



Configuration Management Workflow Guide

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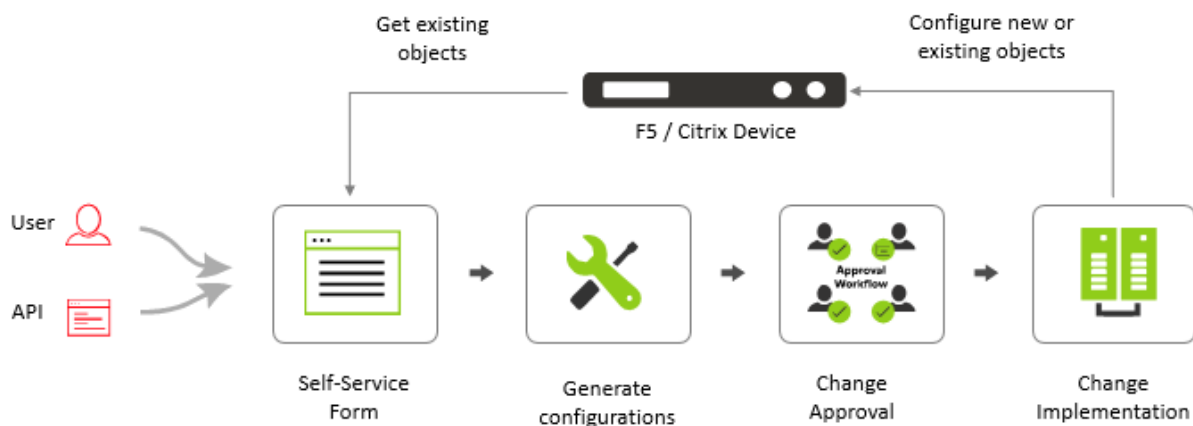
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Description

The Configuration management template allows the users to select an F5 LTM or GTM device and edit the configurations of selected ADC object like Wide IP, Virtual Server, pool, monitor, profile, and iRule. Also, it provides the sample configuration to create new ADC objects through TMSH and config modes.



Prerequisites

To run this automation template, the following prerequisite must be met:

- The ADC devices must be managed in the AppViewX inventory.
- Upload and execute the 'upload_mongodb.py' python script before running the workflow.

Compatible Software Versions

The automation template has been tested and validated for the following versions:

- Free AppViewX and AVX v12.3
- F5 v10.x, v11.x, and v12.x-

Limitations

N/A

REST API

N/A

Log In to AppViewX

Log in to the AppViewX web interface. The standard format for a login URL is:



`https://hostname:portnumber.`

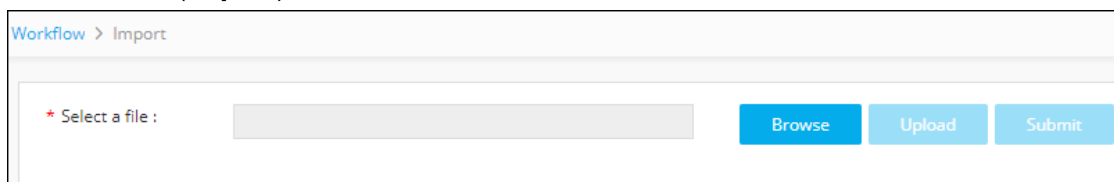
The hostname and port number are configured during deployment, with the default port number set to 5004 and the default web credentials set to `admin/AppViewX@123.`

Note: It is recommended that you access AppViewX using Internet Explorer, Firefox, or Google Chrome.

