Create Role and Dashboard Workflow Guide

Trademarks

The trademarks, logos, and service marks displayed in this manual are the property of AppViewX or other third parties. Users are not permitted to use these marks without the prior written consent of AppViewX or such third party which may own the mark.

This product includes software developed by the CentOS Project (www.centos.org).

This product includes software developed by Red Hat, Inc. (www.redhat.com).

This product includes software developed by VMware, Inc. (www.vmware.com).

All other trademarks mentioned in this document are the property of their respective owners.

Contact Information

AppViewX, Inc.

500 Yale Avenue North, Suite 100

Seattle, WA 98109

Tel: +1 (206) 207 7541

Email: info@appviewx.com

Web: www.appviewx.com

Document Information

Software Version: 12.3.0

Document Version: 1.0

Last updated on: April 03, 2018

Contents

Description

The Create Role and Dashboard workflow is used to create a Role and Dashboard for F5 and Citrix objects efficiently by reducing the manual effort. This workflow enables the user to perform the following:

- Create a new role for multiple applications by assigning a specific permission to access its objects.
- Choose a persona to replicate the access and workflow permissions of an existing role to a new role that you create.
- Create a new dashboard where the user can select multiple applications and associate various tasks to it. Each application you selected in the workflow will be displayed as a separate Widget in the Dashboard.
- Share the dashboards you created with the roles in AppViewX.

Prerequisites

To run this workflow, ensure that the following pre-requisites are met:

- Free AppViewX or AppViewX version 12.3.0 has been downloaded and installed.
- The ADC F5 and Citrix devices has been added in the AppViewX device inventory.
- Each ADC device is a managed entity in AppViewX.

Compatible Software Versions

The automation temple has been tested and validated on the following software versions:

- AppViewX – Free AppViewX and AVX 12.3.0
- F5 (both LTM and GTM) – version10.x, 11.x, or 12.x

Limitations

- The action **Clear RAM Cache** is not supported by this workflow for Dashboard creation.
- Only the F5 and Citrix applications are supported.
- Only the Application View Widget is supported.

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 are available.

1. Click the ▤ (**Menu**) button.
2. Navigate to **Workflow > Studio**.
3. Click the ⬙ (**Import**) button in the Command bar.
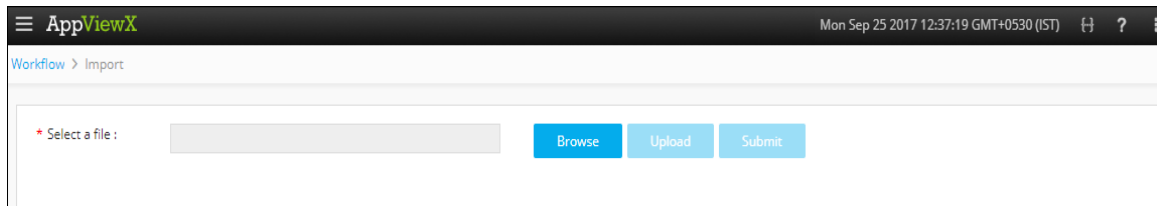
4. To import a workflow, complete the following steps:
    a. Click the **Browse** button.
    b. Select the zip file containing one or more workflows, then click **Upload**.
    c. In the table at the bottom of the Import page, select the check box beside the unzipped workflow file.
    d. Click **Submit** to deploy the workflow into your AppViewX environment.

