	"timestamp": "Sat Jan 16 22:19:51 2021",
	"ttl": "-1",
	"weight": "1"
	},
	{
	"axfrVersion": "0",
	"order": "2",
	"rdata": "10.104.245.105",
	"rrClass": "IN",
	"rrType": "A",
	"timestamp": "Sat Jan 16 22:19:51 2021",
	"ttl": "-1",
	"weight": "2"
	}
	]
	},
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin": "cisco2.com."
	}

Modify CCMRRSet Object By Name

Modifies or creates the specified Cisco Prime Network Registrar CCMRRSet object.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet/rest_up_host1?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json

Request Body:	{
	"hostHealthCheck": "off",
	"lastAccessTime": "none",
	"lastResetTime": "none",
	"name": "rest_up_host1",
	"protectedState": "unprotected",
	"rrList": {
	"CCMRRItem": [
	{
	"order": "1",
	"rdata": "2.2.2.2",
	"rrClass": "IN",
	"rrType": "A",
	"weight": "1"
	},
	{
	"order": "2",
	"rdata": "10.104.245.105",
	"rrClass": "IN",
	"rrType": "A",
	"weight": "2"
	}
	]
	},
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin": "cisco2.com."
	}

Modify CCMRRSet Object List

Modifies or creates the specified list of Cisco Prime Network Registrar CCMRRSet objects.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:2f",
	"axfrVersion": "0",
	"hits": "0",
	"hostHealthCheck": "ping",
	"lastAccessTime": "none",
	"lastResetTime": "none",
	"name": "rest_up_host1",
	"protectedState": "unprotected",
	"rrList": {
	"CCMRRItem":

```
    [
            {
               "axfrVersion": "0",
               "order": "1",
               "rdata": "2.2.2.21",
               "rrClass": "IN",
               "rrType": "A",
               "timestamp": "Sat Jan 16 21:55:08 2021",
               "ttl": "-1",
               "weight": "1"
            },
            {
               "axfrVersion": "0",
               "order": "2",
               "rdata": "10.104.245.105",
               "rrClass": "IN",
               "rrType": "A",
               "timestamp": "Sat Jan 16 21:55:08 2021",
               "ttl": "-1",
               "weight": "2"
            }
         ]
      },
      "tenantId": "0",
      "zone": "OID-00:00:00:00:00:00:00:82",
      "zoneOrigin": "cisco2.com."
   },
   {
      "hostHealthCheck": "ping",
      "name": "rest_up_host2",
      "protectedState": "unprotected",
      "rrList": {
         "CCMRRItem": [
            {
               "order": "1",
               "rdata": "2.2.2.2",
               "rrClass": "IN",
               "rrType": "A",
               "ttl": "-1",
               "weight": "1"
            },
            {
               "order": "2",
               "rdata": "10.104.245.105",
               "rrClass": "IN",
               "rrType": "A",
               "ttl": "-1",
               "weight": "2"
            }
         ]
      },
      "tenantId": "0",
      "zone": "OID-00:00:00:00:00:00:00:82",
      "zoneOrigin": "cisco2.com."
   }
]
```


Delete CCMRRSet Object By Name

Deletes the specified Cisco Prime Network Registrar CCMRRSet object.

Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet/rest_up_host2?"zoneOrigin=cisco2.com.&viewId=2"

Delete CCMRRSet Object List Deletes the specified list of Cisco Prime Network Registrar CCMRRSet objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMRRSet?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json
Request Body:	[{"name": "p_h1"}, {"name": "u_h1"}, {"name": "rest_up_host1"}]

CCMHost

Defines a DNS host record. A CCMHost object is created for each protected name that includes at least one A or AAAA record. A CCMHost object can automatically maintain associated PTR and CNAME records.

Create CCMHost Object Creates a Cisco Prime Network Registrar CCMHost object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json

Request Body:	{
	"addrs": {
	"stringItem": [
	"2.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"2001::"
	]
	},
	"name": "rest_host2",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin":"cisco2.com."
	}

Get CCMHost List Gets the list of Cisco Prime Network Registrar CCMHost objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:93",
	"addrs": {
	"stringItem": [
	"1.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"1001::"
	]
	},
	"name": "rest_host1",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:94",
	"addrs": {
	"stringItem": [
	"2.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"2001::"
	]
	},
	"name": "rest_host2",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin": "cisco2.com."
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:95",
	"addrs": {
	"stringItem": [
	"3.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"3001::"
	]
	},
	"name": "rest_host3",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin": "cisco2.com."
	}
	]

Get CCMHost Object By Name

Gets the Cisco Prime Network Registrar CCMHost object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost/rest_host3?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:95",
	"addrs": {
	"stringItem": [
	"3.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"3001::"
	]
	},
	"name": "rest_host3",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin": "cisco2.com."
	}

Modify CCMHost Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMHost object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost/rest_host3?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json

Request Body:	{
	"addrs": {
	"stringItem": [
	"2.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"2001::"
	]
	},
	"name": "rest_host3",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin":"cisco2.com."
	}

Modify CCMHost Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMHost objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid":"OID-00:00:00:00:00:00:00:95",
	"addrs": {
	"stringItem": [
	"3.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"3001::"
	]
	},
	"name": "rest_host3",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin":"cisco2.com."
	},
	{
	"addrs": {
	"stringItem": [
	"3.0.0.1"
	]
	},
	"ip6AddressList": {
	"stringItem": [
	"4001::"
	]
	},
	"name": "rest_host4",
	"tenantId": "0",
	"zone": "OID-00:00:00:00:00:00:00:82",
	"zoneOrigin":"cisco2.com."
	}
	]

Delete CCMHost Object By Name Deletes the specified Cisco Prime Network Registrar CCMHost object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost/rest_host4?"zoneOrigin=cisco2.com.&viewId=2"
Delete CCMHost Object List Deletes the specified list of Cisco Prime Network Registrar CCMHost objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMHost?"zoneOrigin=cisco2.com.&viewId=2"
Header:	Content-Type:application/json
Request Body:	[{"objectOid": "OID-00:00:00:00:00:00:00:93"}, {"objectOid": "OID-00:00:00:00:00:00:00:94"}]

CCMSecondaryZone

Defines a secondary DNS zone.

Create CCMSecondaryZone Object

Creates a Cisco Prime Network Registrar CCMSecondaryZone object.

Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone
Header:	Content-Type:application/json

Request Body:	{
	"origin": "sec1.com.",
	"primaryServers": {
	"stringItem": [
	"10.104.245.109"
	]
	},
	"tenantId": "0",
	"viewId": "0"
	}

Get CCMSecondaryZone List

Gets the list of Cisco Prime Network Registrar CCMSecondaryZone objects.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:a1",
	"description": "sec1",
	"origin": "sec1.com.",
	"primaryServers": {
	"stringItem": [
	"10.104.245.109"
	]
	},
	"tenantId": "0",
	"viewId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:a2",
	"origin": "sec2.com.",
	"primaryServers": {
	"stringItem": [
	"10.104.245.109"
	]
	},
	"tenantId": "0",
	"viewId": "0"
	}
	]

Get CCMSecondaryZone Object By Name

Gets the Cisco Prime Network Registrar CCMSecondaryZone object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone/sec1.com.

Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:a1",
	"description": "sec1",
	"origin": "sec1.com.",
	"primaryServers": {
	"stringItem": [
	"10.104.245.109"
	]
	},
	"tenantId": "0",
	"viewId": "0"
	}

Modify CCMSecondaryZone Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMSecondaryZone object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone/sec1.com.
Header:	Content-Type:application/json

Request Body:	{
	"origin": "sec1.com.",
	"primaryServers": {
	"stringItem": [
	"10.104.245.109"
	]
	},
	"tenantId": "0",
	"viewId": "0",
	"description": "sec1"
	}

Modify CCMSecondaryZone Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMSecondaryZone objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone
Header:	Content-Type:application/json

Request Body:	<pre>[
	  {
	  "origin": "sec2.com.",
	  "primaryServers": {
	  "stringItem": [
	  "10.104.245.109"
	  ]
	  },
	  "tenantId": "0",
	  "viewId": "0"
	  },
	  {
	  "origin": "sec3.com.",
	  "primaryServers": {
	  "stringItem": [
	  "10.104.245.109"
	  ]
	  },
	  "tenantId": "0",
	  "viewId": "0"
	  }
	]</pre>

Delete CCMSecondaryZone Object By Name Deletes the specified Cisco Prime Network Registrar CCMSecondaryZone object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone/sec1.com.
Delete CCMSecondaryZone Object List Deletes the specified list of Cisco Prime Network Registrar CCMSecondaryZone objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMSecondaryZone
Header:	Content-Type:application/json

Request Body:	<pre>[
	  {"objectOid":"OID-00:00:00:00:00:00:00:a1"},
	  {"objectOid":"OID-00:00:00:00:00:00:00:a2"}
	]</pre>

CCMZoneTemplate

Defines a template used to create new primary DNS zones.

Create CCMZoneTemplate Object Creates a Cisco Prime Network Registrar CCMZoneTemplate object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate
Header:	Content-Type:application/json

Request Body:	{
	"defttl": "10h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	}

Get CCMZoneTemplate List Gets the list of Cisco Prime Network Registrar CCMZoneTemplate objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:93",
	"defttl": "1d16h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:94",
	"defttl": "1d16h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt1",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	}
	]

Get CCMZoneTemplate Object By Name Gets the Cisco Prime Network Registrar CCMZoneTemplate object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate/rest_zt
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:98",
	"defttl": "10h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	}

Modify CCMZoneTemplate Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMZoneTemplate object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate/rest_zt
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:98",
	"defttl": "20h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	}

Modify CCMZoneTemplate Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMZoneTemplate objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:98",
	"defttl": "40h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	},
	{
	"defttl": "40h",
	"expire": "1w",
	"minttl": "5m",
	"name": "rest_zt1",
	"ns": "ns",
	"person": "mail1",
	"refresh": "2h",
	"retry": "1w",
	"serial": "1",
	"soattl": "24h",
	"tenantId": "0"
	}
	]

Delete CCMZoneTemplate Object By Name Deletes the specified Cisco Prime Network Registrar CCMZoneTemplate object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate/zt
Delete CCMZoneTemplate Object List Deletes the specified list of Cisco Prime Network Registrar CCMZoneTemplate objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneTemplate
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:98"}, {"objectOid":"OID-00:00:00:00:00:00:00:99"}]

DnsView

DNS View Configuration Class.