Import Visual Workflows

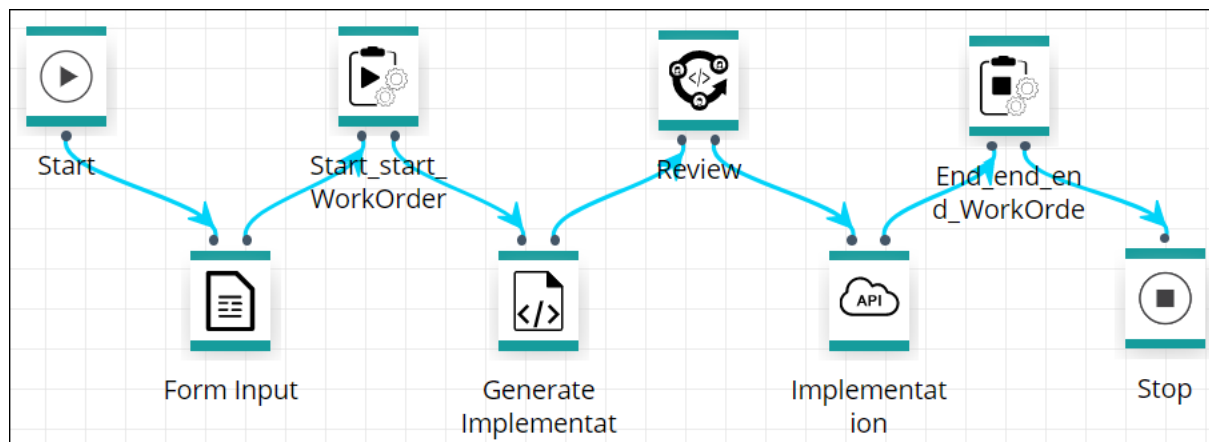
Note: Free AppViewX comes preloaded with visual workflows. You will only need to use the following import instructions when newer versions of the workflows become available.

1. Click the  (Menu) button.
2. Navigate to **Workflow > Studio**.
3. Click the  (**Import**) button in the Command bar.



4. To import a workflow, complete the following sub-steps:
 - a. Click the **Browse** button.
 - b. Select the zip file containing one or more workflows, then click **Upload**.
 - c. In the table at the bottom of the *Import* page, select the check box beside the unzipped workflow file.
 - d. Click **Submit** to deploy the workflow into your AppViewX environment.

The Create Configuration Management workflow is shown in the image below:





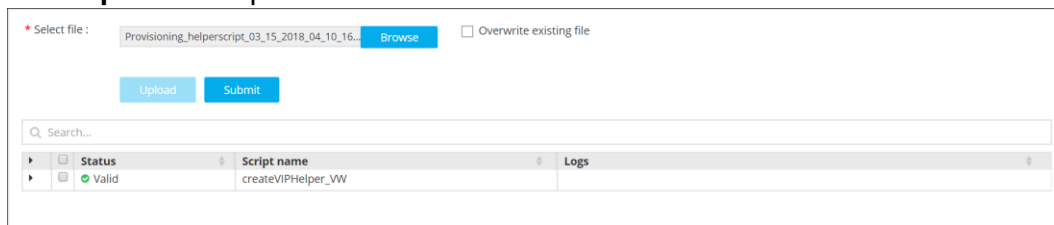
Import Helper Scripts

Note: Free AppViewX comes preloaded with helper scripts. You will only need to use the following import instructions when newer versions of the helper scripts become available.

To import a helper script, complete the following steps:

1. In the navigation menu on the left-hand side of the AppViewX screen, navigate to **Workflow > Studio**.

2. Click on the  (**Helper script**) button. The *Helper script library* screen appears.
3. Click the  (**Import**) button.
4. Click **Browse** and select the helper script zip file you want to import.
5. Click **Upload** to import the file and view its contents.



* Select file : Provisioning_helperscript_03_15_2018_04_10_16... **Browse** ☐ Overwrite existing file

Upload **Submit**

Search...



	Status	Script name	Logs
<input checked="" type="checkbox"/>	Valid	createVIPHelper_VW	


Note: Select the checkbox **Overwrite existing file**, only if the names of the new script file that you are trying to upload and the existing script file are the same.