The Create Role and Dashboard workflow is shown in the image below:
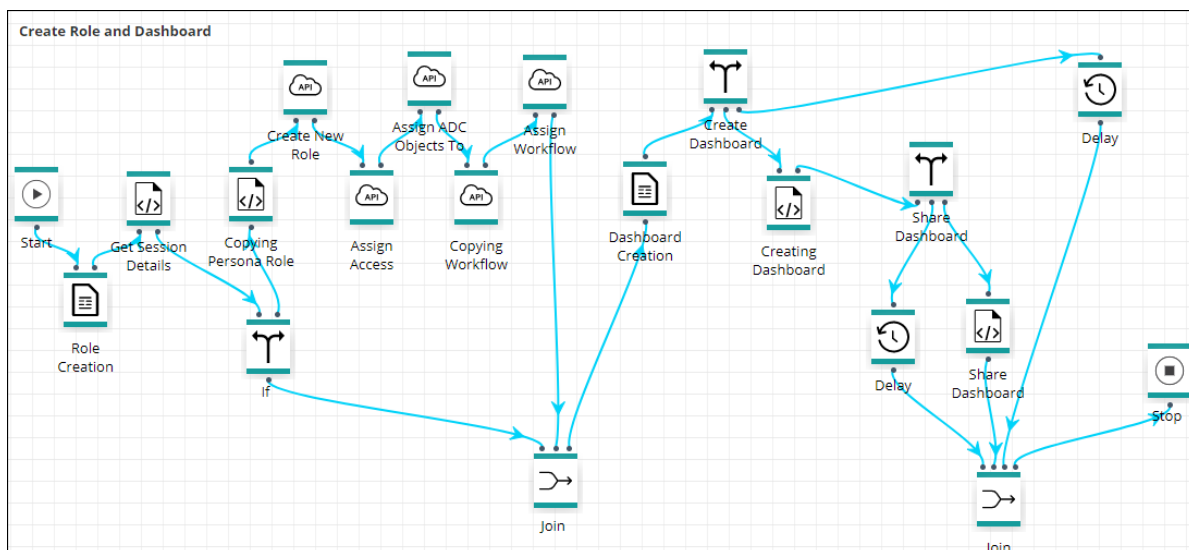
Import Helper Scripts

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 are available.

1. Click the ▤ (**Menu**) button.
2. Navigate to **Workflow > Studio**.
3. Click on the </> (**Helper script**) button in the Command bar.
   The *Helper script library* screen appears.
4. Click the ⬙ (**Import**) button.
5. Click **Browse** and select the helper script zip file you want to import.
6. Click **Upload** to import the file and view its contents.

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.

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

Add an ADC Device: F5 and Citrix

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

6. (Only applicable for F5 device) Click the **vCMP Host** check box, if you want to add and manage the host devices.
7. Select the module to be managed on the ADC device inventory.
8. (Only applicable for F5 device) Click the **vCMP Guest** check box, if you want to add and manage the guest devices.

9. Create a **Device name** that is specific to AppViewX and that will identify the device in the AppViewX inventory.

10. Enter the **management IP address** of the device.

11. (Only applicable for F5 device) Select the **IP address** or **FQDN** radio button based on how you want to establish the communication.

    Enter the IP address or FQDN in their corresponding fields depending on what you selected.

12. Enter the SSH port number of the device.

13. Specify a **Data center location** if you want to have the option later to filter devices based on their location.

14. 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**.

15. (Optional) Select the **AppViewX group sync** check box if you need AppViewX to sync the configuration changes from an active to standby F5 ADC device. This is required in older F5 versions like v10. The latest versions of F5 sync automatically.

16. From the **Credential type** dropdown list, select how to want to provide the credentials:

    o Select **Manual entry**, if you want to manually enter the credential details (user name and the associated password) every time the device is accessed.

    o Select **Credential list**, if you want to retrieve the login details created in the credential template. For more details on how to add a credential to a device, refer to the [Add a Credential](#) section of this guide.

       When you select the credential name from the dropdown list, the user name and password fields will be auto-filled with the values provided in the credential template.

17. In the **Secondary/Alternate** device field, select how you want to fetch the details of a backup device when the primary device becomes unavailable due to failure or scheduled down time:

    a. Select **Auto detect** if you want AppViewX to automatically detect and retrieve the configuration of the secondary/alternate device, then click Save to add the device to AppViewX.

    b. Select **Manual Entry** if you want to manually provide the details of the secondary device. At a minimum, fill in all fields that contain a red asterisk (*) beside their names.

