



Generate and Schedule an iHealth Report Workflow Guide

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Description

The Generate iHealth Report Now workflow is used to generate a report comprising of the customized diagnostic information. The iHealth report gives you valuable, actionable insight into the efficiency of the hardware and software running in your BIG-IP system. It will be sent as an email attachment to the configured email address that enables the user to take the recommended action, and in many cases it helps in resolving common configuration issues without the need to contact the F5 Technical Support.

The iHealth reports can be scheduled using the Schedule F5 iHealth Report workflow. When the user executes the workflow for the first time, it will only fetch all the relevant inputs that are provided and push them to the database. Also, specify the time you want the report generation to occur. For more details on how to set the frequency of report generation, refer to Schedule a Workflows section of this guide.

User will have to execute the “Schedule F5 iHealth Report” workflow again to generate the F5 iHealth report and the inputs will be automatically fetched from the database. In order to modify the inputs, the user has to clone the workflow and provide the inputs on the new workflow. For more details on how to clone a workflow, refer to the Clone a Workflow section of this guide.

Note: The iHealth reports generation for scheduled jobs is available in AppViewX version 11.x and 12.x. In the previous release, it was generated from the device inventory page. For AppViewX version 12.3.0, the iHealth report generation has been provisioned through a workflow.

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 devices has been added in the AppViewX device inventory.
- The iHealth report is configured in AppViewX > Settings > ADC to manage devices, iHealth reports, objects, and statistics.
- The SMTP is configured in AppViewX > Settings > General for sending emails.

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) – version 10.x, 11.x, or 12.x

Limitations

A maximum of 25 devices are supported for iHealth report generation.

Log In to AppViewX

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



`https://hostname:portnumber.`

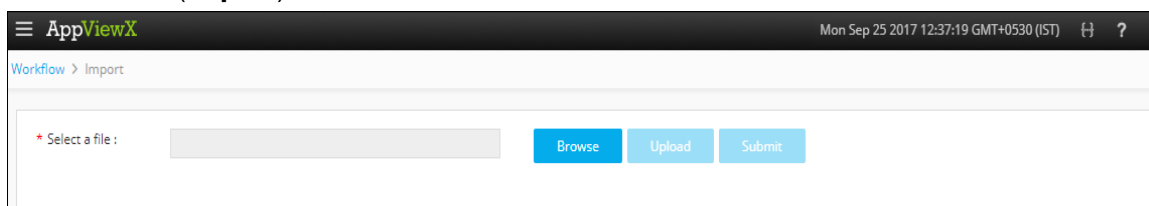
The hostname and port number are configured during deployment, with the default port number set to 5004 and the default web credentials set to `admin/AppViewX@123`.

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

Import Visual Workflows

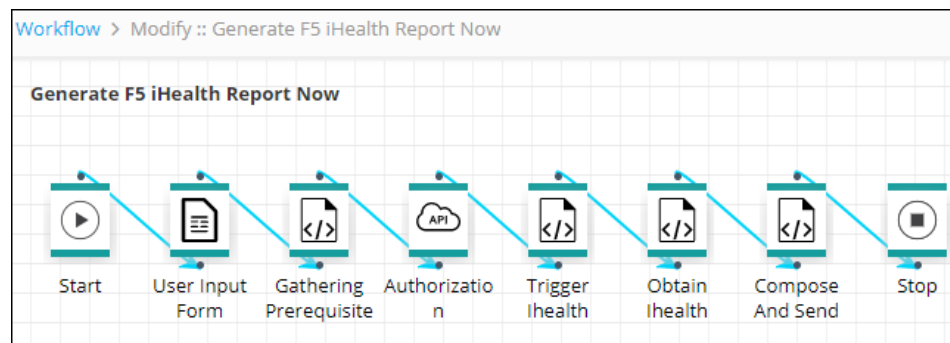
Note: Free AppViewX comes preloaded with visual workflows. You will only need to use the following import instructions when newer versions of the workflows are available.