6. In the table at the bottom of the Import page, select the check boxes beside each of the helper scripts.
7. Click **Submit** to deploy them into your AppViewX environment.

Enable the Configuration Management Workflow



To enable the Configuration management workflow, complete the following steps:

1. Click the  (**Menu**) button.
 2. Navigate to **Workflow > Studio**.
- The *Workflow* screen opens.
3. Select the checkbox beside the **Configuration management** workflow to enable it.
 4. Click the  (Enable) button in the Command bar.

Note: You can also enable the Configuration management workflow from the Card view by clicking the  (**Disable**) button.

5. On the *Confirmation* screen that appears, click **Yes**.

Add an ADC Device: F5

1. Click the  (Menu) button.
 2. Navigate to **Inventory > Device**.
- The *Device* screen opens with the **ADC** device inventory displayed by default.
3. Click the  (**Add**) button in the Command bar.
 4. On the *Add* screen that opens, click to select **F5** as the ADC vendor.

Device :: ADC > Add

Device details

Vendors

- A10
- AVI
- AmazonELB
- BigIQ
- Citrix
- F5**
- HAProxy
- NginxPlus

General information

* Modules ☒ LTM ☐ GTM

* Device name

* SSH Port

Cert sync ☒ Managed ☐ Monitored ☐ Ignored

* Credential type

* User name

* Password

vCMP Host ☐

* IP address

Data center

AppViewX group sync ☒

Credentials

Secondary device information

Secondary / Failover / Sync group ☒ Auto detect ☐ Manual entry

5. Select the module or modules to be managed on the ADC device: LTM or GTM.
6. Enter a **device name** that is specific to AppViewX and that will identify the device in the AppViewX inventory.
7. Enter the **IP address** of the device.
8. (Optional) Specify a **data center** location if you want to have the option later to filter devices based on their location.
9. In the **Cert sync** field, select the radio button for the kind of synchronization relationship you want to establish between SSL certificates on the ADC device and AppViewX: **Managed**, **Monitored**, or **Ignored**.
10. (Optional) Select the **AppViewX group sync** check box if you need AppViewX to sync the configuration changes from an active to a standby F5 ADC device. This is required in older F5 versions like v10. The latest versions of F5 sync automatically.
11. Select a **Credential type** from the dropdown menu.
12. Enter the **User name** and **Password** that are associated with the credentials.
Note: The user you enter in the **User name** field must have advanced shell access.
13. Select **Auto detect** to automatically detect and add secondary or failover devices or sync groups to the ADC device inventory.
14. Click **Save** to save the new ADC device. It will then appear in the table on the ADC tab.

Device :: ADC

ADC Server DNS Firewall WAF Switch Router Proxy Others

Search...

	Name	Sync group/cluster	IP address	Vendor	Modules	Data center	Status	Version
<input checked="" type="checkbox"/>	SFO_F5_ADC_R23		192.168.1.44	F5	LTM	San Francisco	Unresolved	
<input type="checkbox"/>	bigip40.151.payoda.com	HA_PAIR	192.168.40.151	F5	LTM, GTM		Managed	12.0.0 build 0.0.606
<input type="checkbox"/>	demo_f5_device		192.168.10.121	F5	LTM, GTM		Unresolved	

1 to 9 of 9

The device will display one of the following statuses:

- **In Progress** – Device configuration fetch is in progress.
- **Managed** - Device configurations are fetched and parsed successfully. This is the status a successfully added ADC device should have.
- **Unresolved** – Unable to communicate with device due to invalid login credentials.
- **Failed** – Device configuration fetch failed due to unsupported version.

