



Reporting User Guide

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Preface

Revision History

Revision	Description	Date
1.0	Initial release of document for Release 2020.3.0	September 2020

About this Guide

This guide describes AppViewX's Build Your Own Report (BYOR) tool and provides step by step instructions on creating customized reports using preexisting hooks and query builder, sharing and scheduling reports, performing actions on reports (pin, share, clone, delete), associating workflows to reports and more.

Audience

This guide aims to allow users to self-serve, build reports around certificate lifecycle management and application delivery and security automation. It is intended for the following audience:

- Chief Information Security Officer (CISO)
- PKI Security
- Security Operations (SecOps)
- IT Director
- Network and Automation Engineers
- Application Delivery and Traffic Management
- Director of Automation and Security Services
- Network Operations (NetOps)
- Network Engineering and Service Delivery

Text Conventions

The following text conventions are used in this document:

Convention	Description
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in the text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.

Convention	Description
codeblock	Indicates commands with a paragraph, URLs, codes in examples, text that appears on the screen, or text that you enter.

Chapter 1: Module Overview

AppViewX's Build Your Own Report (BYOR) report builder is a low-code reporting and product usage analytics tool that empowers non-technical users to build best-in-class reports and eliminates dependence on development teams. AppViewX's Reporting platform showcases interactive dashboards that display compelling report data, thereby assisting in smarter decision making.

With AppViewX's BYOR you can:

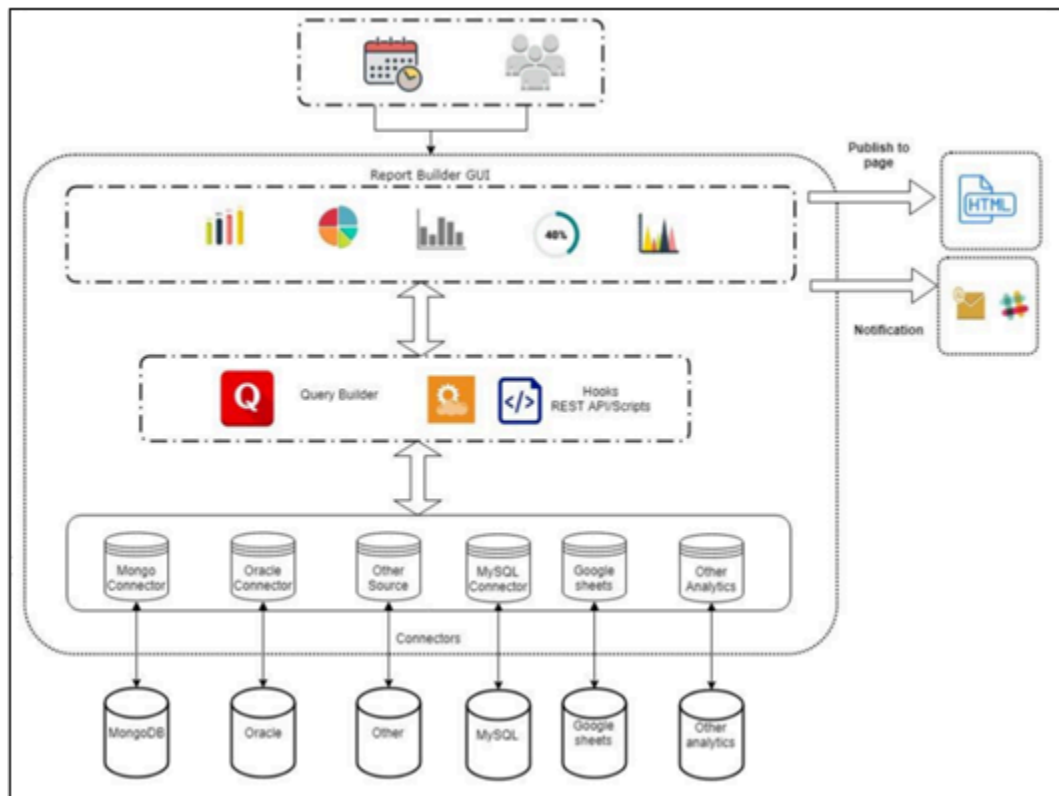
- **Explore pre-shipped reports:** Application Delivery, Security, Certificate, and Automation
- **Build your own reports (BYOR):** Build customizable reports using Low Code report builder/
- **Access multiple data sources:** Query explorer, REST API, Script
- **WYSIWYG:** What you see is what you get, preview reports as you build them.
- **Configure chart drilldowns:** Add detailed levels of data to your reports.
- **Visualize your data:** Pin reports to a self-service dashboard for quick access and insights.
- **Schedule reports:** Schedule and share reports as email attachments (PDF, xls, csv).
- **Build actionable reports:** Integrate with visual workflow for actionable reports and auto remediation.
- **Connect to your data:** Study data quickly and easily through product & feature usage report metrics.
- **Reduce turnaround time:** Increased efficiency with automation of the reporting process

Chapter 2: Prerequisites

Web Browser Requirement

Browsers	Version
Internet Explorer	v11.0.9600.18817 or later
Firefox	v74.0.1 (64-bit) or later
Google Chrome	v85.0.4183.83 (64-bit) or later

Chapter 3: Reference Architecture



The plug-in as part of the above architecture is **avx-commons**.

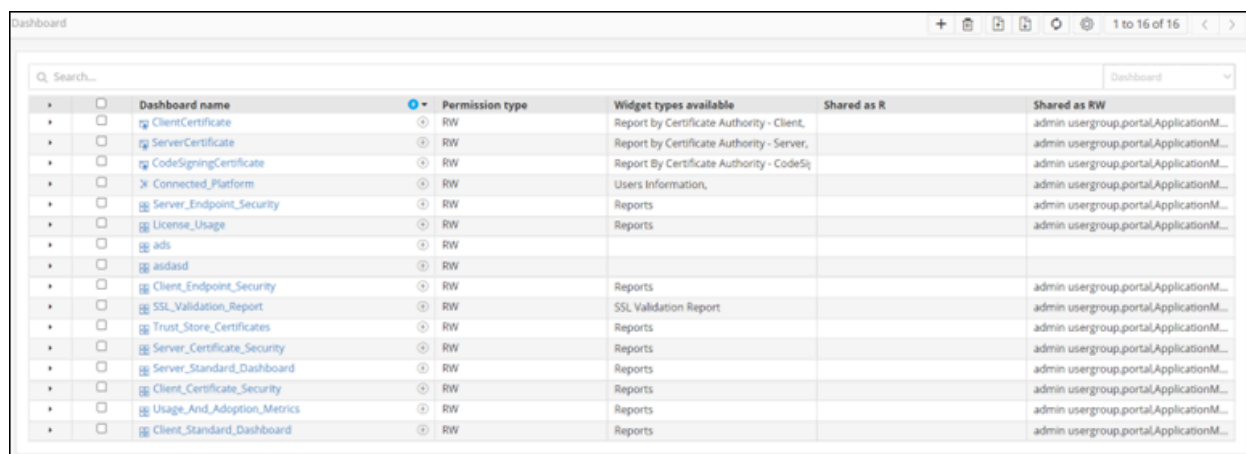
Chapter 4: Getting Started with Dashboard

- Overview
- Getting Started with the Prebuilt Dashboard for Reports
- How to Search for a Dashboard
- How to View a Dashboard
- How to Pin Reports to a Dashboard
- How to Build a Custom Dashboard
- How to Download a Dashboard

Overview

The Dashboard enables you to manage, monitor, and interpret all configured applications and their objects. Widgets on the dashboard display reports that provide consolidated statistics of all accessible certificates, devices, and objects by extracting data from the respective inventories and recording the key value indicators.