18. Click **Add** to add the secondary device to the list at the bottom of the screen.

    Note: You can add more than one secondary devices. The **Update** and **Delete** buttons are enabled only when you try to modify the existing secondary device.

19. Click **Save** to save the new F5 device in the table on the ADC tab.

ADC	Server	DNS	Firewall	WAF	Switch	Router	Proxy	Cloud	Others			
Q Search...												
☐ **Name**		**Sync group/cluster**	**FQDN / IP address**		**Port**		**Vendor**		**Version**		**Modules**	**Status**
☐ ● 10.5.0.159			10.5.0.159		22		🅕 F5		12.1.2 build 2.0.276		LTM	❶ Unresolved
☐ ● 172.16.24.54		device-group-failover	172.16.24.54		22		🅕 F5		11.5.4 build 0.0.256		LTM,GTM	✔ Managed

The device will display one of the following statuses:

o **In Progress** – Device configuration fetch is in progress.

ο **Managed** - Device configurations are fetched and parsed successfully. This is the status a successfully added ADC device should have.

ο **Unresolved** – Unable to communicate with device due to invalid login credentials.

ο **Failed** – Device configuration fetch failed due to unsupported version.

Enable a Workflow

To enable the workflow, complete the following steps:

1. Click the ▤ (**Menu**) button.

2. Navigate to **Workflow** > **Studio**.

   The *Workflow* screen opens.

3. Click the ☐ (**Select**) button on the Create Role and Dashboard workflow to enable. If the workflow is already selected, a ☑ (**Deselect**) button appears.

4. Click the 🔒 (Enable) button in the Command bar.

   Note: You can also enable the Create Role and Dashboard workflow by clicking the ⊘ (**Disable**) button from its Card view.
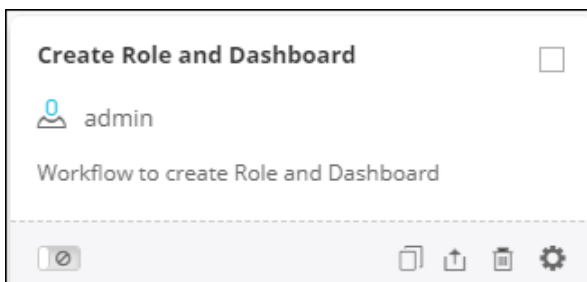

   On the *Confirmation* screen that appears, click **Yes**.

Generate F5 iHealth Report Now Workflow

To submit the Generate F5 iHealth Report Now 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. This screen displays all enabled workflows assigned to a specific user role.

3. Click the Play button on the Create Role and Dashborad workflow to execute.
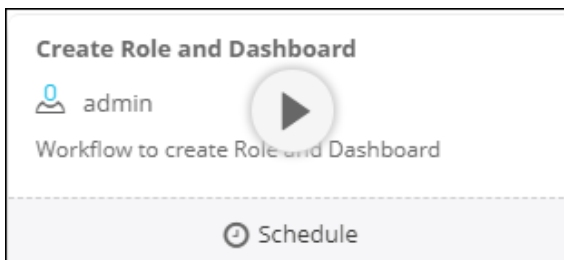
4. The *Form Builder* screen opens with the **Request View** tab displayed by default.

5. Select the **Yes** or **No** radio button depending on whether or not you want to create a role.

6. If the option **Yes** is selected, do the following:

    a. Enter a name for the role to help the users identify it.

    b. Enter a brief description of what users assigned to the role are able to do and/or what features or functionalities are associated with the role.

    c. In the **Persona** filed, click the ▦ (**Retrieve field values**) to fetch the list of existing roles. Select the role whose access and workflow permissions you want to replicate to the new role that you are creating.

    d. In the **Select Application** field, click the ▦ (**Retrieve field values**) to fetch the list of applications from the App Tag collection database. Select the applications for which you want the role to have access.

    e. In the **ADC Object Types** field, click the ▦ (**Retrieve field values**) to fetch the list of associated objects from the database. Select the objects for which you want to provide the permission.

    f. Select either the **Read** or **Read/Write** radio button to designate whether users assigned to the role have read-only or read/write permissions on the objects.

    g. Click the ➕ (**Add**) button.