Configuration Management Workflow

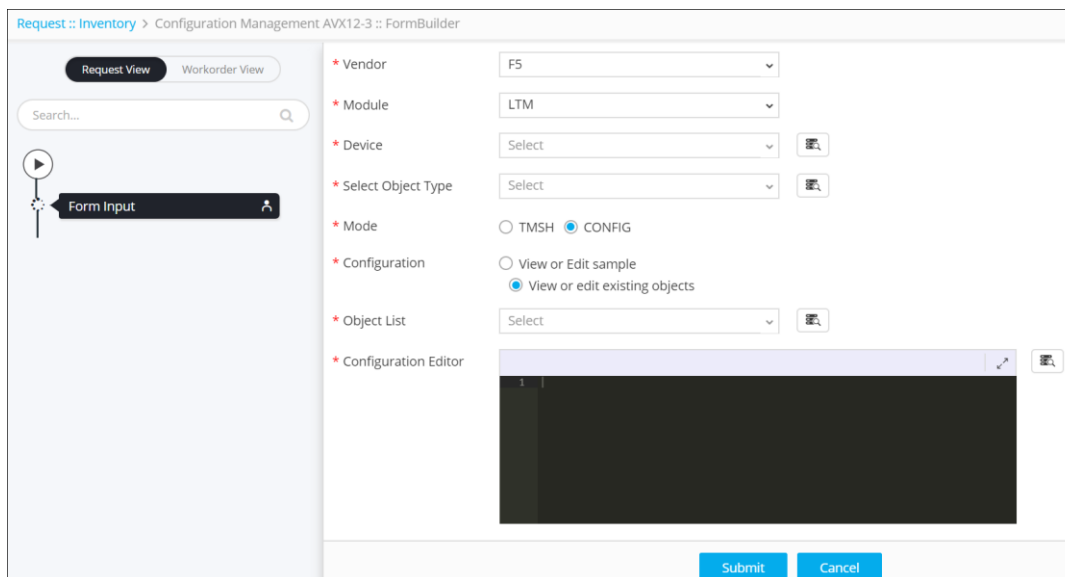
To submit the Configuration management workflow, complete the following steps:



1. Click the  (**Menu**) button.
2. Navigate to **Workflow > Request**.

The *Request* screen opens with the **My catalog** tab displayed by default. This screen displays all enabled workflows assigned to a specific user role.

3. Click the  (**Run workflow**) button for Configuration management.




The *FormBuilder* screen opens.



4. In the **Vendor** dropdown list, select F5.
5. In the **Module** dropdown list, select the module you want to use: **LTM** or **GTM**.
6. In the **Device** field, retrieve the list of available devices by clicking the  (**Fetch**) button and selecting the required device to which configurations will be pushed.
7. In the **Select Object Type** field, retrieve the list of object types available in the selected module by clicking the  (**Fetch**) button and selecting the required object type.
8. In the **Mode** field, select the preferred mode of input for the commands that will be pushed: **TMSH** or **Config**.
9. If you selected **TMSH** in Step 8, complete the following sub-steps:

- a. In the **Configuration editor**, enter the TMSH commands that have to be pushed to the selected device.
- b. Select the preferred mode of input for the commands to be pushed.

If you selected **Config** in Step 8, complete the following sub-steps:

- a. Select the option to **View or Edit sample** or **View or Edit existing objects**.
- b. If you selected **View or Edit sample**, retrieve the sample code by clicking the  (**Fetch**) button.
- c. If you selected **View or Edit existing objects**, retrieve the list of existing objects based on the module selected by clicking the  (**Fetch**) button and selecting the object.
- d. Click the  (**Fetch**) button to retrieve the object configuration.

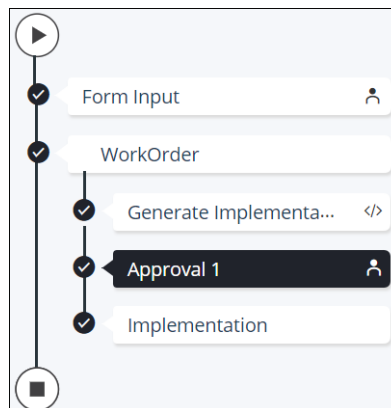
The configuration then appears in the **Configuration editor**.

