

Application Policy Infrastructure Controller Visore Tool Introduction



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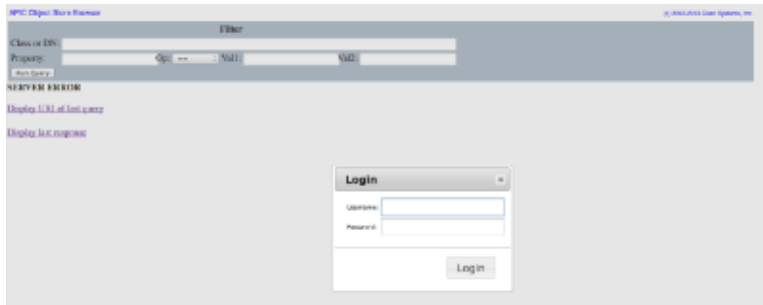
- Health

Introduction

This document describes Visore, the Application Policy Infrastructure Controller (APIC) Object Store Browser. You can use it in order to directly query the Managed Objects (MO) when you point your browser to either the IP address of one of the APICs or a physical switch. One would typically point to the APIC which is generally HTTPS (default), but could also be HTTP if configured.

`https://<APIC or Switch IP ADDRESS>/visore.html`

From there, you are prompted to log in with use of credentials valid with the device.



By default, when you log into the APIC Visore it displays the result of a search for all MOs of class fabricNode.

Filter

Class or DN:

Property: Op: == Val1: Val2:

Run Query

[Display URI of last query](#)

[Display last response](#)

Total objects shown: 124

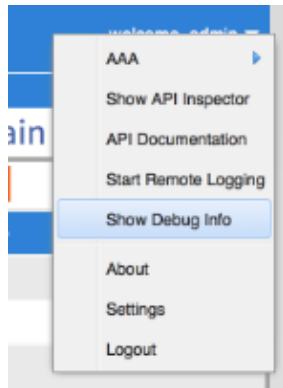
fabricNode		?
adSt	on	
childAction		
delayedHeartbeat	no	
dn	topology/pod-1/node-120 < >	
fabricSt	active	
id	120	
lcOwn	local	
modTs	2014-08-04T12:35:59.674-07:00	
model	N9K-C9396PX	
monPolDn	uni/fabric/monfab-default < >	
name	scale2-leaf20	
role	leaf	
serial		
status		
uid	0	
vendor	Cisco Systems, Inc	
version		
fabricNode		?

Obtain Class Name or DN

There are four methods that can be used in order to find an object's Class Name (CN) or Distinguished Name (DN).

Enable 'Show Debug Info' from the APIC GUI

Click **Welcome**, <userid> and choose **Show Debug Info** in order to enable the debug information.

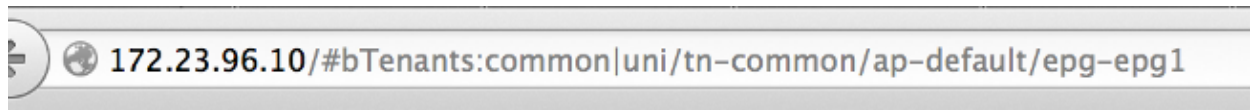


Once enabled, when you click around the GUI you will notice the text shown in this image in the bottom left hand corner. You can then use this in order to find the necessary information. You are interested in the latter half of the text, which begins with 'Current MO'. This is the current MO that is displayed. The Class name is in the section after 'model.def.fvAEPg' and the actual name is after the 'model.def'. In this example this is 'fvAEPg'. Furthermore, the DN is displayed within the square brackets []. In this instance, the DN is 'uni/tn-common/ap-default/epg-epg1'.



URL

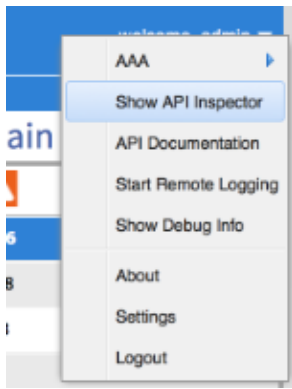
When you click on a link within the GUI, the URL is updated in order to reflect where you are within the APIC GUI. From this, you can obtain the DN. Everything after the vertical bar (|) in the URL is the unique DN. As you can see, this matches what was obtained via the debug method.