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

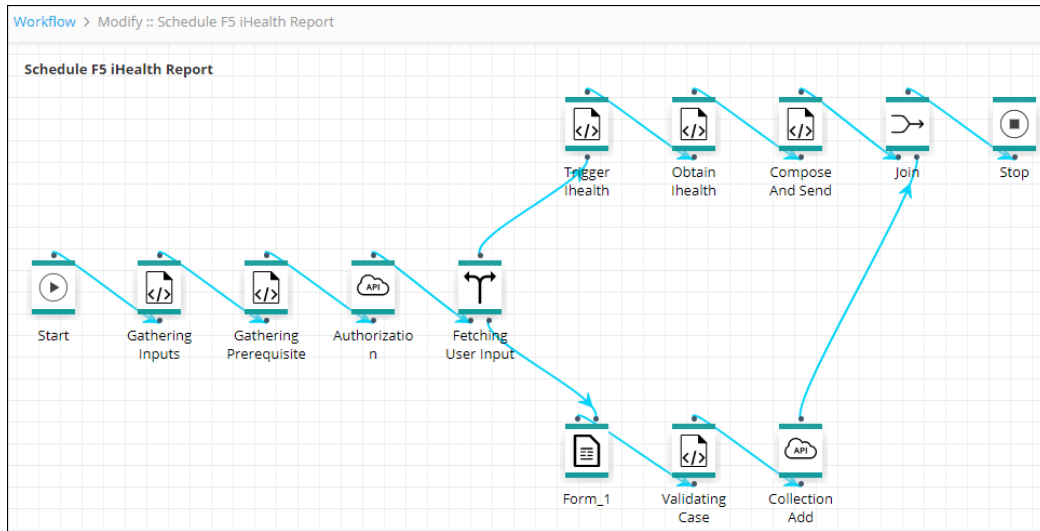


4. To import a workflow, complete the following steps:
 - a. Click the **Browse** button.
 - b. Select the zip file containing one or more workflows, then click **Upload**.
 - c. In the table at the bottom of the Import page, select the check box beside the unzipped workflow file.
 - d. Click **Submit**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

The Generate iHealth Report Now workflow is shown in the image below:






The Schedule iHealth Report 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.

* Select file : ☐ Overwrite existing file

Search...


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

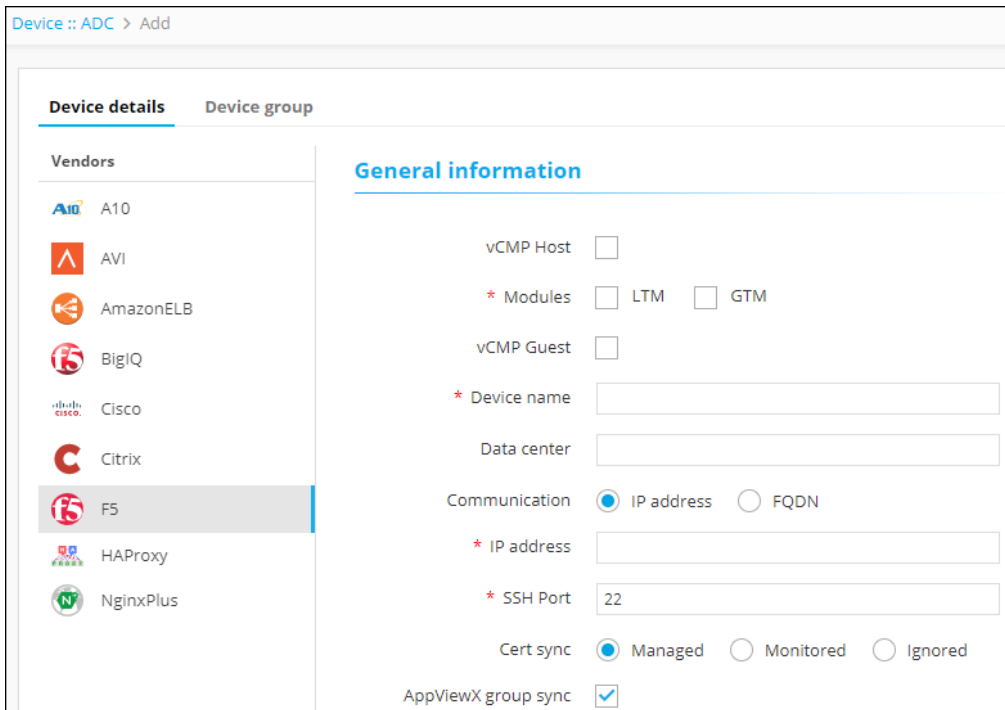
Note: Select the checkbox **Overwrite existing file**, only if the names of the new script file that you are trying to upload and the existing script file are the same.