Create DnsView Object Creates a Cisco Prime Network Registrar DnsView object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView

Header:	Content-Type:application/json

Request Body:	{
	"aclMatchClients": "10.104.245.108",
	"name": "rest_internal",
	"priority": "1",
	"tenantId": "0",
	"viewId": "2"
	}

Get DnsView List Gets the list of Cisco Prime Network Registrar DnsView objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:32",
	"name": "Default",
	"priority": "0",
	"tenantId": "0",
	"viewId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6d",
	"aclMatchClients": "10.104.245.107",
	"name": "rest_external",
	"priority": "2",
	"tenantId": "0",
	"viewId": "3"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6e",
	"aclMatchClients": "10.104.245.117",
	"name": "rest_external_1",
	"priority": "3",
	"tenantId": "0",
	"viewId": "4"
	}
	]

Get DnsView Object By Name Gets the Cisco Prime Network Registrar DnsView object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView/rest_external
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:6d",
	"aclMatchClients": "10.104.245.107",
	"name": "rest_external",
	"priority": "2",
	"tenantId": "0",
	"viewId": "3"
	}

Modify DnsView Object By Name

Modifies or creates the specified Cisco Prime Network Registrar DnsView object.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView/rest_external
Header:	Content-Type:application/json

Request Body:	{
	"aclMatchClients": "10.104.245.117",
	"name": "rest_external",
	"priority": "2",
	"tenantId": "0",
	"viewId": "3"
	}

Modify DnsView Object List

Modifies or creates the specified list of Cisco Prime Network Registrar DnsView objects.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid":"OID-00:00:00:00:00:00:00:6d",
	"aclMatchClients": "10.104.245.107",
	"name": "rest_external",
	"priority": "2",
	"tenantId": "0",
	"viewId": "3"
	},
	{
	"aclMatchClients": "10.104.245.117",
	"name": "rest_external_1",
	"priority": "3",
	"tenantId": "0",
	"viewId": "4"
	},
	{
	"aclMatchClients": "10.104.245.111",
	"name": "rest_external_2",
	"priority": "4",
	"tenantId": "0",
	"viewId": "5"
	}
	]

Delete DnsView Object By Name

Deletes the specified Cisco Prime Network Registrar DnsView object.

Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView/rest_external_2

Delete DnsView Object List

Deletes the specified list of Cisco Prime Network Registrar DnsView objects.

Method:	DELETE

Endpoint:	https://localhost:8443/web-services/rest/resource/DnsView
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6e"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:6b"
	}
	]

DnsForwarder

There may be multiple forward zones. For the forward zone the lists of nameservers is used to forward the queries to. The servers listed have to handle further recursion for the query. Thus, those servers are not authority servers, but are recursive servers too; the DNS caching server does not perform recursion itself for the forward zones, it lets the remote servers do it. Class IN is assumed. A forward-zone entry with name "." and a host or addr target will forward all queries to that other server (unless it can answer from the cache).

Create DnsForwarder Object Creates a Cisco Prime Network Registrar DnsForwarder object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder
Header:	Content-Type:application/json

Request Body:	{
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "66"
	}
	]
	},
	"name": ".",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}

Get DnsForwarder List Gets the list of Cisco Prime Network Registrar DnsForwarder objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:8b",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "66"
	}
	]
	},
	"name": ".",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:8d",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.220",
	"port": "53"
	}
	]
	},
	"name": "cisco.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}
	]

Get DnsForwarder Object By Name Gets the Cisco Prime Network Registrar DnsForwarder object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder/cisco.com.
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8d",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.220",
	"port": "53"
	}
	]
	},
	"name": "cisco.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}

Modify DnsForwarder Object By Name Modifies or creates the specified Cisco Prime Network Registrar DnsForwarder object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder/cisco.com.
Header:	Content-Type:application/json

Request Body:	<pre>{
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.220",
	"port": "53"
	}
	]
	},
	"name": "cisco.com",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}</pre>

Modify DnsForwarder Object List Modifies or creates the specified list of Cisco Prime Network Registrar DnsForwarder objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder
Header:	Content-Type:application/json

Request Body:	<pre>[
	{
	"objectOid":"OID-00:00:00:00:00:00:00:8d",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.220",
	"port": "853"
	}
	]
	},
	"name": "cisco.com",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	},
	{
	"objectOid":"OID-00:00:00:00:00:00:00:8b",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.220",
	"port": "853"
	}
	]
	},
	"name": ".",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}
	]</pre>

Delete DnsForwarder Object By Name Deletes the specified Cisco Prime Network Registrar DnsForwarder object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder/cisco.com.
Delete DnsForwarder Object List Deletes the specified list of Cisco Prime Network Registrar DnsForwarder objects.	
Method:	DELETE

Endpoint:	https://localhost:8443/web-services/rest/resource/DnsForwarder
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:7f",
	"viewId": "3"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:81",
	"viewId": "2"
	}
	]

DnsException

The resolution exception can be used to configure authoritative data to be used by the resolver that cannot be accessed using the public internet servers.

Create DnsException Object Creates a Cisco Prime Network Registrar DnsException object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException
Header:	Content-Type:application/json

Request Body:	{
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "66"
	}
	]
	},
	"name": "rest_zone1.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}

Get DnsException List Gets the list of Cisco Prime Network Registrar DnsException objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:8f",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone1.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:91",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone2.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:90",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone3.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}
	]

Get DnsException Object By Name Gets the Cisco Prime Network Registrar DnsException object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException/rest_zone1.com.
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8f",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone1.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}

Modify DnsException Object By Name

Modifies or creates the specified Cisco Prime Network Registrar DnsException object.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException/rest_zone1.com.
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8f",
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone1.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}

Modify DnsException Object List

Modifies or creates the specified list of Cisco Prime Network Registrar DnsException objects.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException
Header:	Content-Type:application/json

Request Body:	[
	{
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone3.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	},
	{
	"addr": {
	"DnsIPnPortItem": [
	{
	"addr": "10.104.245.212",
	"port": "853"
	}
	]
	},
	"name": "rest_zone2.com.",
	"tls": "enabled",
	"tlsAuthName": "cnr-cent72-4"
	}
	]

Delete DnsException Object By Name

Deletes the specified Cisco Prime Network Registrar DnsException object.

Method:	DELETE

Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException/rest_zone1.com.
Delete DnsException Object List Deletes the specified list of Cisco Prime Network Registrar DnsException objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/DnsException
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid":"OID-00:00:00:00:00:00:00:90"
	},
	{
	"objectOid":"OID-00:00:00:00:00:00:00:91"
	}
	]

CdnsRedirect

Defines a DNS Firewall rule.

Create CdnsRedirect Object Creates a Cisco Prime Network Registrar CdnsRedirect object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect
Header:	Content-Type:application/json

Request Body:	{
	"action": "rpz",
	"domains": {
	"stringItem": [
	"test.com."
	]
	},
	"name": "rest_rule1",
	"rpzServerAddrs": {
	"DnsIPnPortItem": [
	{
	"addr": "1.1.1.1"
	}
	]
	},
	"rpzTls": "true",
	"rpzTrigger": "query-name",
	"rpzZoneName": "test.com."
	}

Get CdnsRedirect List Gets the list of Cisco Prime Network Registrar CdnsRedirect objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:92",
	"aResponse": "1.1.1.1",
	"action": "redirect",
	"domains": {
	"stringItem": [
	"test.com."
	]
	},
	"name": "rest_rul1",
	"rpzServerAddrs": {
	"DnsIPnPortItem": [
	{
	"addr": "1.1.1.1"
	}
	]
	},
	"rpzTls": "true",
	"rpzTrigger": "query-name",
	"rpzZoneName": "test.com."
	},

	{
	"objectOid": "OID-00:00:00:00:00:00:00:96",
	"action": "refuse",
	"domains": {
	"stringItem": [
	"test.com."
	]
	},
	"name": "rest_rule3"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:97",
	"aResponse": "1.1.1.1",
	"action": "redirect",
	"domains": {
	"stringItem": [
	"test.com."
	]
	},
	"name": "rest_rule4"
	}
	]

Get CdnsRedirect Object By Name

Gets the Cisco Prime Network Registrar CdnsRedirect object by name.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect/rest_rule1
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:94",
	"action": "rpz",
	"domains": {
	"stringItem": [
	"test.com."
	]
	},
	"name": "rest_rule1",
	"rpzServerAddrs": {
	"DnsIPnPortItem": [
	{
	"addr": "1.1.1.1"
	}
	]
	},
	"rpzTls": "true",
	"rpzTrigger": "query-name",
	"rpzZoneName": "test.com."
	}

Modify CdnsRedirect Object By Name Modifies or creates the specified Cisco Prime Network Registrar CdnsRedirect object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect/rest_rule2
Header:	Content-Type:application/json

Request Body:	{
	"action": "drop",
	"name": "rest_rule2",
	"action":"drop","domains":{"stringItem":["test.com."]}
	}

Modify CdnsRedirect Object List Modifies or creates the specified list of Cisco Prime Network Registrar CdnsRedirect objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect
Header:	Content-Type:application/json

Request Body:	[
	{
	"action": "refuse",
	"name": "rest_rule3",
	"domains":{"stringItem":["test.com."]}
	},
	{
	"action": "redirect",
	"name": "rest_rule4",
	"domains":{"stringItem":["test.com."]},
	"aResponse":"1.1.1.1"
	}
	]

Delete CdnsRedirect Object By Name Deletes the specified Cisco Prime Network Registrar CdnsRedirect object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect/rest_rule1

Delete CdnsRedirect Object List Deletes the specified list of Cisco Prime Network Registrar CdnsRedirect objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CdnsRedirect
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid":"OID-00:00:00:00:00:00:00:95"
	},
	{
	"objectOid":"OID-00:00:00:00:00:00:00:96"
	},
	{
	"objectOid":"OID-00:00:00:00:00:00:00:97"
	}
	]

CCMCluster

Defines a server cluster. A CCMCluster object contains the configuration data associated with the cluster, including remote connection information such as IP address, port, admin, and password.