        The application and object details are displayed in the **Objects details** table at the bottom of the screen. You can delete or modify the device and object details by selecting the check box beside the troubleshooting options in the table at the bottom of the screen and then clicking either the ✏️ (**Update**) or 🗑️ (**Delete**) button.

    h. Click **Submit** to trigger the workflow immediately.

WorkOrder Flow

The following are the workorder tasks of Create Role and Dashboard workflow.

Note: You can click each task to view its details. Wherever applicable, all logs related to the selected task are displayed in the **Logs** pane at the bottom of the screen.

1. **Role Creation Form** ─ Displays all the details that you have mentioned to create a role.

2. **Get Session details** ─ The session details will be generated to retrieve the information (corresponding to the application you selected) from the database using the API.

3. **Copying Persona Role Details** ─ All the access details of an existing role are copied.

4. **Create New Role** ─ A new role is created in AppViewX based on the inputs provided in the form builder.

5. **Assign Access Permissions To New Role** ─ Fetches the access details from the selected Persona and assigns them to the New Role.

6. **Assign ADC Objects To New Role** ─ Assigns the access permission of the ADC objects to the New Role.

7. **Copying Workflow Permissions from Persona** ─ All the workflow permission of an existing role is copied.

8. **Assigning Workflow Permissions To New Role** ─ Assigns the workflow permission of the ADC objects to the New Role

9. **Dashboard Creation Form** ─ Select the **Yes** or **No** radio button depending on whether or not you want to create a dashboard.

If the option **Yes** is selected, do the following:

a. Enter a name for the dashboard to help the users identify it.

b. Select the Blueprint based on how to want the objects of an application to be displayed in the dashboard.

   Note: Only the **Datacenter based monitoring of an application** is supported in this workflow.

c. In the **Select Application** field, click the 📇 (**Retrieve field values**) to fetch the list of F5 and Citrix applications from the App Tag collection database. Select the applications for which you want the dashboard to be created.

d. In the **Select Actions** field, click the 📇 (**Retrieve field values**) to fetch the complete list of actions available for Application View widgets. Select the actions that you want to be performed on the selected application.

e. Click the ➕ (**Add**) button.

   The application details are displayed in the **Dashboard details** table at the bottom of the screen. You can delete or modify the details by selecting the check box beside the troubleshooting options in the table at the bottom of the screen and then clicking either the ✏️ (**Update**) or 🗑️ (**Delete**) button.

   Note: You can create multiple dashboards and associate various actions to it using this workflow

f. Select the **Yes** or **No** radio button depending on whether or not you want to share the Dashboard with an existing role.

g. If the option **Yes** is selected, click the **Fetch Roles** button to retrieve the list of roles that are available in AppViewX.

h. Select the role from the dropdown list to which you want to share the dashboard.

i. Select either the **R** or **RW** radio button to designate whether users assigned to the role have read-only or read/write permissions on the objects.

j. Click the ➕ (**Add**) button.

   The role and its access details are displayed in the **Shared Roles** table at the bottom of the screen. You can delete or modify the details by selecting the check box beside the troubleshooting options in the table at the bottom of the screen and then clicking either the ✏️ (**Update**) or 🗑️ (**Delete**) button.

k.   Click **Submit** to trigger the workflow immediately.

10. **Creating Dashboard** ─ A new dashboard is created and each application you selected in this workflow will be displayed as a separate Widget under the respective dashboard. Wide IP(s) will be grouped under Global-Traffic. Virtual Servers will be grouped under respective Data center. Data center will be grouped under the group Local-Traffic. Actions will be assigned to the objects under each group and the default action messages are set.

11. **Share Dashboard with Roles** ─ The dashboard you created are shared with the selected Roles.