- **Default dashboards** - Display predefined widgets to provide AppViewX metric usage reports and up-to-the-minute reports. It contains the status and statistics of devices and certificates managed within the AppViewX platform.
- **Custom dashboards** - Display widgets created by the user. Widgets and dashboards can be added, removed, or modified as necessary and can also be shared among multiple roles.



The screenshot shows the AppViewX Dashboard interface. At the top, there is a search bar and a dropdown menu set to 'Dashboard'. Below this is a table listing various dashboards. Each row includes a checkbox, a dashboard name, a permission type (all are 'RW'), widget types available, and shared information. The dashboards listed include ClientCertificate, ServerCertificate, CodeSigningCertificate, Connected_Platform, Server_Endpoint_Security, License_Usage, ads, asdasd, Client_Endpoint_Security, SSL_Validation_Report, Trust_Store_Certificates, Server_Certificate_Security, Server_Standard_Dashboard, Client_Certificate_Security, Usage_And_Adoption_Metrics, and Client_Standard_Dashboard.

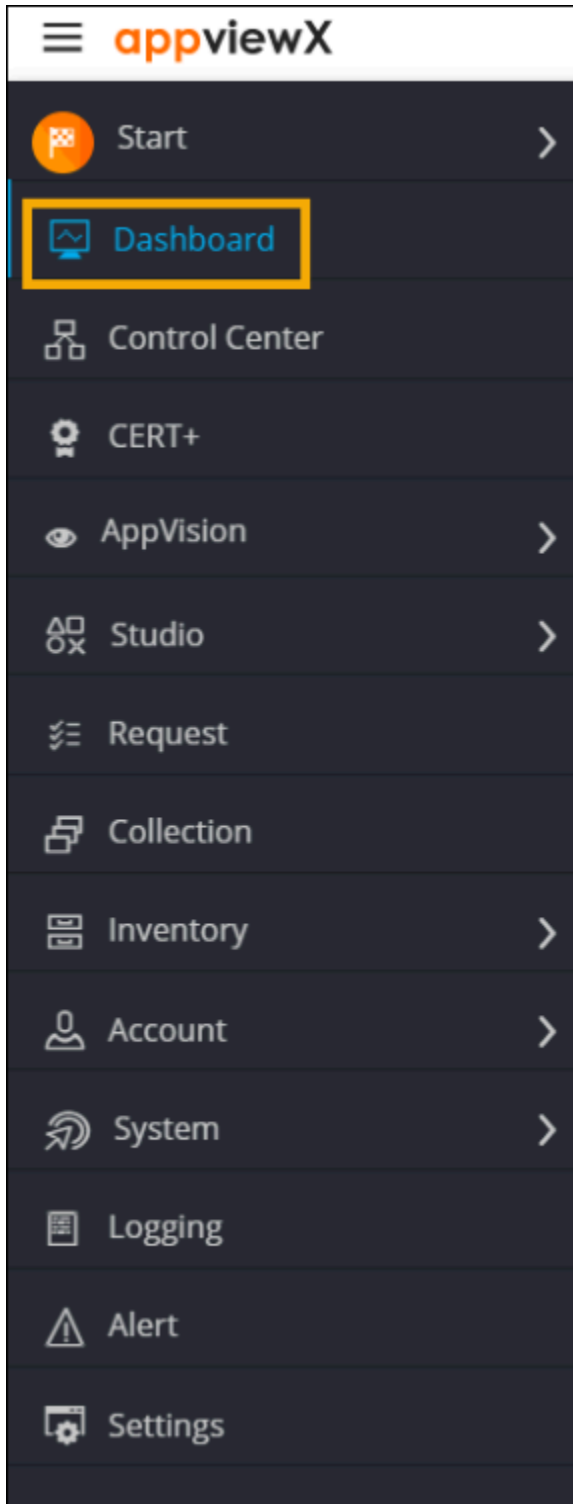
	Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
☐	ClientCertificate	RW	Report by Certificate Authority - Client,		admin usergroup.portal.ApplicationM...
☐	ServerCertificate	RW	Report by Certificate Authority - Server,		admin usergroup.portal.ApplicationM...
☐	CodeSigningCertificate	RW	Report By Certificate Authority - CodeSi		admin usergroup.portal.ApplicationM...
☐	Connected_Platform	RW	Users Information,		admin usergroup.portal.ApplicationM...
☐	Server_Endpoint_Security	RW	Reports		admin usergroup.portal.ApplicationM...
☐	License_Usage	RW	Reports		admin usergroup.portal.ApplicationM...
☐	ads	RW			
☐	asdasd	RW			
☐	Client_Endpoint_Security	RW	Reports		admin usergroup.portal.ApplicationM...
☐	SSL_Validation_Report	RW	SSL Validation Report		admin usergroup.portal.ApplicationM...
☐	Trust_Store_Certificates	RW	Reports		admin usergroup.portal.ApplicationM...
☐	Server_Certificate_Security	RW	Reports		admin usergroup.portal.ApplicationM...
☐	Server_Standard_Dashboard	RW	Reports		admin usergroup.portal.ApplicationM...
☐	Client_Certificate_Security	RW	Reports		admin usergroup.portal.ApplicationM...
☐	Usage_And_Adoption_Metrics	RW	Reports		admin usergroup.portal.ApplicationM...
☐	Client_Standard_Dashboard	RW	Reports		admin usergroup.portal.ApplicationM...

The following table describes the various options on the **Dashboard** inventory page:

Options	Description
Search bar	Searches for the given keyword(s) in the field and shows a list of results that match the searched keyword(s).
	Allows users to create a new dashboard.
	Allows users to delete a dashboard from the list.
	Allows users to export a dashboard from the list.
	Allows users to import a file to create a dashboard.
	Refreshes the page by clicking on the refresh button.
	Allows users to auto-sort the dashboards alphabetically.