Create CCMCluster Object Creates a Cisco Prime Network Registrar CCMCluster object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster
Header:	Content-Type:application/json

Request Body:	{
	"httpsPort": "8443",
	"ipaddr": "10.104.245.117",
	"licensedServices": "dhcp,dns",
	"name": "backup",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required",
	"admin": "admin",
	"password": "changeme"
	}

Get CCMCluster List Gets the list of Cisco Prime Network Registrar CCMCluster objects.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:a5",
	"admin": "admin",
	"clusterId": "4",
	"httpsPort": "8443",
	"ipaddr": "10.104.245.117",
	"licensedServices": "dns",
	"name": "backup",
	"passwordSecret": "00:00:00:00:00:00:00:a4",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:05",
	"clusterId": "1",
	"httpsPort": "8443",
	"ipaddr": "10.104.245.211",
	"licensedServices": "dhcp,dns",
	"name": "localhost",
	"productVersion": "11.1.0",
	"remoteId": "1",
	"scpPort": "1234",
	"sharedSecret": "00:00:00:00:00:00:00:4d",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:44",
	"clusterId": "2",
	"ipaddr": "10.104.245.108",
	"name": "regional-629e15a0-e9e6-49b1-b97d-7fe280252f61",
	"remoteId": "2",
	"scpPort": "1244",
	"sharedSecret": "00:00:00:00:00:00:00:60",
	"tenantId": "0"
	}
	]

Get CCMCluster Object By Name Gets the Cisco Prime Network Registrar CCMCluster object by name.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster/backup
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:a5",
	"admin": "admin",
	"clusterId": "4",
	"httpsPort": "8443",
	"ipaddr": "10.104.245.117",
	"licensedServices": "dhcp,dns",
	"name": "backup",
	"passwordSecret": "00:00:00:00:00:00:00:a4",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	}

Modify CCMCluster Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMCluster object.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster/backup
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:a5",
	"admin": "admin",
	"clusterId": "4",
	"httpsPort": "8443",
	"ipaddr": "10.104.245.117",
	"licensedServices": "dhcp",
	"name": "backup",
	"passwordSecret": "00:00:00:00:00:00:00:a4",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	}

Modify CCMCluster Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMCluster objects.	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:a5",
	"admin": "admin",
	"clusterId": "4",
	"httpsPort": "8443",
	"ipaddr": "10.104.245.117",
	"licensedServices": "dns",
	"name": "backup",
	"passwordSecret": "00:00:00:00:00:00:00:a4",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	},
	{
	"admin": "admin",
	"httpsPort": "8443",
	"ipaddr": "1.1.1.1",
	"licensedServices": "dns",
	"name": "rest_cluster1",
	"password": "changeme",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	},
	{
	"admin": "admin",
	"httpsPort": "8443",
	"ipaddr": "2.2.2.1",
	"licensedServices": "dns",
	"name": "rest_cluster2",
	"password": "changeme",
	"scpPort": "1234",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	}
	]

Delete CCMCluster Object By Name Deletes the specified Cisco Prime Network Registrar CCMCluster object.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster/backup
Delete CCMCluster Object List Deletes the specified list of Cisco Prime Network Registrar CCMCluster objects.	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMCluster
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:a9"}, {"objectOid":"OID-00:00:00:00:00:00:00:aa"}]

CCMFailoverPair

Defines a DHCP failover pair.

Create CCMFailoverPair Object

Creates a Cisco Prime Network Registrar CCMFailoverPair object.

Method:	POST
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair
Header:	Content-Type:application/json

Request Body:	{
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "fo_chn_hyd",
	"tenantId": "0"
	}

Get CCMFailoverPair List

Gets the list of Cisco Prime Network Registrar CCMFailoverPair objects.

Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:7d",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"mclt": "10m",
	"name": "fo_chn_hyd",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:7e",
	"backup": "OID-00:00:00:00:00:00:00:51",
	"main": "OID-00:00:00:00:00:00:00:4e",
	"name": "fo_ngpr_luknw",
	"tenantId": "0"
	}
	]

Get CCMFailoverPair Object By Name

Gets the Cisco Prime Network Registrar CCMFailoverPair object by name.

Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair/fo_chn_hyd
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:7d",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "fo_chn_hyd",
	"tenantId": "0"
	}

Modify CCMFailoverPair Object By Name

Modifies or creates the specified Cisco Prime Network Registrar CCMFailoverPair object.

Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair/fo_chn_hyd
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:7d",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "fo_chn_hyd",
	"tenantId": "0",
	"mclt": "30m"
	}

Modify CCMFailoverPair Object List

Modifies or creates the specified list of Cisco Prime Network Registrar CCMFailoverPair objects.

Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:7d",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "fo_chn_hyd",
	"tenantId": "0",
	"mclt": "10m"
	},
	{
	"backup": "OID-00:00:00:00:00:00:00:51",
	"main": "OID-00:00:00:00:00:00:00:4e",
	"name": "fo_ngpr_luknw",
	"tenantId": "0",
	"load-balancing": "true"
	}
	]

Modify CCMFailoverPair Object By Name (sync)

Modifies or creates the specified Cisco Prime Network Registrar CCMFailoverPair object.

Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair/fo_chn_hyd?"action=sync&mode=update&direction=from-backup"
Header:	Content-Type:application/json

Request Body:	{
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "fo_chn_hyd",
	"tenantId": "0",
	"mclt": "30m"
	}

Delete CCMFailoverPair Object By Name Deletes the specified Cisco Prime Network Registrar CCMFailoverPair object.	
Method:	DELETE
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair/fo_chn_hyd
Delete CCMFailoverPair Object List Deletes the specified list of Cisco Prime Network Registrar CCMFailoverPair objects.	
Method:	DELETE
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:7d"}, {"objectOid":"OID-00:00:00:00:00:00:00:7e"}]

CCMHaDnsPair

A High-Availability (HA) DNS pair.

Create CCMHaDnsPair Object Creates a Cisco Prime Network Registrar CCMHaDnsPair object.	
Method:	POST
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair
Header:	Content-Type:application/json

Request Body:	{
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "ha_chn_hyd",
	"tenantId": "0"
	}

Get CCMHaDnsPair List Gets the list of Cisco Prime Network Registrar CCMHaDnsPair objects.	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:82",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "ha_chn_hyd",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:83",
	"backup": "OID-00:00:00:00:00:00:00:51",
	"main": "OID-00:00:00:00:00:00:00:4e",
	"name": "ha_ngpr_lucknw",
	"tenantId": "0"
	}
	]

Get CCMHaDnsPair Object By Name Gets the Cisco Prime Network Registrar CCMHaDnsPair object by name.	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair/ha_chn_hyd
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:82",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "ha_chn_hyd",
	"tenantId": "0"
	}

Modify CCMHaDnsPair Object By Name Modifies or creates the specified Cisco Prime Network Registrar CCMHaDnsPair object.	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair/ha_chn_hyd
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:82",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "ha_chn_hyd",
	"tenantId": "0",
	"haDnsMainAddress": "10.104.245.211",
	"haDnsBackupAddress": "10.104.245.212"
	}

Modify CCMHaDnsPair Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMHaDnsPair objects.	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair
Header:	Content-Type:application/json

Request Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:82",
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "ha_chn_hyd",
	"tenantId": "0"
	},
	{
	"backup": "OID-00:00:00:00:00:00:00:51",
	"main": "OID-00:00:00:00:00:00:00:4e",
	"name": "ha_ngpr_lucknw",
	"tenantId": "0"
	}
	]

Delete CCMHaDnsPair Object By Name Deletes the specified Cisco Prime Network Registrar CCMHaDnsPair object.	
Method:	DELETE
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair/ha_chn_hyd
Delete CCMHaDnsPair Object List Deletes the specified list of Cisco Prime Network Registrar CCMHaDnsPair objects.	
Method:	DELETE
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair
Header:	Content-Type:application/json
Request Body:	[{"objectOid":"OID-00:00:00:00:00:00:00:82"}, {"objectOid":"OID-00:00:00:00:00:00:00:83"}]

CCMZoneDistribution

Defines the distribution map for a set of primary zones.

Create CCMZoneDistribution Object Creates a Cisco Prime Network Registrar CCMZoneDistribution object.	
Method:	POST
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution
Header:	Content-Type:application/json

Request Body:	{
	"name": "zd_ngpr_lucknw",
	"primary": "OID-00:00:00:00:00:00:00:86",
	"primaryServers": {
	"stringItem": [
	"10.104.245.130",
	"10.104.245.117"
	]
	},
	"tenantId": "0"
	}

Get CCMZoneDistribution List

Gets the list of Cisco Prime Network Registrar CCMZoneDistribution objects.

Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution
Header:	Accept:application/json

Response Body:	[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:39",
	"name": "Default",
	"primary": "OID-00:00:00:00:00:00:00:85",
	"tenantId": "0"
	},
	{
	"objectOid": "OID-00:00:00:00:00:00:00:8d",
	"name": "zd_ngpr_lucknw",
	"primary": "OID-00:00:00:00:00:00:00:86",
	"primaryServers": {
	"stringItem": [
	"10.104.245.130",
	"10.104.245.117"
	]
	},
	"tenantId": "0"
	}
	]

Get CCMZoneDistribution Object By Name

Gets the Cisco Prime Network Registrar CCMZoneDistribution object by name.

Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution/zd_ngpr_lucknw
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8d",
	"name": "zd_ngpr_lucknw",
	"primary": "OID-00:00:00:00:00:00:00:86",
	"primaryServers": {
	"stringItem": [
	"10.104.245.130",
	"10.104.245.117"
	]
	},
	"tenantId": "0"
	}

Modify CCMZoneDistribution Object By Name

Modifies or creates the specified Cisco Prime Network Registrar CCMZoneDistribution object.

Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/CCMZoneDistribution/Default
Header:	Content-Type:application/json

Request Body:	<pre>{
	"objectOid": "OID-00:00:00:00:00:00:00:39",
	"name": "Default",
	"primary": "OID-00:00:00:00:00:00:00:85",
	"primaryServers": {
	"stringItem": [
	"10.104.245.211",
	"10.104.245.212"
	]
	},
	"tenantId": "0"
	}</pre>

Modify CCMZoneDistribution Object List Modifies or creates the specified list of Cisco Prime Network Registrar CCMZoneDistribution objects.	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution
Header:	Content-Type:application/json

Request Body:	<pre>[
	{
	"objectOid": "OID-00:00:00:00:00:00:00:39",
	"name": "Default",
	"primary": "OID-00:00:00:00:00:00:00:85",
	"primaryServers": {
	"stringItem": [
	"10.104.245.211",
	"10.104.245.212"
	]
	},
	"tenantId": "0"
	},
	{
	"name": "zd_ngpr_lucknw",
	"primary": "OID-00:00:00:00:00:00:00:86",
	"primaryServers": {
	"stringItem": [
	"10.104.245.130",
	"10.104.245.117"
	]
	},
	"tenantId": "0"
	}
	]</pre>

Delete CCMZoneDistribution Object By Name Deletes the specified Cisco Prime Network Registrar CCMZoneDistribution object.	
Method:	DELETE
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution/zd_ngpr_lucknw
Delete CCMZoneDistribution Object List Deletes the specified list of Cisco Prime Network Registrar CCMZoneDistribution objects.	
Method:	DELETE
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution
Header:	Content-Type:application/json

Request Body:	<pre>[
	  {"objectOid":"OID-00:00:00:00:00:00:00:8e"}
	]</pre>

Special Functions

Special operations such as 'getNextAddress' and basic actions like 'reload server' require custom logic for the given class. These are identified by the 'action' parameter, and may be further qualified by specific keywords that specify input parameters. Abbreviated forms that are accepted for certain keywords are shown in parentheses. Default values generally apply for any input parameters, and invalid combinations return a 'bad request' error with an error message describing the issue. For example, if the 'reloadServer' action is requested for the Scope class, this will be rejected as a bad request, with an error message stating the action is not supported for that class.

reloadServer (reload)

PUT /web-services/rest/resource/*serverClassName***?action=reloadServer**

Accept: application/xml, application/json

The reloadServer action is supported for the DHCPServer, DNSServer, and DNSCachingServer classes. No additional parameters will apply for this action. If no data input is specified, the named server is reloaded. Otherwise, the server object is modified before issuing the reload command.