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

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.



Device :: ADC > Add

Device details **Device group**

Vendors

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

General information

vCMP Host ☐

* Modules ☐ LTM ☐ GTM

vCMP Guest ☐

* Device name

Data center

Communication ☒ IP address ☐ FQDN

* IP address

* SSH Port

Cert sync ☒ Managed ☐ Monitored ☐ Ignored

AppViewX group sync ☒

6. (Optional) 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.
8. (Optional) 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. (Optional) Specify a **Data center location** if you want to have the option later to filter devices based on their location.
11. 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. 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**.
13. (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.
14. From the **Credential type** dropdown list, select how to want to provide the credentials:
 - Select **Manual entry**, if you want to manually enter the credential details (user name and the associated password) every time the device is accessed.

- 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.

- 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:
 - 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.
 - 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.
 - 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.
- 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								
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	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:

- **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.

Configure iHealth Report Settings


The iHealth report sub-tab enables you to configure the settings for F5 BIG-IP iHealth reports. To configure them, complete the following steps:

- Click the  (**Menu**) button.
- Navigate to **Settings > ADC > iHealth report**.
- In the **iHealth username** field, enter the username used to access the iHealth portal.
- In the **iHealth password** field, enter the password used to access the iHealth portal.
- The **iHealth case number** field is enabled by default, which makes it a mandatory field that users have to complete when they want to generate an iHealth report. If you want to make this field optional, click the  (**Enabled**) button to disable it.

7. The iHealth proxy field is enabled by default, which makes it possible to connect to the F5 website using proxy details. If you want to make this method unavailable, click the  (**Enabled**) button to disable it.
8. Click **Save** to save the iHealth report configuration changes.





Configure the SMTP

To configure an SMTP server, complete the following steps:

1. Click the  (**Menu**) button.
3. Navigate to **Settings > General > SMTP**.
4. In the **SMTP host** field, enter the host address of the SMTP server.
5. In the **SMTP port** field, enter the port number for the SMTP server.
6. In the **From address** field, enter the email address from which the notification must be sent.
7. If an SMTP server requires authentication to connect, click the (**Disabled**) button to enable it.
8. If you enabled authentication in Step 7, enter the user name and password that is used for authentication on the SMTP server.
10. In the **Send email to** field, enter an email address you want to use to test the configuration, then click **Test**. If the configuration is successful, a test email will be sent to this address verifying that everything is working correctly.
11. Click **Save** to save the changes you have made to the system settings.

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 corresponding 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 workflow (Generate F5 iHealth Report Now or Schedule F5 iHealth Report) by clicking the  (**Disable**) button from its Card view.
On the *Confirmation* screen that appears, click **Yes**.

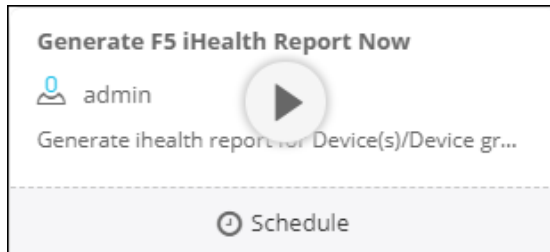
Generate F5 iHealth Report Now Workflow

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.

- Click the Play button on the Generate F5 iHealth Report Now workflow to execute.