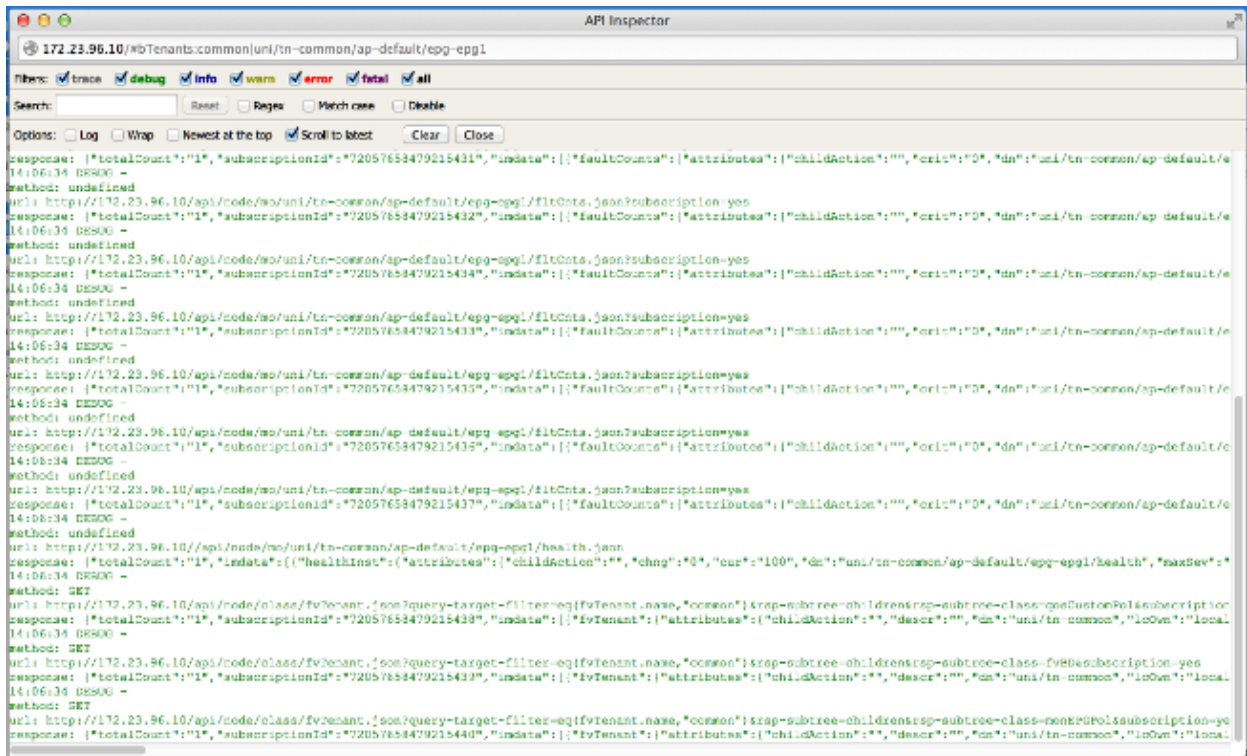
Show API Inspector

Enter the **show API inspector** command and review the API calls that are made.

Click **Welcome**, <userid> and choose **Show API Inspector** in order to enable the API inspector.



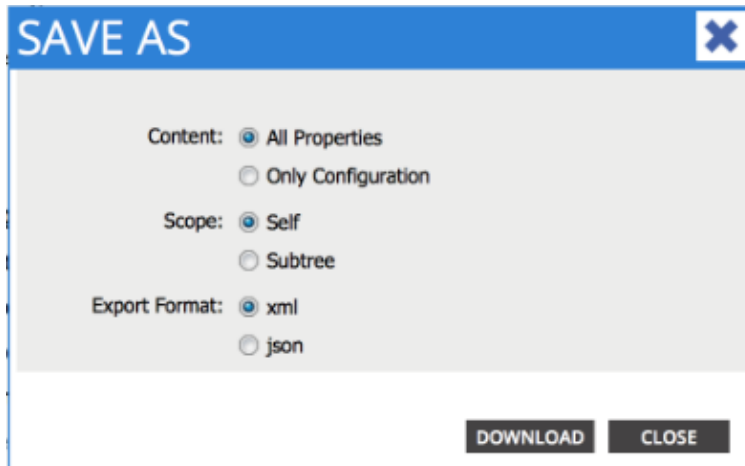
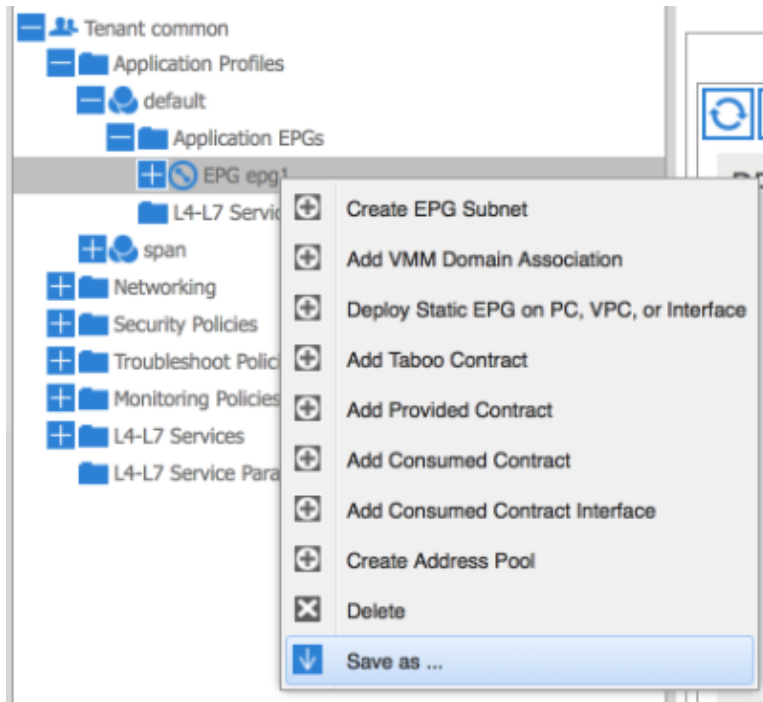
From this output, you see the raw API calls that are made by the GUI to the APIC. You can determine that the DN is 'uni/tn-common/ap-default/epg-epg1' as this is specified in the API URL that is used. Specifically, it is 'http://172.23.96.10/api/node/mo/uni/tn-common/ap-default/epg-epg1/'. In order to break this down, you have the IP address of the APIC, a directory structure of 'api/node/', a call out to an 'MO' instead of a 'class', followed by the DN.