Example:

Get DNSServer Object	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/resource/DNSServer
Header:	Content-Type:application/json

Response Body:	<pre>{
	  "objectOid": "OID-00:00:00:00:00:00:00:07",
	  "activityCounterLogSettings":
	"performance,query,errors,maxcounters,system,cache,update",
	  "name": "DNS"
	}</pre>

Modify DNSServer Object By Name	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/DNSServer?action=reloadServer
Header:	Content-Type:application/json

Request Body:	<pre>{
	  "objectOid": "OID-00:00:00:00:00:00:00:07",
	  "activityCounterLogSettings":
	"performance,query,errors,maxcounters,system,cache,update",
	  "minimalResponses" : "true",
	  "name": "DNS"
	}</pre>

runSync (sync)

PUT /web-services/rest/resource/*syncClassName***/***objectName***?action=runSync**

Accept: application/xml, application/json

The runSync action is supported for the CCMFailoverPair, CCMHaDnsPair, and CCMZoneDistribution classes. If no data input is specified the named object is synchronized. Otherwise, the input object is modified before running the sync. By default, the sync is done in complete mode. The mode parameter may be used to specify update or exact mode. For DHCP failover and DNS HA pair sync, the default sync direction is from main. The direction parameter may be used to specify sync from backup.

Modify CCMFailoverPair Object By Name	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair/fo_chn_hyd?"action=sync&mode=update&direction=from-backup"
Header:	Content-Type:application/json

Request Body:	{
	"backup": "OID-00:00:00:00:00:00:00:65",
	"main": "OID-00:00:00:00:00:00:00:5b",
	"name": "fo_chn_hyd",
	"tenantId": "0",
	"mclt": "30m"
	}

Modify CCMHaDnsPair Object By Name	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMHaDnsPair/ha_chn_hyd?"action=sync&mode=exact&direction=from-backup"
Header:	Content-Type:application/json

Request Body:	{
	"backup": "OID-00:00:00:00:00:00:00:57",
	"main": "OID-00:00:00:00:00:00:00:05",
	"name": "ha_chn_hyd",
	"tenantId": "0",
	"haDnsMainAddress": "10.104.245.211",
	"haDnsBackupAddress": "10.104.245.212"
	}

Modify CCMZoneDistribution Object By Name	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution/zd_ngpr_lucknw?"action=sync&mode=exact"
Header:	Content-Type:application/json

Request Body:	{
	"name": "zd_ngpr_lucknw",
	"primary": "OID-00:00:00:00:00:00:00:86",
	"primaryServers": {
	"stringItem": [
	"10.104.245.130",
	"10.104.245.117"
	]
	},
	"tenantId": "0"
	}

Cluster Sync

Sync action support has been added for cluster objects. This action is required whenever admin credentials or licensed services are changed. This action is available only in regional cluster.

Modify CCMCluster Object By Name	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMCluster/*clustername*?action=sync
Header:	Content-Type:application/json

Request Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:54",
	"admin": "admin",
	"clusterId": "2",
	"httpsPort": "8443",
	"ip6Address": "::",
	"ipaddr": "10.104.245.211",
	"licensedServices": "dhcp,dns",
	"name": "cnr-cent72-3",
	"passwordSecret": "00:00:00:00:00:00:00:88",
	"productVersion": "11.1.0",
	"remoteId": "2",
	"replicationInitialized": "true",
	"scpPort": "1234",
	"sharedSecret": "00:00:00:00:00:00:00:ae",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	}

pushToLocal (push)

PUT /web-services/rest/resource/*className***?action=pushToLocal&localCluster=***clusterName***

Accept: application/xml, application/json

PUT /web-services/rest/resource/*className***/***objectName***?action=pushToLocal&localCluster=***clusterName***

Accept: application/xml, application/json

The pushToLocal action is supported on the regional server for all list classes with corresponding regional and local storage. Note that child classes do NOT support independent push. These are only pushed when the parent object (that is, zone, subnet, or prefix) is pushed. If no data input is specified, the current regional list, or the named object are pushed to the specified local cluster(s). Otherwise, the input objects are modified on regional if necessary, and then pushed to the local cluster. By default, the push is done in replace mode. The mode parameter may be used to specify ensure or exact mode. However, exact mode can only be used when pushing a list of objects. The localCluster (cluster) parameter must specify at least one destination server.

Example:

pushToLocal	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMScopeTemplate? "action=pushToLocal&localCluster={*server1*,*server2*}&mode=exact"
Header:	Content-Type:application/json

Request Body:	[
	{
	"name": "Rest_Scope_template_1",
	"policy": "default",
	"rangesExpr": "(create-range 1 10)",
	"scopeName": "(concat \"ISP-\" subnet)",
	"tenantId": "0"
	}
	]

Response Body:	[1/2]: https://localhost:8453/web-services/rest/resource/CCMScopeTemplate?action=pushToLocal&localCluster=*server1*&mode=exact --> <stdout> --_curl_--https://localhost:8453/web-services/rest/resource/CCMScopeTemplate?action=pushToLocal&localCluster=*server1*&mode=exact [2/2]: https://localhost:8453/web-services/rest/resource/CCMScopeTemplate?action=pushToLocal&localCluster=*server2*&mode=exact --> <stdout> --_curl_--https://localhost:8453/web-services/rest/resource/CCMScopeTemplate?action=pushToLocal&localCluster=*server2*&mode=exact

applyTemplate

You can apply templates to scopes, zones, prefixes, and links using the REST API. These can be applied to new or existing configuration objects using the applyTemplate action. Also, general template support is added for other types of configuration objects. For more information, see the *Cisco Prime Network Registrar 11.2 REST APIs Reference Guide*.

Apply Template Using Pre-exisitng Zone	
Method:	POST
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZone?"action=applyTemplate&template=rest_zone1.com."
Header:	Content-Type:application/json

Request Body:	{
	"origin": "rest_zone2.com."
	}

Apply Template Using Scope Template	
Method:	PUT
Endpoint:	https://localhost:8453/web-services/rest/resource/Scope/rest_scope_2?"action=applyTemplate&scopeTemplate=rest_st"
Header:	Content-Type:application/json

Request Body:	{
	"name": "rest_scope_2",
	"subnet": "2.0.0.0/24"
	}

getLocalServer

GET /web-services/rest/resource/*syncClassName***/LocalServer?searchParam=***value***

Content-Type: application/xml, application/json

The getLocalServer action is available on regional clusters to identify the local cluster or pair for a given address, scope, prefix, FQDN, or primary zone. It is supported for the CCMCluster, CCMFailoverPair, CCMHaDnsPair, and CCMZoneDistribution classes. If a requested cluster is part of a pair, the main cluster is returned. If the parent cluster is not part of a requested pair or zone distribution, or a parent cluster is not found, a 'not found' error is returned.

Because this request is a GET action, the reserved resource 'LocalServer' is used to specify the action in place of the action parameter. If no search parameter is given, the request is interpreted as a getObjectByName request.

The set of search parameter keywords supported are:

Keyword	Value
address	IP v4 or v6 address or subnet
vpnId	VPN identifier for addresses in a VPN
scope	Scope name
prefix	Prefix name
link	Link name
fqdn	Zone or RR name
viewID	View identifier for zones or FQDNs in a view

If the specified keyword is not valid for the requested class, a 'bad request' error will be returned.

Example:

Get Local Server using CCMCluster (by Address)	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMCluster/LocalServer?address=20.0.0.0
Header:	Accept:application/json
Get Local Server using CCMCluster (by Scope)	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMCluster/LocalServer?scope=ISP-10.0.0.0-24
Header:	Accept:application/json
Get Local Server using CCMCluster (by Prefix)	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMCluster/LocalServer?prefix=p2
Header:	Accept:application/json
Get Local Server using CCMCluster (by FQDN)	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMCluster/LocalServer?fqdn=zone10.com.
Header:	Accept:application/json

Response Body (for all the above operations):	{
	"objectOid": "OID-00:00:00:00:00:00:00:6b",
	"admin": "admin",
	"clusterId": "4",
	"httpsPort": "8443",
	"ip6Address": "2001:420:54ff:13::403:37",
	"ipaddr": "10.104.245.117",
	"licensedServices": "dhcp,dns",
	"name": "cnr-rhel81-2",
	"passwordSecret": "00:00:00:00:00:00:00:6a",
	"productVersion": "11.1.0",
	"remoteId": "2",
	"replicationInitialized": "true",
	"scpPort": "1234",
	"sharedSecret": "00:00:00:00:00:00:00:9e",
	"tenantId": "0",
	"useHttpsPort": "true",
	"useSsl": "required"
	}

Get Local Server using CCMFailoverPair (by address)	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMFailoverPair/LocalServer?address=10.0.0.0
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8b",
	"backup": "OID-00:00:00:00:00:00:00:75",
	"main": "OID-00:00:00:00:00:00:00:6b",
	"name": "pair2",
	"scopetemplate": "OID-00:00:00:00:00:00:00:86",
	"tenantId": "0"
	}

Get Local Server using CCMZoneDistribution (by fqdn)	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/resource/CCMZoneDistribution/LocalServer?fqdn=zone1.com.
Header:	Accept:application/json

Response Body:	{
	"objectOid": "OID-00:00:00:00:00:00:00:8e",
	"name": "zd_1",
	"primary": "OID-00:00:00:00:00:00:00:89",
	"primaryServers": {
	"stringItem": [
	"10.104.245.211",
	"10.104.245.212"
	]
	},
	"tenantId": "0"
	}

Advanced APIs

Following are some of the advanced APIs in Cisco Prime Network Registrar:

Lease Actions

You can activate or deactivate a lease using the REST API. The v4 and v6 leases can be activated, deactivated, and forced available using the deactivate, activate, and forceAvailable actions respectively. The v6 lease can also be forced available using the reconfigure action.

Example:

getNextAddress

POST /web-services/rest/resource/*addressClassName***?action=getNextAddress&param=***value***

The getNextAddress action is supported for the Reservation, Lease, Reservation6, and Lease6 classes. The action is valid for the class resource and must specify a client identifier, and either a specific scope/prefix by name or the parent subnet/prefix address and vpnId, if applicable. When the specific scope or prefix is not specified, the clientClass parameter is supported to target a specific address type. The prefixLength parameter may also be used for PD prefixes.

If the specified scope or prefix name is not found, a 'not found' error with the EX_REF_NOTFOUND error code is returned. If no suitable address range is configured for a specified parent address or client class, a 'not found' error is returned with the AX_DHCP_NO_CONFIGURED_RANGE error code. If configured, but no addresses are available, a 'server' error is returned with the AX_DHCP_NO_MORE_ADDRESSES error code indicating no addresses are available. Semantically incorrect input parameters report AX_SCP_INVALID_REQUEST.

