



**API Use Examples**

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# Introduction

This is a list of examples of how to use the API from vManage.

# How to access vManage API

## From the web

## From CURL

## From a Python script

## From JavaScript

# Python Examples

This is a list of example scripts from Python accessing the vManage API.

## Get Devices List

This script makes a login to vManage and then gets the devices list. It prints the devices list as Python dictionary.

## Get Devices List Formatted

This script makes a login to vManage and then gets the devices list. It prints the devices list in a tabular way showing the device system-ip, the device site-id and the UUID.

## Get Feature Templates List Formatted

This script makes a login to vManage and then gets the feature templates list. It prints the feature templates list in a tabular way showing the feature template name and the feature template id.

## Get Feature Templates File

This script makes a login to vManage and then gets the feature templates list. It writes the feature templates in a file as a Python dictionary.

## Create a Feature Template

This script creates a feature template called ‘tenant1’. The template definition is included in the script, but it could be read from a file.

## Get Device Config

This script gets the config of a device and prints it to the screen. To get the config we need to make a get request to [https://vManageIP@/dataservice/template/config/running/deviceUUID](NULL).

In the example, we are using the vManage from the dCloud demo and the config we want to retrieve is the one for ‘BR2-VEDGE1’. That means that vManageIP@ is ‘198.18.1.10’ and the deviceUUID is ddd801b2-8cbe-4394-abd1-3b71e39886e3 (the one for ‘BR2-VEDGE1’. These values are hardcoded in the script, but could be passed as arguments.

# Use Cases

The scripts explained in the previous sections can be used for some real use cases required by our customers.

## Move from one vManage to another one

You have been working in a PoV for a customer and have developed several Device Templates, Feature Templates and Policies.

Now you need to start a new PoV for a new customer, with a new vManage, and you find that, probably, 90% of the Templates and Policies you defined in the previous PoV could be reused in the new PoV.

You know how to build Templates and Policies from the vManage GUI, but if you have 100 Templates and 100 policies, defining them through the GUI in the new vManage GUI can be a tedious job.

What if you could export all the Templates and Policies definitions (and whatever configuration information you like) from a vManage and import them to a new vManage for the next PoV?

## Get Device Config

You are making an SD-WAN proposal for a customer, and the customer requires to have a backup of all the config files of all the routers in the network.

In the Viptela environment this is not required since the vManage keeps all the configuration parameters that have to be provided to every vEdge router, so, in fact, there’s a backup copy of the configuration of all the vEdges inside of vManage. If one vEdge fails and the config must be reapplied, it can be done with the data available in vManage.

But the customer is used to have a repository somewhere with a copy of all the running configs of all the routers in the network, and requires you to provide a way to have a copy of all the running configs of all the routers in the network out of vManage.

Can the Viptela solution provide this?

## SP Comparison

Your customer is interested in going to an SD-WAN model using two Service Providers in each branch office.

The customer wants to make sure the level of performance received from each Service Provider is similar, but, if one of the Service Providers is experiencing high levels of latency, jitter or loss continuously, the customer would like to be able to have some reports to show to the Service Providers to ask for an improvement of the service level.

So, the customer is asking you if the Viptela solution can provide reports with a comparison of performance metrics between Service Providers.

The vManage dashboard shows a graph of the evolution of the performance parameters for each one of the Service Providers, but these graphs can’t be exported or automated. The customer must go to the vManage dashboard and obtain a screenshot of the graph. This is a manual task and it just provides a picture (not a real report with records of time based performance data).

The customer is asking you in the Viptela solution can provide periodic automated reports with performance related data for each Service Provider. Is this possible?