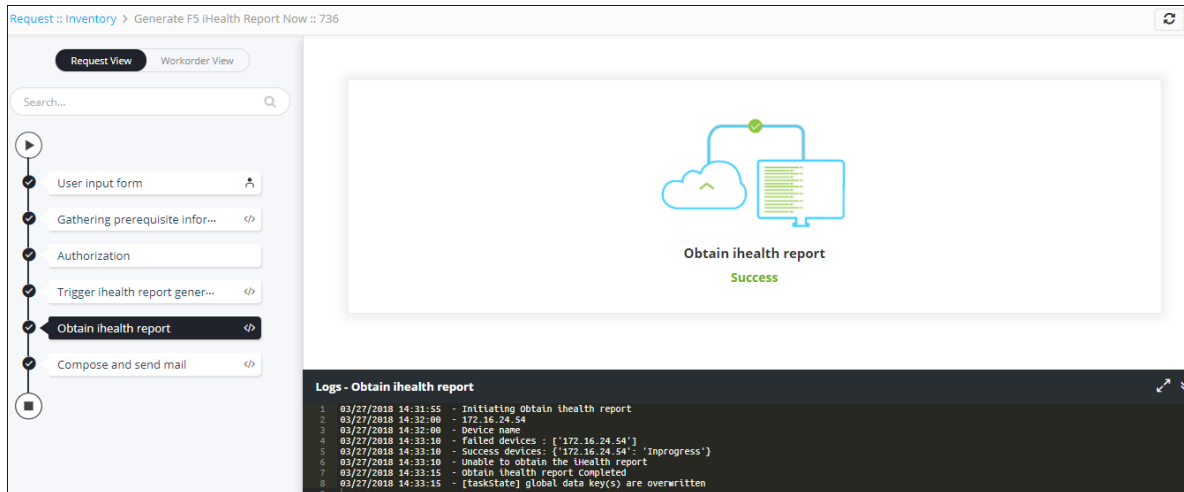
- The *Form Builder* screen opens with the **Request View** tab displayed by default.

- Enter the relevant case number on F5 portal to which the iHealth report needs to be uploaded.
- Click the **Device name** or **Device group** radio button based on the type of configuration you want to use.
- In the **Device** field, click the  (**Retrieve field values**) to fetch the list of F5 devices for which you want to trigger the iHealth report generation.
- Enter the email address of the user who should receive the iHealth report.
- Click **Submit** to trigger the workflow immediately.

WorkOrder Flow

The following are the workorder tasks of Generate F5 iHealth Report Now 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. **Gathering prerequisite information** — The prerequisite information is fetched from the properties file to generate the session ID for the system user.
2. **Authorization** — The session ID of the system user is retrieved for authorization using the Rest API.
3. **Trigger iHealth report generation** — The iHealth report generation is triggered for the selected devices (based on the inputs provided in the form builder).
4. **Obtain iHealth report generation** — The report for the selected devices consist the severity count for each device and it takes a maximum of 4 hours to be generated.
5. **Compose and send mail** — The iHealth diagnostic report for the selected devices is sent in a PDF format to the configured recipients as a mail attachment.

Schedule F5 iHealth Report

To submit the Schedule F5 iHealth Report 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 Schedule F5 iHealth Report workflow to execute.



The *Form Builder* screen opens with the **Request View** tab displayed by default.