If the DHCP server finds an address, the location for the corresponding Lease, Reservation, Lease6, or Reservation6 object is returned. The lease time for the lease is the default value for whatever policy is used. Note that when failover is employed, the first lease time is always the MCLT (typically one hour). When a reservation is allocated it will be persisted in the CCM database. If failover is configured, the reservation is be added to the partner, provided the partner server is running and reachable. If the partner update fails, the client must retry the update or run failover sync to ensure the reservation is configured on both servers.

The set of parameter keywords supported are:

Keyword	Value
clientId	Client identifier or v6 duid
parentAddress (address)	IP v4 subnet or v6 prefix/link address
vpnId	VPN identifier for addresses in a VPN
clientClass	Client class for this address
hostName (host)	Host name for this address
domainName (domain)	Domain name for this address host name
scopeName (scope)	Scope name
prefixName (prefix)	Prefix name
prefixLength (length)	For PD prefixes, the length to be allocated, or 0 if the server should determine the length.

If the specified keyword is not valid for the requested class, a 'bad request' error is returned.

Note that POST parameters may be submitted in a form or specified in the request.

Example:

Create Lease Object Creates a Cisco Prime Network Registrar Lease object.	
Method:	POST

Endpoint:	https://localhost:8443/web-services/rest/resource/Lease?"clientId=1,6,01:01:01:01:01:01:01&scope=ISP-1.0.0.0-24"
Header:	Accept: application/x-www-form-urlencoded
Response Header:	`Location: https://localhost:8443/web-services/rest/resource/Lease/1.0.0.1`
Get Next Available Lease Object Creates a Network Registrar Lease object with the next available address.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Lease? "clientId=1,6,01:01:01:01:01:01:05&address=1.0.0.0&hostName=test&domainName=zone.com."
Header:	Accept: application/x-www-form-urlencoded
Create Lease6 Object Creates a Cisco Prime Network Registrar Lease6 object.	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Lease6?"clientId=00:01:00:03:02:02:02:02:02:02:02&address=1001::"
Header:	Accept: application/x-www-form-urlencoded
Response Header:	`Location: https://localhost:8443/web-services/rest/resource/Lease6/1001::515c:2c0b:233e:9867`
Create Reservation and Obtain Lease	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Reservation? "action=getNextAddress&ClientId=1,6,02:02:02:02:02:03&address=1.0.0.0"
Header:	Content-Type:application/json

Request Body:	`{`
	`"ipaddr": "1.0.0.110",`
	`"lookupKey": "01:03:02:02:02:02:02:03",`
	`"lookupKeyType": "9",`
	`"scope": "ISP-1.0.0.0-24",`
	`"tenantId": "0",`
	`"vpnId": "0"`
	`}`

Response Header:	`Location: https://localhost:8443/web-services/rest/resource/Reservation/1.0.0.132`
Create Reservation6 and Obtain Lease6	
Method:	POST
Endpoint:	https://localhost:8443/web-services/rest/resource/Reservation6? "action=getNextAddress&clientId=01:01:01:03:01:01:01:01:01:02&address=1001::1002"
Header:	Content-Type:application/json

Request Body:	<pre>{
	"ip6Address": "1001::1002",
	"lookupKey": "01:01:01:03:01:01:01:01:01:02",
	"lookupKeyType": "7",
	"prefix": "p1",
	"tenantId": "0",
	"vpnId": "0"
	}</pre>

Response Header:	Location: https://localhost:8443/web-services/rest/resource/Reservation6/1001::3c32:5923:e494:ea71

Modify Lease

Modify Lease Object By Name	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Lease/1.0.0.131?action=deactivate
Header:	Accept:application/json
Release Lease Object by Name	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Lease/1.0.0.131?action=forceAvailable
Header:	Accept:application/json

releaseAddress

DELETE /web-services/rest/resource/*addressClassName***/address?action=releaseAddress**

The releaseAddress action is supported for the Reservation, Lease, Reservation6, and Lease6 classes. The action will force-available the specified address in the DHCP server. If the specified address is not found, a 'not found' error is returned.

If a reservation exists, it is deleted from the CCM database on that server. If failover is configured, the reservation is also removed from the partner, provided the partner server is running and reachable. If the partner update fails, the client must retry the update or run failover sync to ensure the reservation is removed on both servers.

Example:

Release Lease	
Method:	PUT
Endpoint:	https://localhost:8443/web-services/rest/resource/Lease/1.0.0.128?action=releaseAddress
Header:	Accept:application/json
Release Lease6	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Lease6/1001::515c:2c0b:233e:9867
Header:	Accept:application/json
Delete Reservation and Release Lease	
Method:	DELETE

Endpoint:	https://localhost:8443/web-services/rest/resource/Reservation/1.0.0.132?action=releaseAddress
Header:	Accept:application/json
Delete Reservation6 and Release Lease6	
Method:	DELETE
Endpoint:	https://localhost:8443/web-services/rest/resource/Reservation6/ 1001::3c32:5923:e494:ea71?action=releaseAddress
Header:	Accept:application/json

Server Statistics

GET /web-services/rest/stats/*serverClassName*

Content-Type: application/xml, application/json

GET /web-services/rest/stats/*serverClassName***?nrClass=***extStatsClassName*

Content-Type: application/xml, application/json

Stats is supported for the DHCPServer, DNSServer, and DNSCachingServer classes and returns the basic stats for each server or the extended total stats object if a specific class is specified by the 'nrClass' parameter. If the requested class is not valid for the specified server class, a 'bad request' error is returned.

Example:

DHCPServer

Optional classes that can be requested are: CCMServerInfo, DHCP6Stats, DHCPFailoverStats, DHCPServerActivityStats, DHCPTopUtilizedStats, ServerSystemsStats

Get DHCP Server Stats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPServer
Header:	Accept:application/json

Response Body:	{
	"sampleDeltaTime": "60s",
	"sampleEndTime": "Mon Mar 22 18:31:16 2021",
	"serverReloadTime": "Mon Mar 22 18:09:17 2021",
	"serverStartTime": "Mon Mar 22 18:09:17 2021",
	"serverUpTime": "22m7s",
	"startTime": "Mon Mar 22 18:09:17 2021",
	"startTimeStr": "Mon Mar 22 18:09:17 2021",
	"statisticsRequestTime": "Mon Mar 22 18:31:24 2021",
	"statisticsResetTime": "Mon Mar 22 18:09:17 2021",
	"totalAcks": "5",
	"totalDeclines": "0",
	"totalDiscovers": "5",
	"totalNaks": "0",
	"totalOffers": "5",
	"totalReleases": "0",
	"totalRequests": "5"
	}

Get DHCPFailoverStats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPServer?nrClass=DHCPFailoverStats
Header:	Accept:application/json

Response Body:	{
	"bindingAcksReceived": "260",
	"bindingAcksSent": "0",
	"bindingNaksReceived": "0",
	"bindingNaksSent": "0",
	"bindingUpdatesReceived": "0",
	"bindingUpdatesSent": "260",
	"connectAcksReceived": "1",
	"connectAcksSent": "0",
	"connectionsTerminatedByPartner": "0",
	"connectionsTerminatedByServer": "0",
	"connectsReceived": "0",
	"connectsSent": "1",
	"contactsReceived": "98",
	"contactsSent": "97",
	"decayingMaxRequestBuffersInUse": "1",
	"discardedMessages": "0",
	"disconnectsReceived": "0",
	"disconnectsSent": "0",
	"failedConnections": "0",
	"invalidConnections": "0",
	"invalidMessagesReceived": "0",
	"packetsReceived": "375",
	"packetsSent": "374",
	"poolRequestsReceived": "3",
	"poolResponsesSent": "3",
	"requestBuffersAllocated": "239",
	"requestBuffersInUse": "0",
	"stateReceived": "3",
	"stateSent": "3",
	"successfulConnections": "1",
	"unavailableRequests": "0",
	"updateDoneReceived": "1",
	"updateDoneSent": "2",
	"updateRequestsReceived": "1",
	"updateRequestsSent": "0",
	"v6BindingAcksReceived": "5",
	"v6BindingAcksSent": "0",
	"v6BindingNacksReceived": "0",
	"v6BindingNacksSent": "0",
	"v6BindingUpdatesReceived": "0",
	"v6BindingUpdatesSent": "5",
	"v6PoolRequestsReceived": "1",
	"v6PoolRequestsSent": "0",
	"v6PoolResponsesReceived": "0",
	"v6PoolResponsesSent": "1",
	"v6UpdateDoneReceived": "1",
	"v6UpdateDoneSent": "2",
	"v6UpdateRequestsReceived": "1",
	"v6UpdateRequestsSent": "0"
	}

DHCPRelatedServer

DHCP Related Server classes are: DNSRelatedServer, FailoverRelatedServer, LDAPRelatedServer, RelayAgentState, TCPConnectionRelatedServer, TCPListenerRelatedServer, DHCPRenewalData

Example:

Get DNS Related Server Status	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPRelatedServer?nrClass=DNSRelatedServer
Header:	Accept:application/json

Response Body:	[
	{
	"acknowledgedRequests": "0",
	"commState": "none",
	"currentTime": "Mon Mar 22 19:36:13 2021",
	"deactivatedCount": "0",
	"dnsServerFlags": "used-in-ha-pair,init-reply-time",
	"dnsServerState": "PROBE",
	"dnsTimeout": "6",
	"haDnsFailoverTimeout": "30",
	"haDnsProbeRetry": "1",
	"haDnsProbeTimeout": "2",
	"haDnsRole": "HA-MAIN",
	"inFlightRequests": "0",
	"ipaddr": "10.104.245.211",
	"lastHaDnsRoleSwitchTime": "Mon Mar 22 19:33:56 2021",
	"lastProbeSentTime": "Mon Mar 22 19:33:56 2021",
	"lastReplyReceivedTime": "Mon Mar 22 19:33:56 2021",
	"maxDnsRetries": "3",
	"maxRequests": "20",
	"requests": "0",
	"serverDeactivatedCount": "0",
	"timedOutRequests": "0"
	},
	{
	"acknowledgedRequests": "0",
	"commState": "none",
	"currentTime": "Mon Mar 22 19:36:13 2021",
	"deactivatedCount": "0",
	"dnsServerFlags": "used-in-ha-pair,init-reply-time",
	"dnsServerState": "PROBE",
	"dnsTimeout": "6",
	"haDnsFailoverTimeout": "30",
	"haDnsProbeRetry": "1",
	"haDnsProbeTimeout": "2",
	"haDnsRole": "HA-BACKUP",
	"inFlightRequests": "0",
	"ipaddr": "10.104.245.212",
	"lastHaDnsRoleSwitchTime": "Mon Mar 22 19:33:56 2021",
	"lastProbeSentTime": "Mon Mar 22 19:33:56 2021",
	"lastReplyReceivedTime": "Mon Mar 22 19:33:56 2021",
	"maxDnsRetries": "3",
	"maxRequests": "20",
	"requests": "0",
	"serverDeactivatedCount": "0",
	"timedOutRequests": "0"
	}
	]