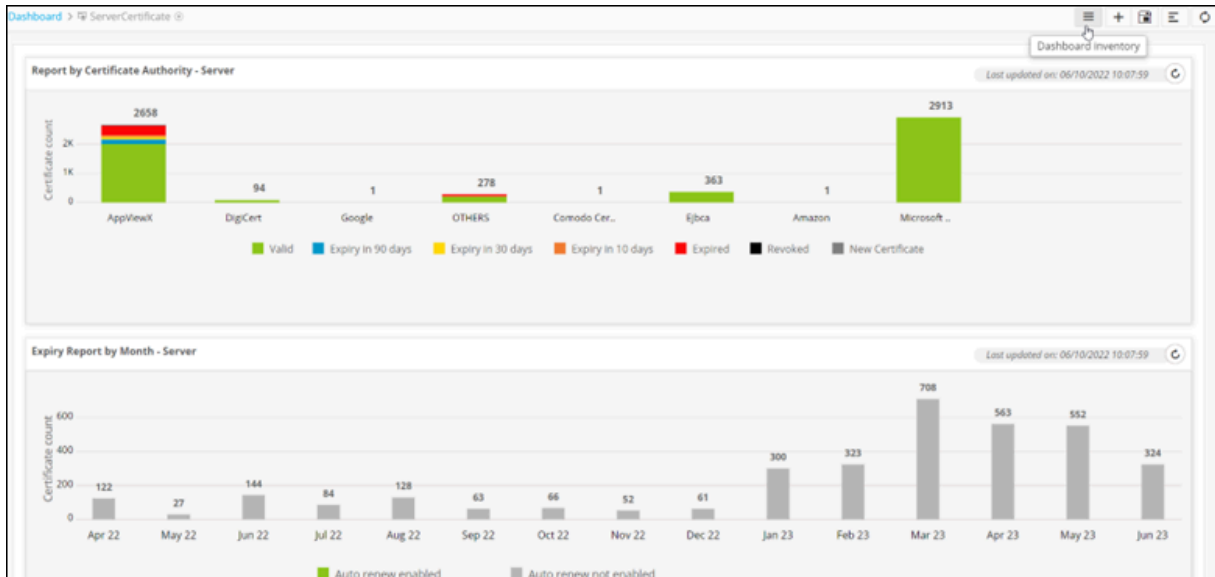
Getting Started with the Prebuilt Dashboard for Reports

1. From the top left corner of the screen, click .
2. From the menu displayed, select **Dashboard**.



The last opened or pinned **Dashboard** is displayed.

3. To view the **Dashboard** inventory, from the top right corner of the screen, click .



The **Dashboard** inventory page is displayed.

Dashboard

Q Search...

Dashboard

☐	Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
☐	ClientCertificate	☐ RW	Report by Certificate Authority - Client,		admin usergroup.portal.ApplicationM...
☐	ServerCertificate	☐ RW	Report by Certificate Authority - Server,		admin usergroup.portal.ApplicationM...
☐	CodeSigningCertificate	☐ RW	Report By Certificate Authority - CodeSi		admin usergroup.portal.ApplicationM...
☐	Connected_Platform	☐ RW	Users Information,		admin usergroup.portal.ApplicationM...
☐	Server_Endpoint_Security	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	License_Usage	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	ads	☐ RW			
☐	adadad	☐ RW			
☐	Client_Endpoint_Security	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	SSL_Validation_Report	☐ RW	SSL Validation Report		admin usergroup.portal.ApplicationM...
☐	Trust_Store_Certificates	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	Server_Certificate_Security	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	Server_Standard_Dashboard	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	Client_Certificate_Security	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	Usage_And_Adoption_Metrics	☐ RW	Reports		admin usergroup.portal.ApplicationM...
☐	Client_Standard_Dashboard	☐ RW	Reports		admin usergroup.portal.ApplicationM...

- To access the prebuilt dashboard for Reports, under **Dashboard name**, click **Usage_And_Adoption_Metrics**.

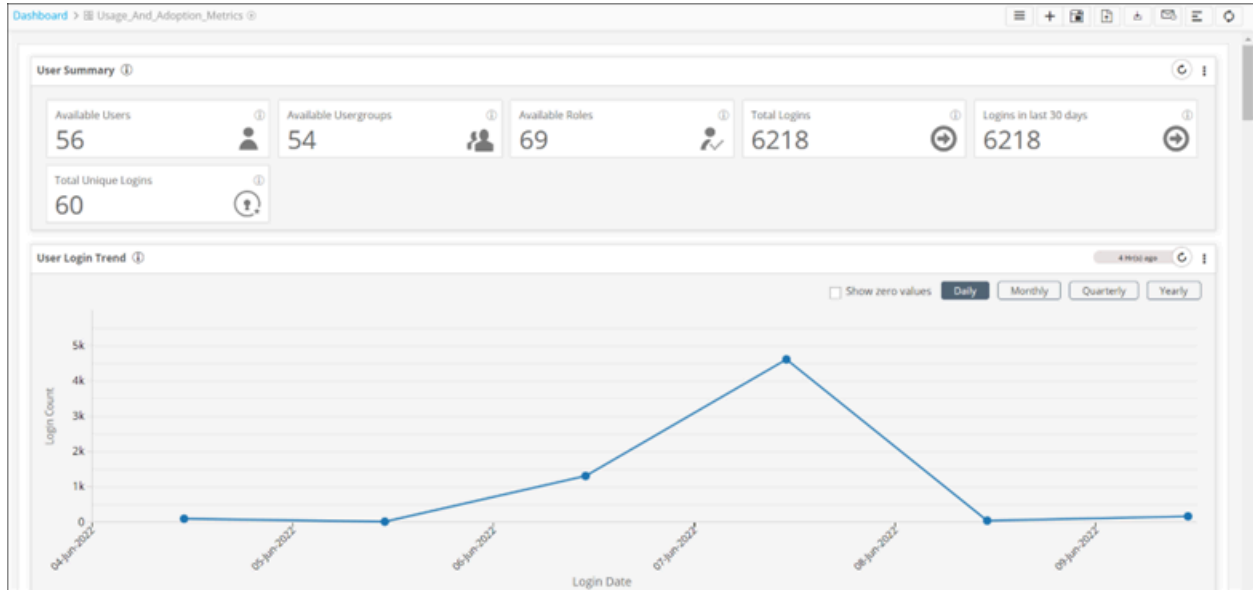
Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
ClientCertificate	RW	Report by Certificate Authority - Client,		admin usergroup.portal.ApplicationM...
ServerCertificate	RW	Report by Certificate Authority - Server,		admin usergroup.portal.ApplicationM...
CodeSigningCertificate	RW	Report By Certificate Authority - CodeSe		admin usergroup.portal.ApplicationM...
Connected_Platform	RW	Users Information,		admin usergroup.portal.ApplicationM...
Server_Endpoint_Security	RW	Reports		admin usergroup.portal.ApplicationM...
License_Usage	RW	Reports		admin usergroup.portal.ApplicationM...
ads	RW			
asdasd	RW			
Client_Endpoint_Security	RW	Reports		admin usergroup.portal.ApplicationM...
SSL_Validation_Report	RW	SSL Validation Report		admin usergroup.portal.ApplicationM...
Trust_Store_Certificates	RW	Reports		admin usergroup.portal.ApplicationM...
Server_Certificate_Security	RW	Reports		admin usergroup.portal.ApplicationM...
Server_Standard_Dashboard	RW	Reports		admin usergroup.portal.ApplicationM...
Client_Certificate_Security	RW	Reports		admin usergroup.portal.ApplicationM...
Usage_And_Adoption_Metrics	RW	Reports		admin usergroup.portal.ApplicationM...
Client_Start	RW	Reports		admin usergroup.portal.ApplicationM...