End Point Group (EPG) File

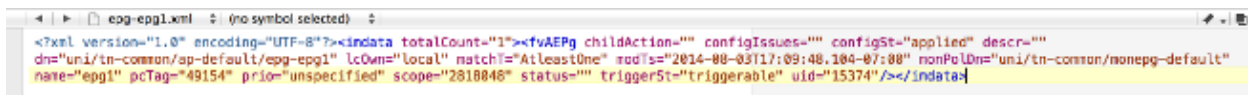
Right-click a policy, save the policy, and open the saved XML file.

Lastly, you can obtain the Class and DN information when you right-click the policy of choice. Choose **Save as** and then proceed to download the file. In this example, the file is exported as an XML document.



Once the file has been downloaded to your local file system, open it in your favorite editor. Once the file is open, you will be able to inspect the XML/JSON and determine the Class and DN.

With the same example, you can see that the class is highlighted in blue and is equal to 'fvAEPg'. Furthermore, you see the specific text dn='uni/tn-common/ap-default/epg-epg1'.



Execute a Query

Use the details you found from one of the four methods in the previous section in order to inspect the MO in further detail with Visore.

In order to execute a query, enter either the Class or DN.

Example 1 - DN

APIC Object Store Browser

Filter

Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

[Display last response](#)

fvAEPg		?
childAction		
configIssues		
configSt	applied	
descr		
dn	uni/tn-common/ap-default/epg-epg1 < > ! H	
lcOwn	local	
matchT	AtleastOne	
modTs	2014-08-03T17:09:48.104-07:00	
monPolDn	uni/tn-common/monepg-default < > ! H	
name	epg1	
pcTag	49154	
prio	unspecified	
scope	2818048	
status		
triggerSt	triggerable	
uid	15374	

Example 2 - Class

When you search this Class, Visore returns ALL objects of this Class type. As can be seen in the output, this system has 1615 objects of Class type fvAEPg.

Filter







Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

[Display last response](#)

Total objects shown: 1615

fvAEPg ?	
childAction	
configIssues	
configSt	applied
descr	
dn	uni/tn-infra/ap-access/epg-default < >   
lcOwn	local
matchT	AtleastOne
modTs	2014-08-03T16:43:28.938-07:00
monPolDn	uni/tn-common/monepg-default < >   
name	default
pcTag	49153
prio	unspecified
scope	16777199
status	
triggerSt	triggerable
uid	0
fvAEPg ?	

Visore Filters

Previously when you searched on the Class type of 'fvAEPg' it returned a result of 1615 objects, but you can narrow this search. For example, perhaps you are only interested in the objects that are within the Application Profile 'ap-default'. As this is contained within the DN, you can filter by the DN as follows:

APIC Object Store Browser

Filter

Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

[Display last response](#)

fvAEPg		?
childAction		
configIssues		
configSt	applied	
descr		
dn	uni/tn-common/ap-default/epg-epg1 < > ! H	
lcOwn	local	
matchT	AtleastOne	
modTs	2014-08-03T17:09:48.104-07:00	
monPolDn	uni/tn-common/monepg-default < > ! H	
name	epg1	
pcTag	49154	
prio	unspecified	
scope	2818048	
status		
triggerSt	triggerable	
uid	15374	

This happens to return a single result as this application profile does not have any additional EPGs. Alternatively, from the original search on 'fvAEPg', you can narrow the list down to 873 when you search for all EPGs that contain 'epg'.