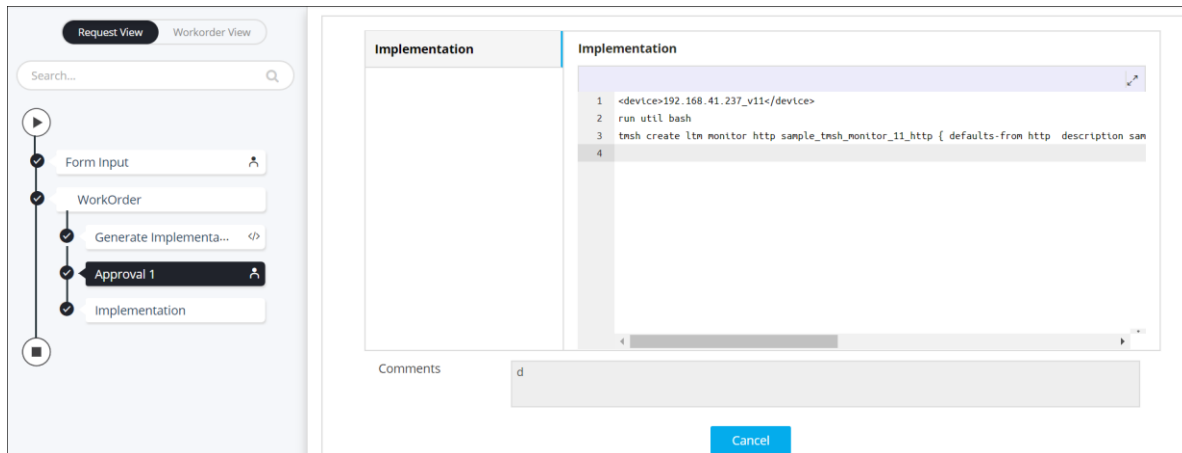
10. Click **Submit** to submit the template.

Work Order Flow

The following tasks are included in the Configuration management workflow, which is initiated after you have filled in the Configuration management form. Clicking any of the workflow links opens a log related to the selected task in the **Logs** pane at the bottom of the screen.

1. An implementation task is generated and submitted for approval.
2. Approval is granted by a user with permission to approve and implement tasks.
3. The configuration changes are implemented.






Request Inventory

To go to the Request inventory, complete the following steps:

1. Click the  (**Menu**) button.
2. Navigate to **Workflow > Request**.

The *Request* screen opens with **My catalog** tab displayed by default.

3. Click the **Request Inventory** tab.


This displays all workflows that have been triggered. On the **Request Inventory** screen, you can search for a request using the **Search** field and/or click the  (**Filter**) button to select the options you want to use to sort the requests.