- [Usage and Adoption Metrics Dashboard](#)

Usage and Adoption Metrics Dashboard

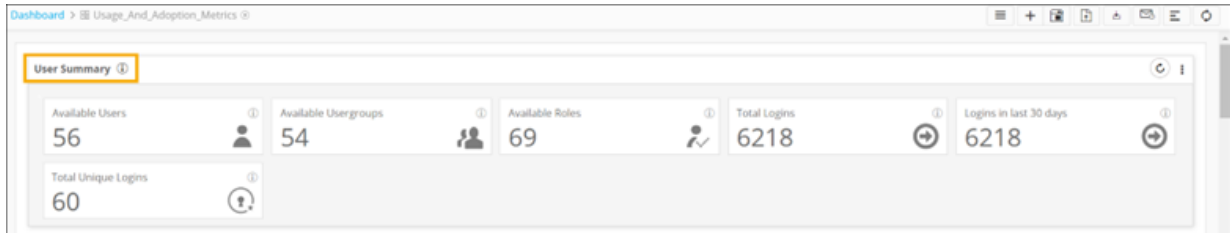
Product Usage and Metrics is a useful tool for understanding the interactions between the customer and your product/service. It helps capture day to day information on how the product or service is being used by customers. Moreover, it can help capture the duration, frequency, feature usage, activity logs. Analyzing this data empowers you to provide an improved customer experience.

The **Usage and Adoption Metrics** dashboard displays predefined widgets to provide the AppViewX metric usage reports and up-to-the-minute reports. It contains the status and statistics of devices and certificates managed within the AppViewX platform. It displays reports related to user summary, logins, user activity, asset inventory and more.



Following are the various reports and metrics that are available on this dashboard:

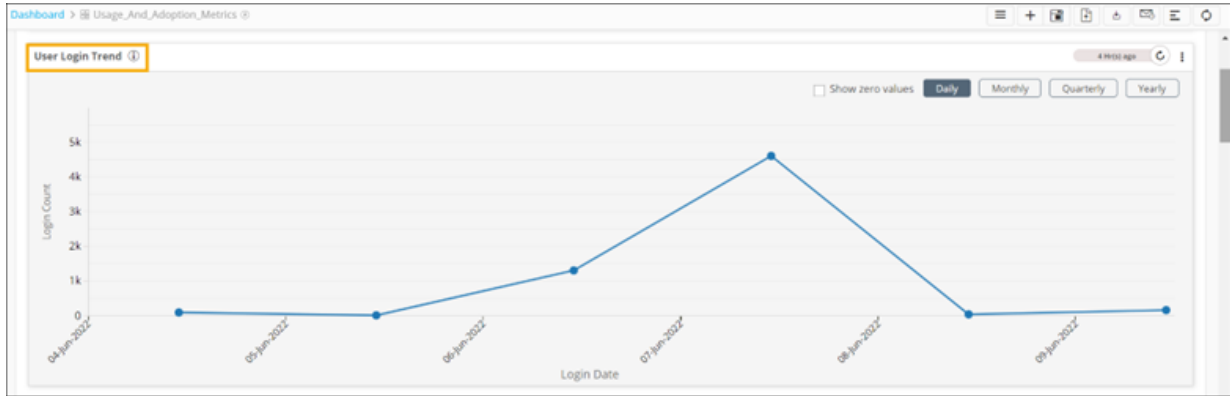
- The **User Summary** report gives a snapshot of user login, summary, and trends.



The following table describes the metrics displayed in this widget:

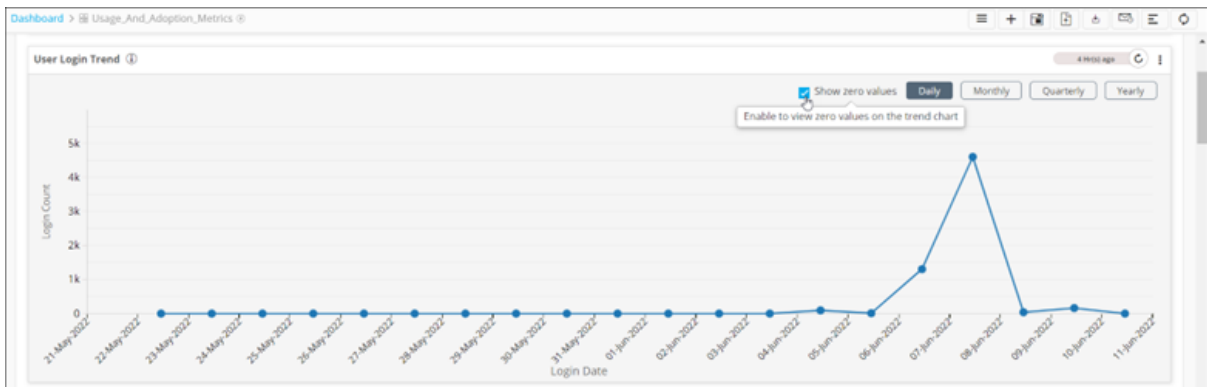
Metric	Description
Available Users	This metric displays available users in AppViewX.
Available User Groups	This metric displays available user groups in AppViewX.
Available Roles	This metric displays the available roles in AppViewX.
Total Logins	This metric displays the total number of logins in AppViewX.
Logins in last 30 days	This metric displays the number of logins in the last 30 days.
Total Unique Logins	This metric displays the total unique logins from different IDs.

- The **User Login Trend** report displays the date-wise count of logins in AppViewX.