DNSServer

Optional classes that can be requested are: CCMServerInfo, DNSServerDBStats, DNSServerErrorsStats, DNSServerHaStats, DNSServerIPv6Stats, DNSServerMaxCounterStats, DNSServerPerformanceStats, DNSServerPushNotificationsStats, DNSServerQueryStats, DNSServerSecurityStats, DNSTopNameStats, ServerSystemsStats

Get DNS Server Stats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DNSServer
Header:	Accept:application/json

Response Body:	{
	"configRecurs": "3",
	"configReset": "4",
	"configResetTime": "16h43m8s",
	"configUpTime": "23h33m7s",
	"counterResetTime": "Mon Mar 22 12:40:18 2021",
	"id": "Cisco Systems, Inc. DNS Server, Release 11.0 Linux 64-bit build #11.0.2103211314, Mar 21 2021 13:16:11",
	"sampleInterval": "60s",
	"sampleTime": "Tue Mar 23 12:13:18 2021",
	"statisticsRequestTime": "Tue Mar 23 12:13:25 2021",
	"totalRrs": "10",
	"totalZones": "3"
	}

Get DNSServerHaStats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DNSServer?nrClass=DNSServerHaStats
Header:	Accept:application/json
Response Body:	{ "haFullZoneResync": "2", "haMsgConnectRecv": "14", "haMsgConnectSent": "14", "haMsgHeartbeatRecv": "3306", "haMsgHeartbeatSent": "3307", "haMsgReconcileRecv": "0", "haMsgReconcileSent": "36", "haMsgReqRecv": "3335", "haMsgReqRecvTime": "Tue Mar 23 13:02:31 2021", "haMsgReqSent": "3409", "haMsgReqSentTime": "Tue Mar 23 13:02:31 2021", "haMsgRespRecv": "3406", "haMsgRespSent": "3333", "haMsgRrsyncRecv": "0", "haMsgRrsyncSent": "24", "haMsgRrupdateRecv": "0", "haMsgRrupdateSent": "0", "haMsgShutdownRecv": "2", "haMsgShutdownSent": "3", "haMsgZonesyncRecv": "0", "haMsgZonesyncSent": "12", "haRespInconsistent": "0", "haRespServfail": "0", "haRespUnknown": "0", "haStateCommInterrupted": "13", "haStateCurrent": "HA_NORMAL",

```
        "haStateLastChangeTime": "Tue Mar 23 05:29:31 2021",
        "haStateNegotiating": "14",
        "haStateNormal": "13",
        "haStatePartnerDown": "0",
        "haStateStartup": "6",
        "haSyncConflict": "0",
        "haSyncDiscardName": "0",
        "haSyncMergeName": "0",
        "haUpdateReject": "0",
        "haZoneMismatch": "0"
}
```


CCMServer

Get CCM Server Stats	
Method:	GET
Endpoint:	https://loalhost:8443/web-services/rest/stats/CCMServer
Header:	Accept:application/json
Response Body:	


```
    {
       "dataFreeSpace": "16376",
       "dataPath": "/var/nwreg2/local/data/",
       "dataTotalSpace": "38389",
       "lastBackupBytes": "80.5 MB",
       "lastBackupElapsedTime": "6s",
       "lastGoodBackup": "Mon Mar 22 23:45:06 2021",
       "logsFreeSpace": "16376",
       "logsPath": "/var/nwreg2/local/logs/",
       "logsTotalSpace": "38389",
       "serverStats": {
          "ServerSystemStatsItem": [
             {
                "cpuUtilization": "4s",
                "memoryUtilization": "9376",
                "pid": "7318",
                "serverType": "1443",
                "vmUtilization": "304184"
             },
             {
                "cpuUtilization": "41s",
                "memoryUtilization": "59576",
                "pid": "7497",
                "serverType": "1451",
                "vmUtilization": "504464"
             },
             {
                "cpuUtilization": "3m4s",
                "memoryUtilization": "67484",
                "pid": "8258",
                "serverType": "1200",
                "vmUtilization": "517460"
             },
```

```
    {
                "cpuUtilization": "8m29s",
                "memoryUtilization": "40128",
                "pid": "8259",
                "serverType": "1100",
                "vmUtilization": "603120"
            },
            {
                "cpuUtilization": "9m34s",
                "memoryUtilization": "125203",
                "pid": "7502",
                "serverType": "1460",
                "statisticsRequestTime": "Tue Mar 23 13:20:24 2021",
                "vmUtilization": "154112"
            },
            {
                "cpuUtilization": "0",
                "memoryUtilization": "10936",
                "pid": "7499",
                "serverType": "1600",
                "vmUtilization": "260968"
            }
        ]
    },
    "statisticsRequestTime": "Tue Mar 23 13:25:00 2021"
}
```


DNSCachingServer

Optional classes that can be requested are: CCMServerInfo, DNSTopNameStats, ServerSystemsStats

Get DNS Caching Server Stats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DNSCachingServer
Header:	Accept:application/json
Response Body:	{ "answersRrsetUnsecure": "0", "answersSecure": "0", "answersUnsecure": "0", "answersUnwanted": "0", "answersWithFormerr": "0", "answersWithNodata": "0", "answersWithNoerror": "0", "answersWithNotauth": "0", "answersWithNotimp": "0", "answersWithNxdomain": "0", "answersWithRefused": "0", "answersWithServfail": "0", "answersWithOtherErrors": "0", "cacheHits": "0", "cacheMisses": "0", "cachePrefetches": "0", "clientRateLimit": "0", "configRecurs": "1", "dns64A2AaaaConversions": "0",

```
    "dns64PtrConversions": "0",
       "domainRateLimit": "0",
       "exceededMaxTargetCount": "0",
       "firewallDropped": "0",
       "firewallRedirectNxdomain": "0",
       "firewallRedirected": "0",
       "firewallRefused": "0",
       "firewallRpz": "0",
       "keyCacheExceeded": "0",
       "memCache": "33064",
       "memCacheExceeded": "0",
       "memIterator": "16596",
       "memProcess": "0",
       "memQueryCache": "33064",
       "memQueryCacheExceeded": "0",
       "memValidator": "0",
       "name": "Cisco Systems, Inc. DNS Caching Server, Release 10.1.1 Linux 64-bit
    build #10.1.1.2012081345, Dec  8 2020 13:47:47",
       "queriesFailingAcl": "0",
       "queriesOverIpv6": "0",
       "queriesOverTcp": "0",
       "queriesTotal": "0",
       "queriesTypeA": "0",
       "queriesTypeAaaa": "0",
       "queriesTypeAny": "0",
       "queriesTypeCname": "0",
       "queriesTypeDnskey": "0",
    "queriesTypeDs": "0",
       "queriesTypeMx": "0",
       "queriesTypeNs": "0",
       "queriesTypeNsec": "0",
       "queriesTypeNsec3": "0",
       "queriesTypePtr": "0",
       "queriesTypeRrsig": "0",
       "queriesTypeSoa": "0",
       "queriesTypeOther": "0",
       "queriesUnwantedClass": "0",
       "queriesWithEdns": "0",
       "queriesWithEdnsDo": "0",
       "queriesWithFlagAa": "0",
       "queriesWithFlagAd": "0",
       "queriesWithFlagCd": "0",
       "queriesWithFlagQr": "0",
       "queriesWithFlagRa": "0",
       "queriesWithFlagRd": "0",
       "queriesWithFlagTc": "0",
       "queriesWithFlagZ": "0",
       "recursiveRepliesTotal": "0",
       "recursiveTimeAverage": "0",
       "recursiveTimeMedian": "0",
       "remoteNsCacheExceeded": "0",
    "requestlistTotal": "0",
       "requestlistTotalAverage": "0",
       "requestlistTotalExceeded": "0",
       "requestlistTotalMax": "0",
       "requestlistTotalOverwritten": "0",
       "requestlistTotalSystem": "0",
       "requestlistTotalUser": "0",
       "resetTime": "Fri Mar 26 15:50:19 2021",
       "restartTime": "Fri Mar 26 15:50:19 2021",
       "sampleInterval": "60s",
       "sampleTime": "Fri Mar 26 17:03:28 2021",
       "smartCache": "0",
       "timeCurrent": "Fri Mar 26 17:03:31 2021",
       "timeElapsed": "3s",
       "timeUp": "1h13m12s"
    }
```

Sample Statistics

In Cisco Prime Network Registrar, in addition to total statistics, the REST interface provides sample statistics of all servers (DHCP (v4 and v6), DNS and Caching DNS).

Example:

DHCPServer

Get DHCPFailoverStats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/sample/DHCPServer?nrClass=DHCPFailoverStats
Header:	Accept:application/json
Response Body:	{ "bindingAcksReceived": "0", "bindingAcksSent": "0", "bindingNaksReceived": "0", "bindingNaksSent": "0", "bindingUpdatesReceived": "0", "bindingUpdatesSent": "0", "connectAcksReceived": "0", "connectAcksSent": "0", "connectionsTerminatedByPartner": "0", "connectionsTerminatedByServer": "0", "connectsReceived": "0", "connectsSent": "0", "contactsReceived": "4", "contactsSent": "4", "decayingMaxRequestBuffersInUse": "3", "discardedMessages": "0", "disconnectsReceived": "0", "disconnectsSent": "0", "failedConnections": "0", "invalidConnections": "0", "invalidMessagesReceived": "0", "packetsReceived": "4", "packetsSent": "4", "poolRequestsReceived": "0", "poolResponsesSent": "0", "requestBuffersAllocated": "239", "requestBuffersInUse": "0", "stateReceived": "0", "stateSent": "0", "successfulConnections": "0", "unavailableRequests": "0", "updateDoneReceived": "0", "updateDoneSent": "0", "updateRequestsReceived": "0", "updateRequestsSent": "0", "v6BindingAcksReceived": "0", "v6BindingAcksSent": "0", "v6BindingNacksReceived": "0", "v6BindingNacksSent": "0", "v6BindingUpdatesReceived": "0", "v6BindingUpdatesSent": "0",

	"v6PoolRequestsReceived": "0", "v6PoolRequestsSent": "0", "v6PoolResponsesReceived": "0", "v6PoolResponsesSent": "0", "v6UpdateDoneReceived": "0", "v6UpdateDoneSent": "0", "v6UpdateRequestsReceived": "0", "v6UpdateRequestsSent": "0" }
Response Header:	< X-Sample-Time: Tue Mar 23 13:40:14 2021 < X-Sample-Interval: 60s