Filter

Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

[Display last response](#)

Total objects shown: 873

fvAEPg ?	
childAction	
configIssues	
configSt	applied
descr	
dn	uni/tn-common/ap-default/epg-epg1
lcOwn	local
matchT	AtleastOne
modTs	2014-08-03T17:09:48.104-07:00
monPolDn	uni/tn-common/monepg-default
name	epg1
pcTag	49154
prio	unspecified
scope	2818048
status	
triggerSt	triggerable
uid	15374
fvAEPo ?	

Display URI of the Last Query

This is useful for when you want to play with the API. You can view the actual call made by Visore. You can find similar information with the API Inspector.

APIC Object Store Browser

Filter

Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

</api/node/mo/uni/tn-common/ap-default/epg-epg1.xml?query-target=self>

APIC Object Store Browser

Filter

Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

</api/node/class/fvAEPg.xml?>

Display Last Response

This provides the raw XML output of the last response that was returned. This is what the Visore tool returned and massaged into the table output format shown here. No other type of translation/modification takes place.

APIC Object Store Browser © 2013-2015 Cisco Systems, Inc.

Filter

Class or DN:

Property: Op: Val1: Val2:

[Display URI of last query](#)

[Display last response](#)

```
<?xml version="1.0" encoding="UTF-8" ?><imdata totalCount="1"><fvAEPg childAction="" configIssues="" configSt="applied" descr="" dn="uni/tn-common/ap-default/epg-epg1" locOwn="local"
munchT="AdressOne" modTs="2014-08-03T17:09:48.104-07:00" monPolDn="uni/tn-common/monepg-default" name="epg1" pcTag="49154" price="unspecified" scope="2818048" status="
triggerSt="triggerable" uid="15374"></imdata>
```

Class Object Name

Click the Class Object Name in order to execute a new search and return all objects of that particular Class type.

Click the ? (question mark) in order to display the Model - Property details for that particular class type. It is a very detailed and useful way to learn the object model. Across the top of this help are hyperlinks that link you to further information on this Class.

[Overview](#) [Naming](#) [Containers](#) [Contained](#) [Inheritance](#) [Stat](#) [Counters](#) [Stats](#) [Events](#) [Faults](#) [FSMs](#) [Properties](#) [Summary](#) [Properties Detail](#)

Class fv:AEPg (CONCRETE)

Class ID:1961
Class Label: Application EPG
Encrypted: false - Exportable: true - Persistent: true - Configurable: true
Write Access: [admin, tenant-epg, tenant-network-profile]
Read Access: [asa, access-connectivity-11, access-connectivity-12, admin, fabric-protocol-mgmt, mw-svc-device, mw-svc-policy, tenant-connectivity-12, tenant-connectivity-13, tenant-connectivity-mgmt, tenant-connectivity-util, tenant-epg, tenant-network-profile, tenant-protocol-13, tenant-security, vmm-policy]
Semantic Scope: EPG
Semantic Scope Evaluation Rule: Parent
Monitoring Policy Source: Explicit
Monitoring Flags : [IsObservable: true, HasStats: true, HasFaults: true, HasHealth: true]

A set of requirements for the application-level EPG instance. The policy regulates connectivity and visibility among the end points within the scope of the policy.

Toolbar

A description of each icon in the toolbar, from left to right, is described in this section.



Left Arrow

The left arrow executes a new search that displays the Parent of the Managed Object.

Right Arrow

The right arrow executes a new search that displays the Children of the Managed Object.

Statistics

If supported on the object, this returns an additional list of objects appended to the bottom of the query and displays the associated statistics.

Faults

If supported on the object, this displays any raised faults on the object.

Health

This appends the HealthScore "healthInst" for the DN selected to the bottom of the current query.

dn	uni/tn-common/ap-default/epg-epg1 < > !H
lcOwn	local
matchT	AtleastOne
modTs	2014-08-03T17:09:48.104-07:00
monPolDn	uni/tn-common/monepg-default < > !H
name	epg1
pcTag	49154
prio	unspecified
scope	2818048
status	
triggerSt	triggerable
uid	15374
<u>healthInst</u>	
childAction	
chng	0
cur	100
maxSev	cleared
prev	100
rn	health
status	
twScore	100
updTs	2014-08-07T15:28:18.546-07:00

?