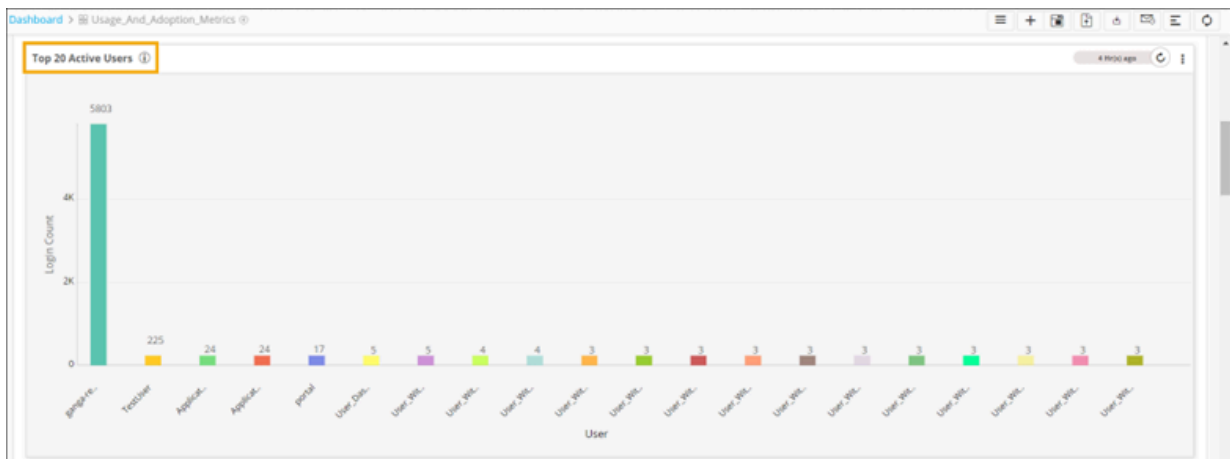


Note: The default selection is set to **Daily**.

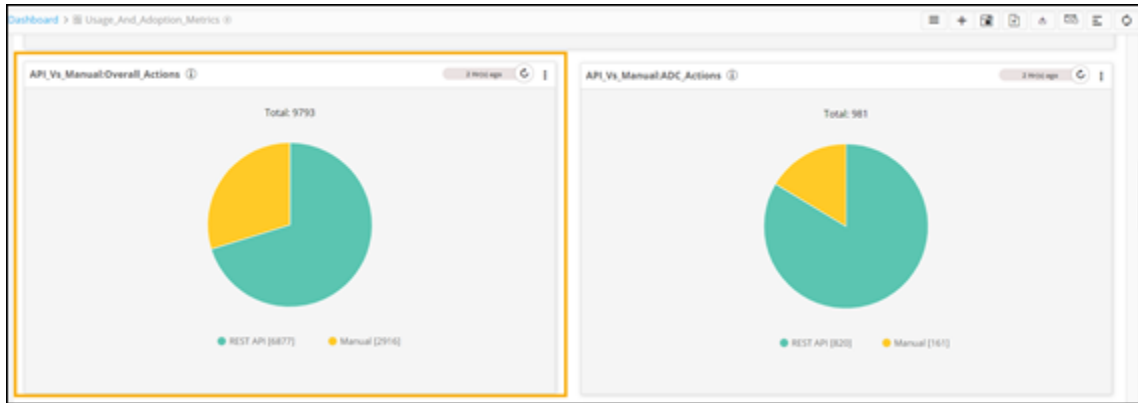
- To display dates on which there were zero logins into AppviewX, select the **Show zero values** checkbox.



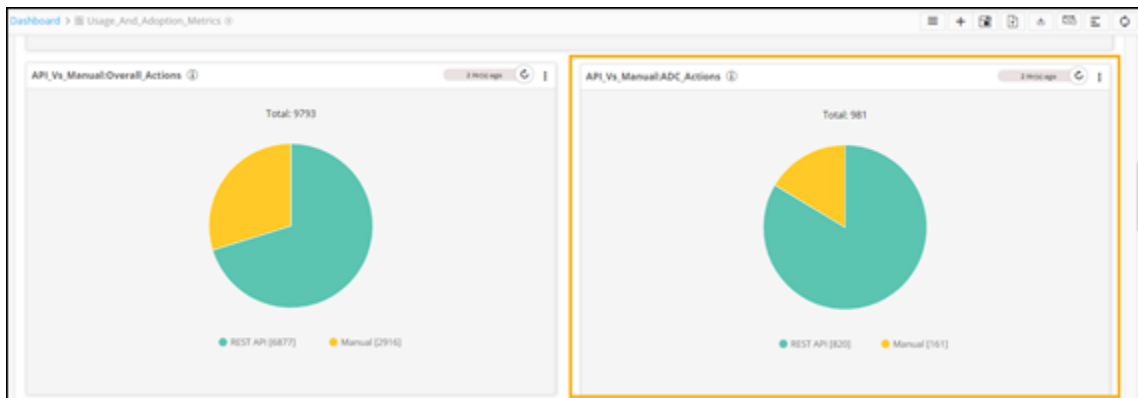
- Select **Monthly**, **Quarterly**, and **Yearly** options to get data based on the respective timelines.
- The **Top 20 Active Users** chart displays the top 20 active users by login count.



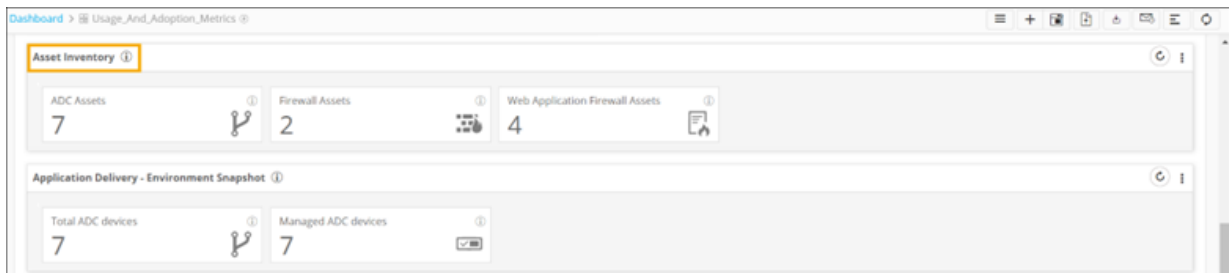
- The **API_vs_Manual:Overall_Actions** pie chart shows the list of actions triggered either manually or via API.



- The **API_vs_Manual:ADC_Actions** pie chart shows the list of ADC actions triggered either manually or via API.