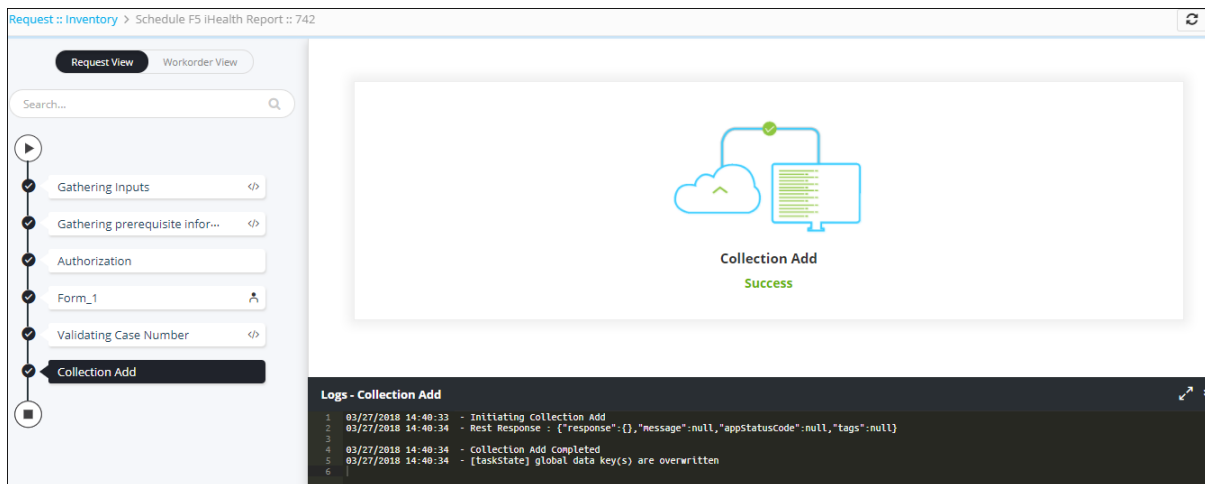
4. Enter the relevant case number on F5 portal to which the iHealth report needs to be uploaded.

5. Click the **Device name** or **Device group** radio button based on the type of configuration you want to use.
6. In the **Device** field, click the  (**Retrieve field values**) to fetch the list of F5 devices for which you want to trigger the iHealth report generation.
7. Enter the email address of the user who should receive the iHealth report.
8. Click **Submit** to trigger the workflow immediately.

WorkOrder Flow

The following are the workorder tasks of Schedule F5 iHealth Report workflow when you execute the workflow for the very first time.

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.



The screenshot shows the 'Request View' for 'Schedule F5 iHealth Report'. On the left, a vertical list of tasks is shown: 'Gathering Inputs', 'Gathering prerequisite information', 'Authorization', 'Form_1', 'Validating Case Number', and 'Collection Add'. The 'Collection Add' task is selected and highlighted. The main area displays a diagram of the 'Collection Add' task, showing a cloud icon and a server icon connected by a line, with the text 'Collection Add Success' below it. At the bottom, a 'Logs - Collection Add' pane shows the following log entries:

```

1 03/27/2018 14:40:33 - Initiating Collection Add
2 03/27/2018 14:40:34 - Rest Response : {"response": {}, "message": null, "appStatusCode": null, "tags": null}
3
4 03/27/2018 14:40:34 - collection Add completed
5 03/27/2018 14:40:34 - [taskState] global data key(s) are overwritten
6

```

1. **Gathering Inputs** — AppViewX will search for the inputs in the database to fetch and generate the F5 iHealth report. If the inputs are not available, the user will be redirected to the input form to provide all the relevant details.
2. **Gathering prerequisite information** — The prerequisite information is fetched from the properties file to generate the session ID for the system user.
3. **Authorization** — The session ID of the system user is retrieved for authorization using the Rest API.
4. **Form** — The details corresponding to the device are displayed.
5. **Validating case number** — Checks if the case number is mandatory in the iHealth report settings.
6. **Collection Add** — Pushes the user inputs to the database to be consumed for the upcoming requests.

The following are the workorder tasks of Schedule F5 iHealth Report workflow when you execute the workflow for the very first time.

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.

Request View: Schedule F5 iHealth Report :: 743

Workflow steps:

- Gathering Inputs
- Gathering prerequisite information
- Authorization
- Trigger iHealth report generation
- Obtain iHealth report**
- Compose and send mail

Obtain iHealth report Success

Logs - Obtain iHealth report

```

1 03/27/2018 14:41:14 - Initiating Obtain iHealth report
2 03/27/2018 14:41:20 - gs-fs-dev3b.payoda.com,gs-fs-sne4.payoda.com
3 03/27/2018 14:41:20 - Device name
4 03/27/2018 14:42:30 - Failed devices: ['gs-fs-dev3b.payoda.com', 'gs-fs-sne4.payoda.com']
5 03/27/2018 14:42:30 - Success devices: ['gs-fs-dev3b.payoda.com': 'Inprogress', 'gs-fs-sne4.payoda.com': 'Inprogress']
6 03/27/2018 14:42:30 - Unable to obtain the iHealth report
7 03/27/2018 14:42:34 - Obtain iHealth report Completed
8 03/27/2018 14:42:34 - [taskState] global data key(s) are overwritten
9