Request Inventory

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

1. Click the ▤ (**Menu**) button.

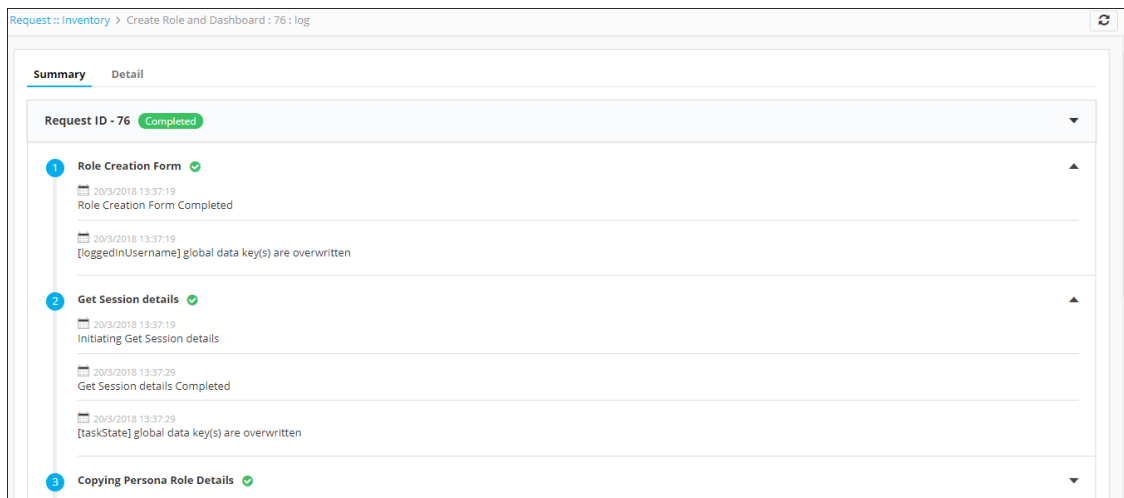2. Navigate to **Workflow** > **Request**.

   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 ID	Workflow	Created by	Created time	Last updated	Status	Ref. ID	Activity log
☐	641	Create Role and Dashboard	admin	30/03/2018 02:19 PM	30/03/2018 02:19 PM	⟳ In Progress		View
☐	640	Create Role and Dashboard	admin	30/03/2018 11:10 AM	30/03/2018 11:10 AM	✔ Completed		View
☐	639	Create Role and Dashboard	admin	30/03/2018 10:40 AM	30/03/2018 10:40 AM	✔ Completed		View
☐	78	Create Role and Dashboard	admin	20/03/2018 02:02 PM	20/03/2018 02:02 PM	✔ Completed		View
☐	77	Create Role and Dashboard	admin	20/03/2018 01:51 PM	20/03/2018 01:51 PM	✔ Completed		View

4. Click the **Request ID** created for Create Role and Dashboard workflow to view its details. The screen opens with the **Request View** tab selected by default.

   a. After the workflow execution is complete, the **Request View** tab displays the tasks or phases of a request in a tree view. For more details, refer to the [WorkOrder Flow](#) section of this guide.

   b. Click the **Workorder View** tab to view the work order details such as work order ID, date and time when the work order was created and updated, status, RFC ID, and RFC status.

5. In the *Request Inventory* screen, you can also view the following details of the request: 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 Workflows

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**) button on the corresponding workflow.
4. On the respective window that opens, select the frequency of the report generation 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:
   o In the **View log** column, click **View** to display the details of a scheduled workflow.
   o 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 check box beside the device name, then click the 🔎 (**Credential**) button in the Command bar.

4. On the *Add credential* screen that appears, enter the name of the credential you want to add to the device.

5. Enter the **username** and **password** associated with the credential.

6. (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.

7. 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 **Modify credential** or **Delete** button in the Command bar.

Troubleshooting

I cannot find the workflow in the Request Catalog

You must enable the workflow from the Configurator section. For more details on how to enable a workflow, refer to the Enable a Workflow section of this guide.