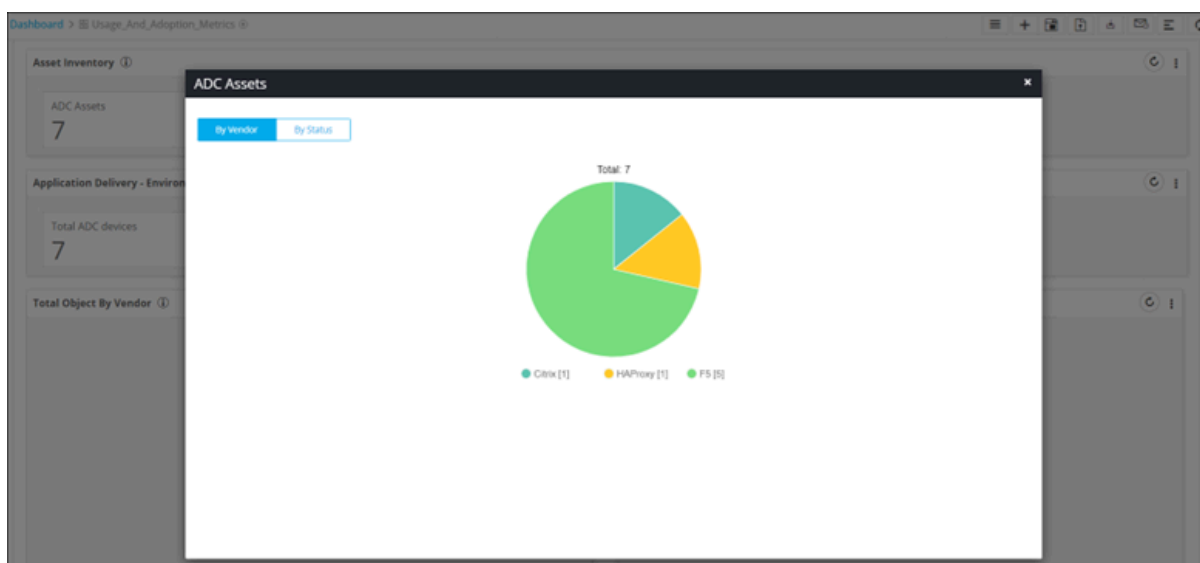
- The **Asset Inventory** widget displays the inventory of different types of assets such as ADC, firewall, and WAF.



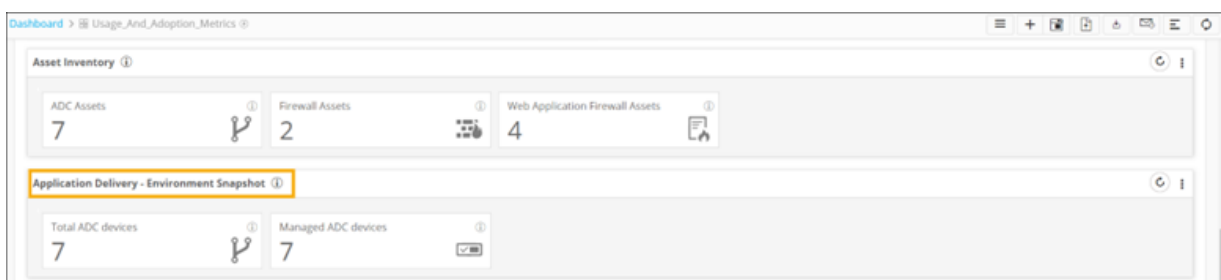
The following table describes the metrics displayed on this widget:

Metric	Description
ADC Assets	This metric displays the total count of all available ADC devices.
Firewall Assets	This metric displays the total count of all available Firewall devices.
Web Application Firewall Assets	This metric displays the total count of all available WAF devices.

- To drill down a chart to display more levels of information, click any metric.



- The **Application Delivery - Environment Snapshot** widget displays a snapshot of application delivery. Each metric displays the total count of respective devices.

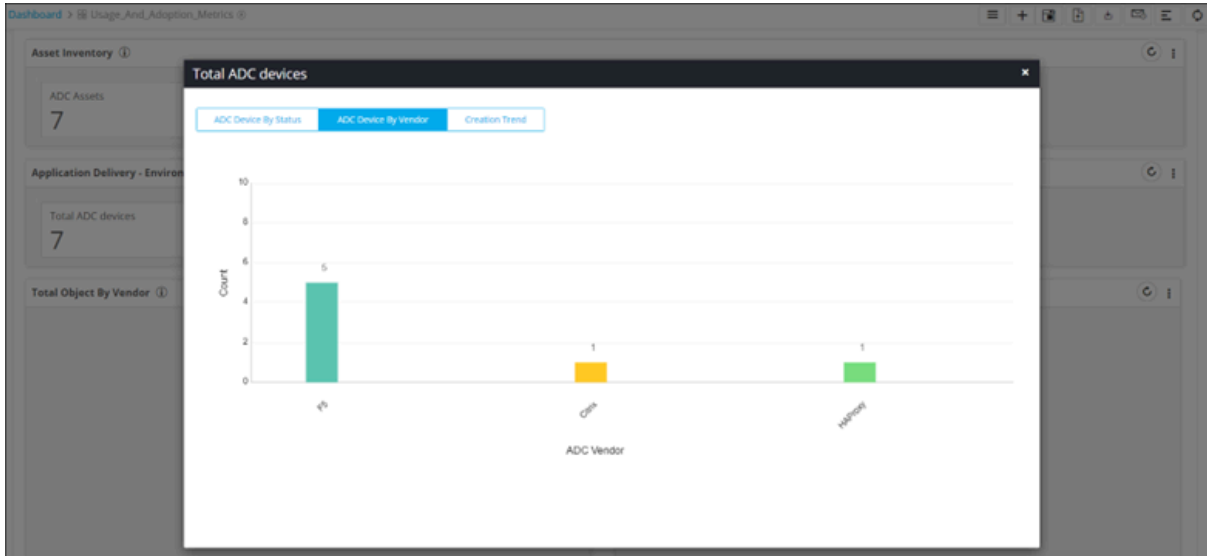


The following table describes the metrics displayed on this widget:

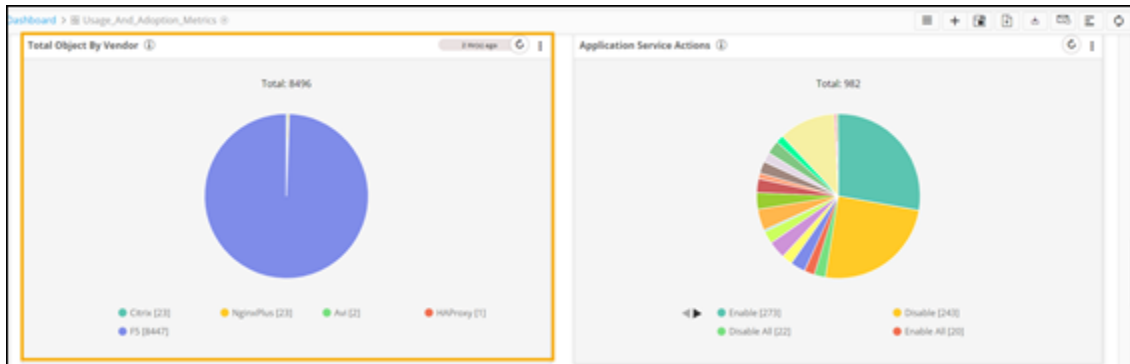
Metric	Description
Total ADC devices	This metric displays the total count of all available ADC devices.

Metric	Description
Total Application Service Objects	This metric displays the total application service objects.
Managed ADC devices	This metric displays all the managed ADC devices.