```

1. **Gathering Inputs** — The inputs are fetched from the database.
2. **Gathering prerequisite information** — The prerequisite information is fetched from the properties file to generate the session ID for the system user.
3. **Authorization** — The session ID of the system user is retrieved for authorization using the Rest API.
4. **Trigger iHealth report generation** — The iHealth report generation is triggered for the selected devices (based on the inputs provided in the form builder).
5. **Obtain iHealth report generation** — The report for the selected devices consist the severity count for each device and it takes a maximum of 4 hours to be generated.
6. **Compose and send mail** — The iHealth diagnostic report for the selected devices is sent in a PDF format to the configured recipients as a mail attachment.

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


My workflows

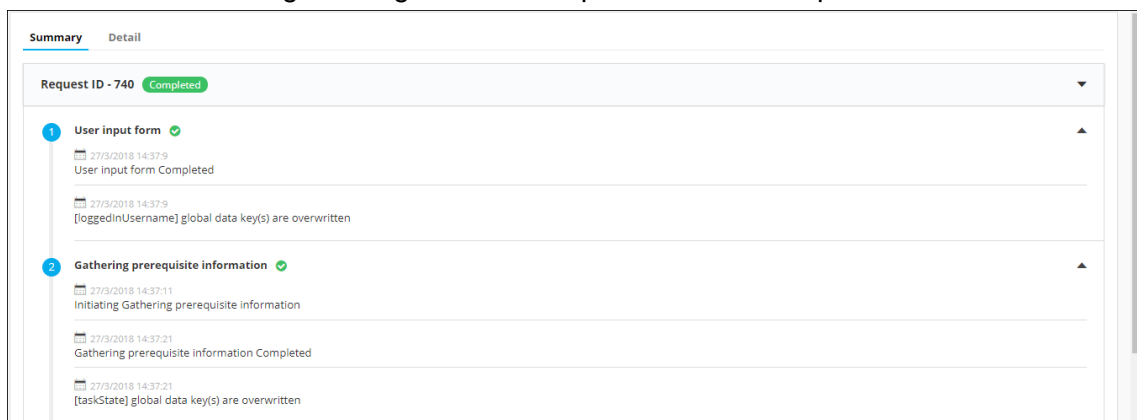
Request Inventory

Scheduled workflows

Q Search...



	Request ID	Workflow	Created by	Created time	Last updated	Status	Ref. ID	Activity log
	746	Schedule F5 iHealth Report	admin	27/03/2018 02:59 PM	27/03/2018 02:59 PM	Failed		View
	743	Schedule F5 iHealth Report	admin	27/03/2018 02:40 PM	27/03/2018 02:40 PM	Completed		View
	742	Schedule F5 iHealth Report	admin	27/03/2018 02:39 PM	27/03/2018 02:39 PM	Completed		View
	741	Schedule F5 iHealth Report	admin	27/03/2018 02:37 PM	27/03/2018 02:37 PM	Failed		View
	740	Generate F5 iHealth Report Now	admin	27/03/2018 02:37 PM	27/03/2018 02:37 PM	Completed		View

4. Click the **Request ID** created for corresponding 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:
 - 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.



Clone a Workflow

To clone a workflow in AppViewX, complete the following steps:

1. Click the  (**Menu**) button.
2. Navigate to **Workflow > Studio**.
The *Configurator* screen appears.
3. Select a workflow for which you want to create an exact replica.
4. Click the  (**Clone**) button in the Command bar.
On the *Clone Workflow* screen that appears, enter a name for the new workflow.
5. (Optional) Enter a description that helps differentiate this workflow from the original.
6. Click **Save** to add the workflow to the system.
The cloned workflow workspace appears with all the data that was in the parent workflow. Also, the cloned workflow will be executed immediately after the cloning is complete.

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.