DNSServer

Get DnsServerHAStats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/sample/DNSServer?nrClass=DNSServerHAStats
Header:	Accept:application/json

Response Body:	{
	"haFullZoneResync": "0",
	"haMsgConnectRecv": "0",
	"haMsgConnectSent": "0",
	"haMsgHeartbeatRecv": "0",
	"haMsgHeartbeatSent": "0",
	"haMsgReconcileRecv": "0",
	"haMsgReconcileSent": "0",
	"haMsgReqRecv": "0",
	"haMsgReqRecvTime": "Tue Mar 23 13:45:56 2021",
	"haMsgReqSent": "0",
	"haMsgReqSentTime": "Tue Mar 23 13:45:56 2021",
	"haMsgRespRecv": "0",
	"haMsgRespSent": "0",
	"haMsgRrsyncRecv": "0",
	"haMsgRrsyncSent": "0",
	"haMsgRrupdateRecv": "0",
	"haMsgRrupdateSent": "0",
	"haMsgShutdownRecv": "0",
	"haMsgShutdownSent": "0",
	"haMsgZonesyncRecv": "0",
	"haMsgZonesyncSent": "0",
	"haRespInconsistent": "0",
	"haRespServfail": "0",
	"haRespUnknown": "0",
	"haStateCommInterrupted": "0",
	"haStateCurrent": "HA_NORMAL",
	"haStateLastChangeTime": "Tue Mar 23 13:31:17 2021",
	"haStateNegotiating": "0",
	"haStateNormal": "0",
	"haStatePartnerDown": "0",
	"haStateStartup": "0",
	"haSyncConflict": "0",
	"haSyncDiscardName": "0",
	"haSyncMergeName": "0",
	"haUpdateReject": "0",
	"haZoneMismatch": "0"
	}

Response Header:	< X-Sample-Time: Tue Mar 23 13:49:15 2021 < X-Sample-Interval: 60s

DNSCachingServer

Get DNSTopNameStats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/sample/DNSCachingServer?nrClass=DnsTopNameStats
Header:	Accept:application/json

Response Body:	{
	"lastAccessTime": "Tue Mar 23 13:53:11 2021",
	"lastResetTime": "Tue Mar 23 13:52:11 2021",
	"timestamp": "Tue Mar 23 13:53:34 2021",
	"topNames": {
	"list": []
	},
	"totalCounted": "0"
	}

Response Header:	< X-Sample-Time: Tue Mar 23 13:53:17 2021 < X-Sample-Interval: 60s

Server System Statistics

You can get the server system statistics for the individual servers using the REST API. This helps in monitoring the servers effectively. REST support is added for SystemStats and ServerSystemStats classes. ServerSystemStats provides information about the system resources used by one Cisco Prime Network Registrar server. SystemStats provides system-wide statistics about the host running Network Registrar. This typically includes things like memory, CPU, and disk-space utilization.

Example:

Get ServerSystemStats	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DNSCachingServer?nrClass=ServerSystemStats
Header:	Accept:application/json

Response Body:	{
	"cpuUtilization": "0",
	"memoryUtilization": "64544",
	"pid": "5980",
	"serverType": "1227",
	"vmUtilization": "368824"
	}

Utilization Data

You can obtain the utilization data for scopes and prefixes using the REST API. Support for a new category of statistics has been added to report v4 and v6 utilization. REST support is added for CurrentUtilization and CurentPrefixUtilization classes. CurrentUtilization provides detailed address utilization information from a single DHCP scope, or an entire subnet or address block. CurentPrefixUtilization reports detailed address utilization information from a single DHCP prefix, or for all DHCP prefixes contained in a parent prefix or link.

CurrentUtilization

Get DHCP Scope Utilization	
Method:	GET

Endpoint:	https://localhost:8453/web-services/rest/stats/CurrentUtilization
Header:	Accept:application/json

Response Body:	[
	{
	"activeDynamic": "1",
	"aggregationLevel": "subnet-level",
	"avail": "127",
	"deactivated": "0",
	"expired": "0",
	"freeDynamic": "254",
	"leased": "1",
	"leasedDeactivated": "0",
	"offered": "0",
	"otherAvail": "127",
	"pendAvail": "0",
	"reservedActive": "0",
	"reservedInactive": "0",
	"reservedLeasedDeactivated": "0",
	"reservedUnavail": "0",
	"subnet": "1.0.0.0/24",
	"totalDynamic": "255",
	"totalReserved": "0",
	"unavail": "0",
	"vpnId": "0"
	},
	{
	"activeDynamic": "1",
	"aggregationLevel": "scope-level",
	"avail": "127",
	"clusterId": "2",
	"deactivated": "0",
	"expired": "0",
	"failoverRole": "main",
	"failoverState": "normal",
	"freeDynamic": "254",
	"leased": "1",
	"leasedDeactivated": "0",
	"offered": "0",
	"otherAvail": "127",
	"pendAvail": "0",
	"primarySubnet": "1.0.0.0/24",
	"reservedActive": "0",
	"reservedInactive": "0",
	"reservedLeasedDeactivated": "0",
	"reservedUnavail": "0",
	"scopeName": "ISP-1.0.0.0-24",
	"subnet": "1.0.0.0/24",
	"timestamp": "Mon Mar 22 13:47:06 2021",
	"totalDynamic": "255",
	"totalReserved": "0",
	"unavail": "0",
	"vpnId": "0"
	}
	]

Get DHCP Scope Utilization for a given scope	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/CurrentUtilization/ISP-1.0.0.0-24
Header:	Accept:application/json

Response Body:	{
	"activeDynamic": "1",
	"aggregationLevel": "scope-level",
	"avail": "127",
	"deactivated": "0",
	"expired": "0",
	"failoverRole": "main",
	"failoverState": "normal",
	"freeDynamic": "254",
	"leased": "1",
	"leasedDeactivated": "0",
	"offered": "0",
	"otherAvail": "127",
	"pendAvail": "0",
	"primarySubnet": "1.0.0.0/24",
	"reservedActive": "0",
	"reservedInactive": "0",
	"reservedLeasedDeactivated": "0",
	"reservedUnavail": "0",
	"scopeName": "ISP-1.0.0.0-24",
	"subnet": "1.0.0.0/24",
	"totalDynamic": "255",
	"totalReserved": "0",
	"unavail": "0",
	"vpnId": "0"
	}

CurrentPrefixUtilization

Get DHCP Prefix Utilization	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/CurrentPrefixUtilization
Header:	Accept:application/json
Response Body:	[{ "activeDynamic": "2", "aggregationLevel": "prefix-level", "deactivated": "0", "dhcpType": "dhcp", "expired": "0", "leased": "2", "leasedDeactivated": "0", "linkName": "Link-1001::/64", "offered": "0", "pendingDelete": "0", "prefix": "1001::/64", "prefixDeactivated": "false", "prefixName": "p1", "prefixRange": "1001::/64", "reservedActive": "0", "reservedInactive": "0",

<table>
<tr><td></td><td><pre>
            "revoked": "0",
            "totalReserved": "0",
            "unavail": "0",
            "vpnId": "0"
         },
         {
            "activeDynamic": "5",
            "aggregationLevel": "prefix-level",
            "deactivated": "0",
            "dhcpType": "dhcp",
            "expired": "0",
            "leased": "5",
            "leasedDeactivated": "0",
            "linkName": "Link-3001::/64",
            "offered": "0",
            "pendingDelete": "0",
            "prefix": "3001::/64",
            "prefixDeactivated": "false",
            "prefixName": "p3",
            "prefixRange": "3001::/64",
            "reservedActive": "0",
            "reservedInactive": "0",
            "reservedLeasedDeactivated": "0",
            "reservedUnavail": "0",
            "revoked": "0",
            "tenantId": "1",
            "totalReserved": "0",
            "unavail": "0",
            "vpnId": "0"
         }
]
</pre></td></tr>
<tr><td colspan="2">Get DHCP Prefix Utilization for a given prefix</td></tr>
<tr><td>Method:</td><td>GET</td></tr>
<tr><td>Endpoint:</td><td>https://localhost:8443/web-services/rest/stats/CurrentPrefixUtilization/p3</td></tr>
<tr><td>Header:</td><td>Accept:application/json</td></tr>
<tr><td>Response Body:</td><td><pre>
{   "activeDynamic": "5",
      "aggregationLevel": "prefix-level",
      "deactivated": "0",
      "dhcpType": "dhcp",
      "expired": "0",
      "leased": "5",
      "leasedDeactivated": "0",
      "linkName": "Link-3001::/64",
      "offered": "0",
      "pendingDelete": "0",
      "prefix": "3001::/64",
      "prefixDeactivated": "false",
      "prefixName": "p3",
      "prefixRange": "3001::/64",
      "reservedActive": "0",
      "reservedInactive": "0",
      "reservedLeasedDeactivated": "0",
      "reservedUnavail": "0",
      "revoked": "0",
      "tenantId": "1",
      "totalReserved": "0",
      "unavail": "0",
      "vpnId": "0"}
</pre></td></tr>
</table>

DHCP Scope Status

You can determine whether a scope is up to date in the DHCP server using the REST API. REST support is added for the DHCPScopeStatus class. It reports the status of a scope.

Get DHCP Scope Status	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPScopeStatus?nrStatusFull=true
Header:	Accept:application/json

Response Body:	[
	{
	"name": "ISP-1.0.0.0-24",
	"scopeStatus": "published"
	},
	{
	"name": "ISP-2.0.0.0-24",
	"scopeStatus": "published"
	},
	{
	"name": "unpublished",
	"scopeStatus": "published"
	}
	]

Get DHCP Scope Status for a given scope	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPScopeStatus/ISP-1.0.0.0-24
Header:	Accept:application/json

Response Body:	{
	"name": "ISP-1.0.0.0-24",
	"scopeStatus": "published"
	}

Get DHCP Scope Status by staged edits	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPScopeStatus
Header:	Accept:application/json

Response Body:	[
	{
	"name": "ISP-1.0.0.0-24",
	"scopeStatus": "unpublished"
	},
	{
	"name": "ISP-2.0.0.0-24",
	"scopeStatus": "unpublished"
	},
	{
	"name": "unpublished",
	"scopeStatus": "unpublished"
	}
	]

DNSHaStatus

Get DNS HA Status	
Method:	GET
Endpoint:	https://localhost:8453/web-services/rest/stats/DnsHAStatus
Header:	Accept:application/json