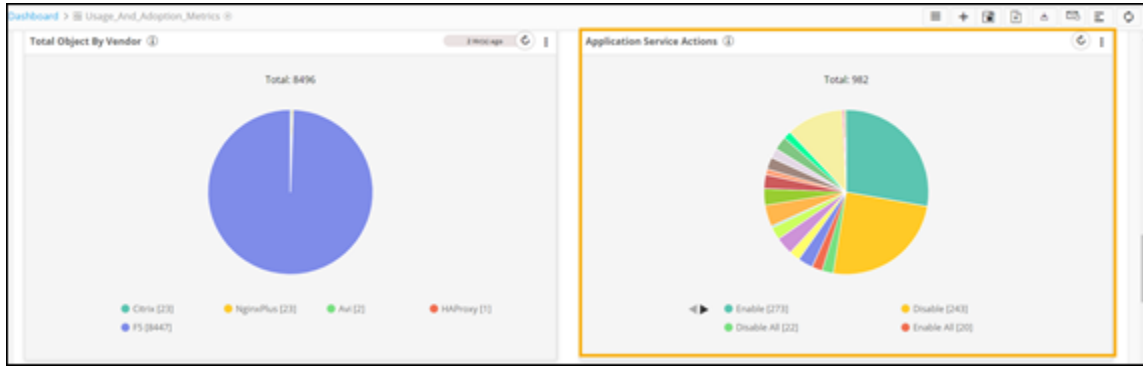
- To drill down a chart to display more levels of information, click any metric.



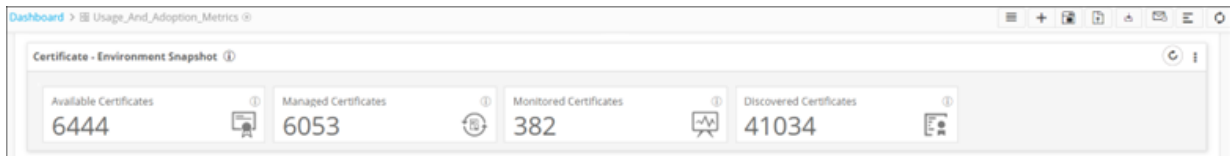
- The **Total Object by Vendor** pie chart displays the count of all ADC objects by vendor.



- The **Application Service Actions** pie chart shows a snapshot of application services performed.



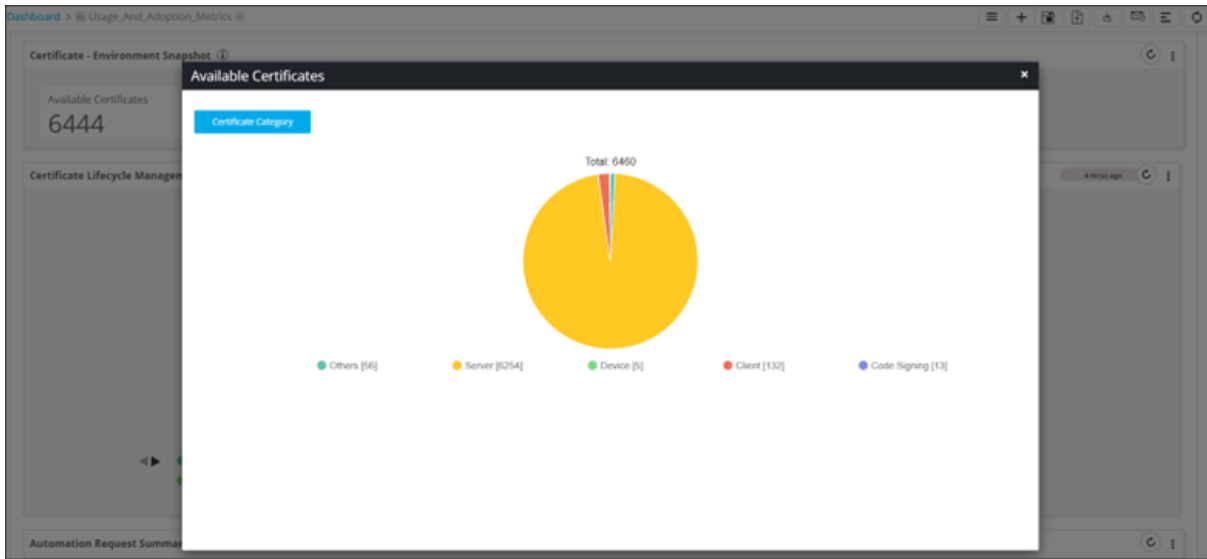
- The **Certificate - Environment Snapshot** widget displays a snapshot of managed and monitored certificates.



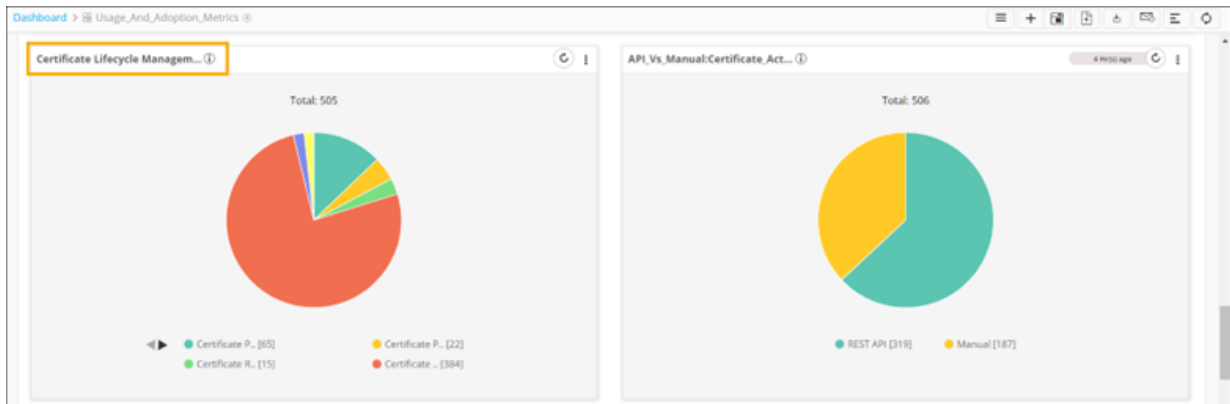
The following table describes the metrics displayed on this widget:

Metric	Description
Available Certificates	This metric displays the total count of all available certificates.
Managed Certificates	This metric displays the total count of all managed certificates.
Discovered Certificates	This metric displays the total count of all discovered certificates.