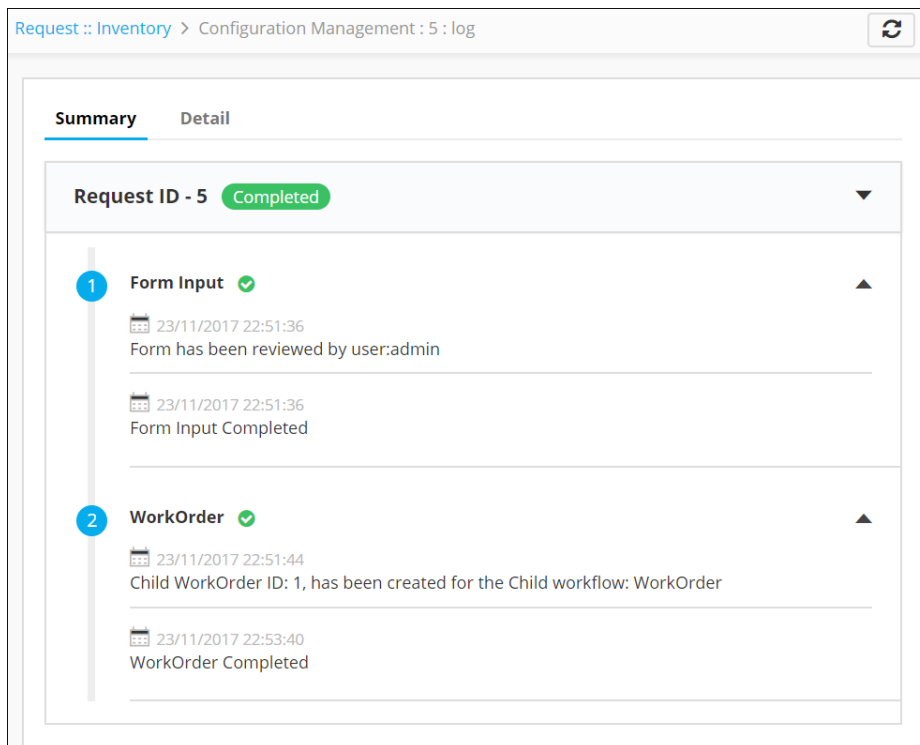
Request :: Inventory 1 to 1 of 1

My catalog **Request Inventory** Scheduled workflows

Search...

	Request ID	Workflow	Created by	Created time	Last updated	Status	Activity log
<input type="checkbox"/>	128	Configuration Management	admin	02/11/2017 05:49 PM	02/11/2017 05:49 PM	Completed	View

4. Click the **Request ID** created for **Configuration management** to view the tasks or phases of a request in a tree-view. For more details, refer to the [Work Order Flow](#) section of this guide
5. You can also view the following details of the request that are created: request creator, request time, last updated time, status, and activity log.
6. Click the **View** link in the **Activity log** column to display the request in a stage view. In the **Summary** tab, click the  (**Expand**) icon to view the details of each task. Click the **Details** tab to view log messages and other particulars of a request.




Schedule a Workflow

To schedule a workflow, complete the following steps:


1. Click the  (**Menu**) button.
2. Navigate to **Workflow > Request**.



The *Request* screen opens with **My catalog** tab displayed by default.

3. Click the  (**Schedule workflow**) button on the Configuration management workflow.
4. On the Configuration management window that opens, select the frequency of the policy migration process: once, hourly, daily, weekly, monthly, or yearly. The remaining fields in the Scheduler region update depending on what you select.
5. Click **Save**.

View Scheduled Workflows



To go to the scheduled workflow screen, complete the following steps:



1. Click the  (**Menu**) button.
2. Navigate to **Workflow > Request**.
3. The *Request* screen opens with **My catalog** tab displayed by default.
4. Click the **Scheduled workflows** tab.
5. On the Scheduled workflow screen that appears, you can perform the following tasks:
 - In the **View log** column, click **View** to display the details of a scheduled workflow.

- Click the  (**Pause**) or  (**Resume**) button to temporarily stop or continue the execution of a workflow.

Add a Credential

To add a credential to a device, complete the following steps:

1. Click the  (**Menu**) button.
2. Navigate to **Inventory > Device**.
The *Device* screen opens with the **ADC** tab selected by default.
3. Click the **ADC** tab.
4. Click the check box beside the device name, then click the  (**Credential**) button in the Command bar.
5. On the *Add credential* screen that appears, enter the name of the credential you want to add to the device.
6. Enter the **username** and **password** associated with the credential.
7. (Optional) If a secondary credential password was created by a vendor in order to communicate with the device, thus allowing different levels of control over the credential, enter this password in the **Secondary password** field.
8. Click **Save**.

The credential is then added to the table at the bottom of the screen. You can delete a credential or modify its name, user name, or password by selecting the check box beside the credential name in the table at the bottom of the screen and then clicking either the  (**Credential**) or  (**Delete**) button in the Command bar.