Response Body:	[
	{
	"role": "MAIN",
	"state": "HA_NORMAL",
	"clusterName": "cnr-cent72-3",
	"haZoneCount": "2",
	"zoneSyncCompleteCount": "2",
	"zoneSyncCompleteList": {
	"CCMZoneItem": [
	{"origin": "zone2.com"},
	{"origin": "zone1.com"}
	]
	},
	"zoneSyncFailedCount": "0",
	"zoneSyncFailedList": {
	"list": []
	},
	"zoneSyncPendingCount": "0",
	"zoneSyncPendingList": {
	"list": []
	}
	},
	{
	"role": "MAIN",
	"state": "HA_NORMAL",
	"clusterName": "cnr-rhel81-2",
	"haZoneCount": "2",
	"zoneSyncCompleteCount": "2",
	"zoneSyncCompleteList": {
	"CCMZoneItem": [
	{"origin": "zone10.com"},
	{"origin": "zone20.com"}
	]
	},
	"zoneSyncFailedCount": "0",
	"zoneSyncFailedList": {
	"list": []
	},
	"zoneSyncPendingCount": "0",
	"zoneSyncPendingList": {
	"list": []
	}
	}
	]

Get DNS HA Status for a given DNS HA pair	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DnsHAStatus/pair1
Header:	Accept:application/json

Response Body:	{
	"role": "MAIN",
	"state": "HA_NORMAL",
	"haZoneCount": "2",
	"zoneSyncCompleteCount": "2",
	"zoneSyncCompleteList": {
	"CCMZoneItem": [
	{
	"origin": "zone2.com"
	},
	{
	"origin": "zone1.com"
	}
	]
	},
	"zoneSyncFailedCount": "0",
	"zoneSyncFailedList": {
	"list": []
	},
	"zoneSyncPendingCount": "0",
	"zoneSyncPendingList": {
	"list": []
	}
	}

DnsZoneStatus

Get Unpublished DNS Zone Status Gets the list of Network Registrar DnsZoneStatus objects for all primary zones with unpublished changes. Use the query parameter *nrStatusFull* to request status for all primary zones.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DnsZoneStatus
Header:	Accept:application/json

Response Body:	[
	{
	"haStatus": "none",
	"origin": "unpublished.com.",
	"viewQualifiedName": "unpublished.com.",
	"zoneStatus": "unpublished"
	}
	]

Get Unpublished DNS zone status inside view Gets the Network Registrar DnsZoneStatus object for the specified forward or reverse zone.	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DnsZoneStatus?nrStatusFull=False&viewId=1
Header:	Accept:application/json

Response Body:	[
	{
	"haStatus": "none",
	"origin": "view2.com.",
	"viewQualifiedName": "view1/view2.com.",
	"zoneStatus": "unpublished"
	}
	]

Get DNS Zone Status all

Gets the list of Network Registrar DnsZoneStatus objects for all primary zones with unpublished changes. Use the query parameter nrStatusFull to request status for all primary zones.

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DnsZoneStatus?nrStatusFull=True
Header:	Accept:application/json

Response Body:	[
	{
	"haStatus": "none",
	"origin": "unpublished.com.",
	"viewQualifiedName": "unpublished.com.",
	"zoneStatus": "unpublished"
	},
	{
	"haStatus": "sync-complete",
	"origin": "zone1.com.",
	"viewQualifiedName": "zone1.com.",
	"zoneStatus": "published"
	},
	{
	"haStatus": "sync-complete",
	"origin": "zone2.com.",
	"viewQualifiedName": "zone2.com.",
	"zoneStatus": "published"
	},
	{
	"haStatus": "none",
	"origin": "127.in-addr.arpa.",
	"viewQualifiedName": "127.in-addr.arpa.",
	"zoneStatus": "published"
	}
	]

DHCP Failover Status

You can determine the failover status in the DHCP server using the REST API. REST support is added for the FailoverRelatedServer class. It reports the DHCP server's related servers' information that is specific to a Failover partner.

Get FailoverRelatedServer

Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/DHCPRelatedServer?nrClass=FailoverRelatedServer
Header:	Accept:application/json

Request Body:	[
	{
	"bindingAcksReceivedTotal": "270",
	"bindingUpdatesSentTotal": "270",
	"commState": "ok",
	"connectionEndTime": "Mon Mar 22 19:34:00 2021",
	"connectionStartTime": "Mon Mar 22 19:34:06 2021",
	"currentTime": "Mon Mar 22 20:03:08 2021",
	"decayingMaxRequestBuffersInUse": "1",
	"failoverPairName": "pair1",
	"ipaddr": "10.104.245.212",
	"lastCommOkTime": "Mon Mar 22 20:02:11 2021",
	"loadBalancingBackupPct": "0%",
	"loadBalancingDroppedRequests": "0",
	"loadBalancingDroppedTotal": "0",
	"loadBalancingProcessedRequests": "0",
	"loadBalancingProcessedTotal": "0",
	"maximumClientLeadTime": "3600",
	"otherServerDownTime": "Mon Mar 22 19:34:00 2021",
	"ourIpaddr": "10.104.245.211",
	"partnerRole": "backup",
	"partnerState": "normal",
	"partnerVendorMajorVersion": "2",
	"partnerVendorMinorVersion": "0",
	"requestBuffersAllocated": "239",
	"role": "main",
	"sequenceNumber": "1.0",
	"smoothedTimeDelta": "0",
	"startOfCommInterrupted": "Mon Mar 22 19:34:00 2021",
	"startTimeOfPartnerState": "Mon Mar 22 19:34:06 2021",
	"startTimeOfState": "Mon Mar 22 19:34:06 2021",
	"state": "normal",
	"updateRequestDoneTime": "Mon Mar 22 19:33:56 2021",
	"updateResponseDoneTime": "Mon Mar 22 19:34:06 2021",
	"updateResponseStartTime": "Mon Mar 22 19:34:06 2021",
	"useOtherAvailable": "false",
	"v6BindingAcksReceivedTotal": "16",
	"v6BindingUpdatesSentTotal": "16",
	"v6UpdateRequestDoneTime": "Mon Mar 22 19:33:56 2021",
	"v6UpdateResponseDoneTime": "Mon Mar 22 19:34:06 2021",
	"v6UpdateResponseStartTime": "Mon Mar 22 19:34:06 2021"
	}
	]

Resource Limits Notification

As part of Resource Limits feature, when resource limits are crossed, it is indicated via alarms in web UI, through status code '109' in CLI during the entry and exit of CLI, and through the **resource report** command. The same feature is available via the REST API too.

Example:

Get Resource Status	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/ResourceStatus
Header:	Accept:application/json

Response Body:	{
	"critical": "1",
	"ok": "12",
	"warning": "1"
	}

Get Resource Report	
Method:	GET
Endpoint:	https://localhost:8443/web-services/rest/stats/ResourceReport
Header:	Accept:application/json
Response Body:	[{ "critical": "1", "ok": "12", "warning": "1" }, { "objectOid": "OID-00:00:00:00:00:00:00:88", "ascendingOrdered": "true", "eventState": "critical", "eventTimestamp": "Tue Mar 23 15:08:22 2021", "intCriticalLevel": "400", "intDataType": "AT_INT64", "lastEventTime": "Tue Mar 23 15:08:22 2021", "lastIntValue": "515", "lastUpdatedTime": "Tue Mar 23 15:10:22 2021", "lastValueMessage": "515 above 400", "lastValueState": "Critical", "name": "lease-count", "peakIntValue": "515", "peakTime": "Tue Mar 23 13:31:22 2021", "peakValueMessage": "515 max above 400", "serverClass": "1100", "state": "Critical", "tenantId": "0" }, { "objectOid": "OID-00:00:00:00:00:00:00:8a", "ascendingOrdered": "true", "eventState": "warning", "eventTimestamp": "Tue Mar 23 15:08:22 2021", "intCriticalLevel": "25000000", "intDataType": "AT_INT64", "intWarningLevel": "10", "lastEventTime": "Tue Mar 23 15:08:22 2021", "lastIntValue": "16", "lastUpdatedTime": "Tue Mar 23 15:10:22 2021", "lastValueMessage": "16 above 10", "lastValueState": "Warning",

```
            "name": "rr-count",
            "peakIntValue": "16",
            "peakTime": "Tue Mar 23 13:31:22 2021",
            "peakValueMessage": "16 max above 10",
            "serverClass": "1200",
            "state": "Warning",
            "tenantId": "0"
        }
]
```


Swagger Documentation

Swagger UI for REST API can be launched using https://*ipaddress*:*port*/web-services

When server has both IPv4 and IPv6 addresses, Swagger works on IPv4 by default. For IPv6 communication, you need to launch the Swagger UI using https://*ipv6address:port/*web-services (IPv6 address enclosed in square brackets) and select v6 address from the server drop-down.

Swagger UI picks up the address and port from the file cnr.data-home/tomcat/webapps/ws/web-services/openapi.json. This file should not be edited unless required. Any changes made to this file requires server agent restart.

When openapi.json has default values for address and port, that is, SWAGGER_IP, SWAGGER_IPV6, and SWAGGER_PORT instead of real values:

- If values are not configured in the cnr.conf file, on server agent restart, the Swagger UI picks and configures openapi.json values from the local environment.
- If values are configured in the cnr.conf file wherein cnr.swagger-ip is set to IPv4 address, cnr.swagger-ipv6 is set to IPv6 address, then these values will be picked up.

Note: If openapi.json has previously configured valid values, then openapi.json takes precedence irrespective of the value set in cnr.conf later.

Special Characters to Use in REST Requests

In certain cases, special characters have to be used in the input request to get a successful response. You need to substitute these special characters with the following HTML codes in the name when performing an operation by name.

Character	Code
Space	%20
!	%21
“	%22
#	%23
$	%24
%	%25
&	%26
‘	%27
(	%28

)	%29
*	%2A
+	%2B
,	%2C
-	%2D
.	%2E

Status Codes

Status Code	**Description**
200 OK	The request has successfully completed. This response is typically seen for GET, PUT, and DELETE methods.
201 Created	The request has successfully completed and a new resource has been created. This response is typically seen for POST and PUT methods.
405 Method Not Allowed	The method in the request is not supported by the resource. For example, if you try POST method on DNSServer, you will get this error.
500 Internal Server Error	The server is unable to handle the error.
400 Bad Request	For the following SCP message response codes: • AX_SCP_INVALID_CLASSNAME • AX_SCP_INVALID_ATTRNAME • AX_SCP_INVALID_ATTRVAL
401 Unauthorized	For the following SCP message response codes: • AX_EPERM • AX_EACCES • AX_SCP_PERMISSION_DENIED • AX_SCP_AUTHENTICATION_FAILED • AX_SCP_SERVER_AUTH_FAILED • AX_DNS_PERMISSION_DENIED • AX_SCP_INVALID_REQUEST
404 Not Found	For the following SCP message response codes: • AX_ENOENT • EX_REF_NOTFOUND • AX_DHCP_NO_CONFIGURED_RANGE

Product Documentation

See Cisco Prime Network Registrar 11.2 Documentation Overview for the list of Cisco Prime Network Registrar 11.2 guides.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation.

To receive new and revised Cisco technical content directly to your desktop, you can subscribe to the What's New in Cisco Product Documentation RSS feed. RSS feeds are a free service.