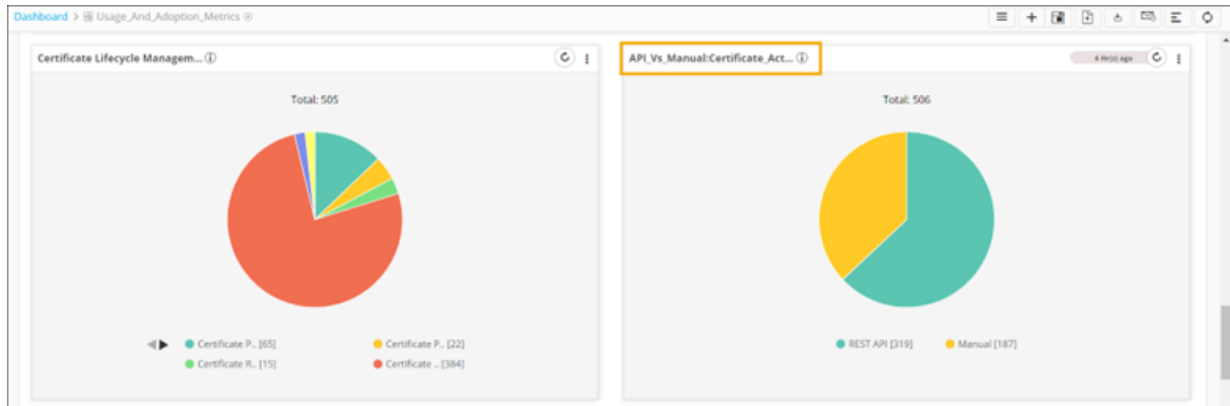
- To drill down a chart to display more levels of information, click any metric.



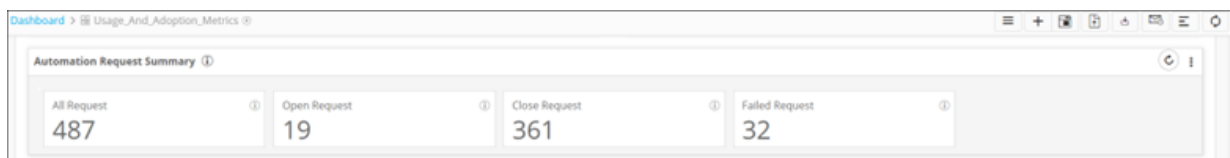
- The **Certificate Lifecycle Management** pie chart displays a snapshot of certificate actions performed, such as certificate push, certificate rollback, certificate push and bind and so on.



- The **API_vs_Manual:Certificate_Actions** pie chart shows a list of certificate actions triggered either manually or via API.



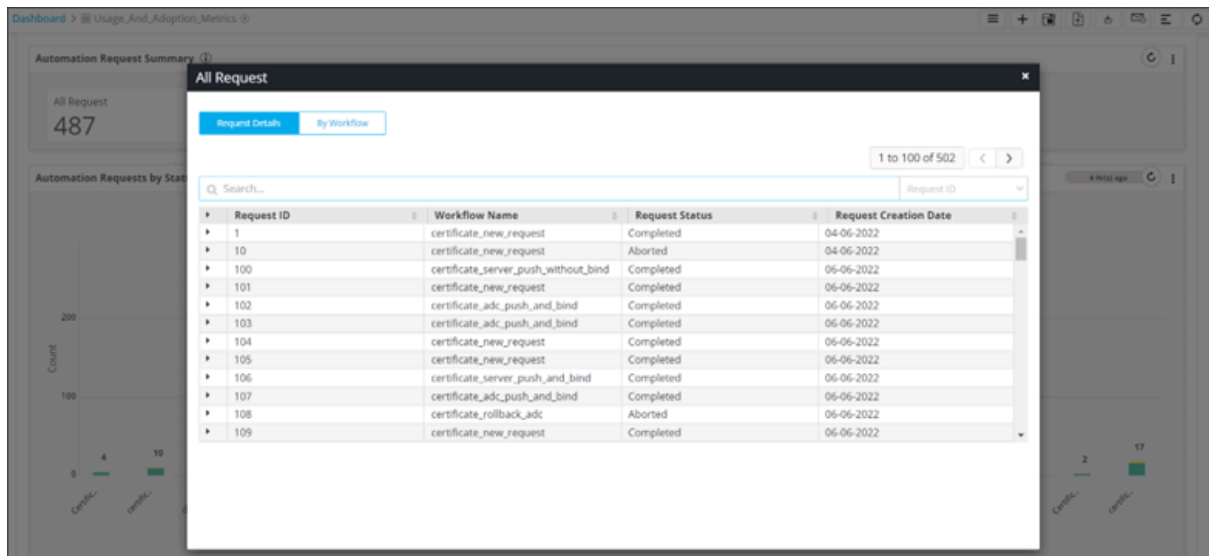
- The **Automation Request Summary** widget displays a snapshot of automation request status and trend.



The following table describes the metrics displayed in this widget:

Metric	Description
All Request	This metric displays the count of total workflow automation requests.
Open Request	This metric displays the count of open workflow automation requests.
Close Request	This metric displays the count of closed workflow automation requests.
Failed Request	This metric displays the count of failed workflow automation requests.

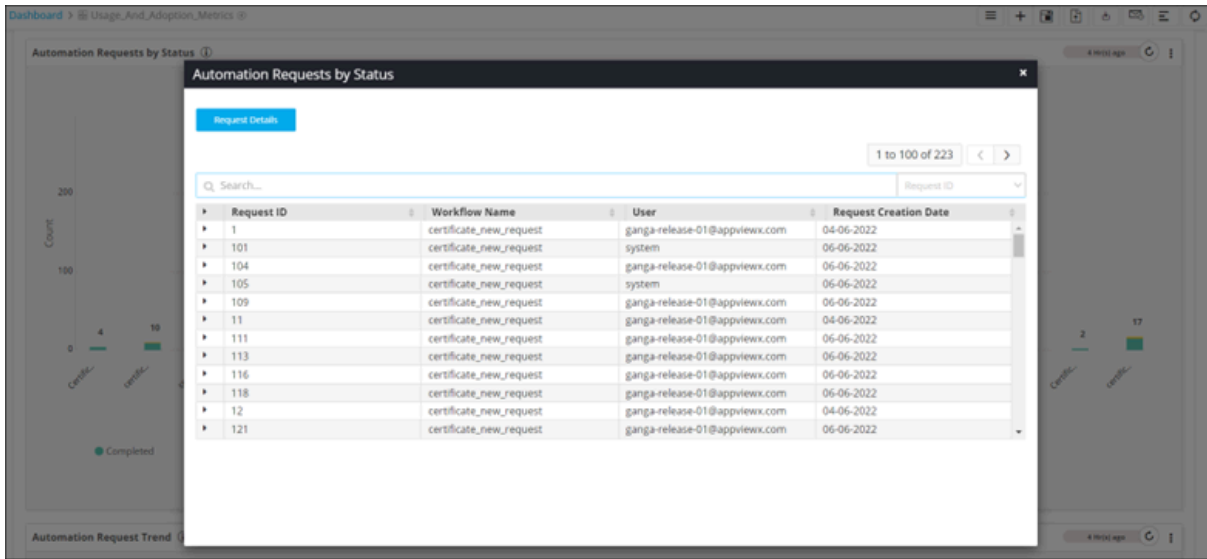
- To drill down a chart to display more levels of information, click any metric.



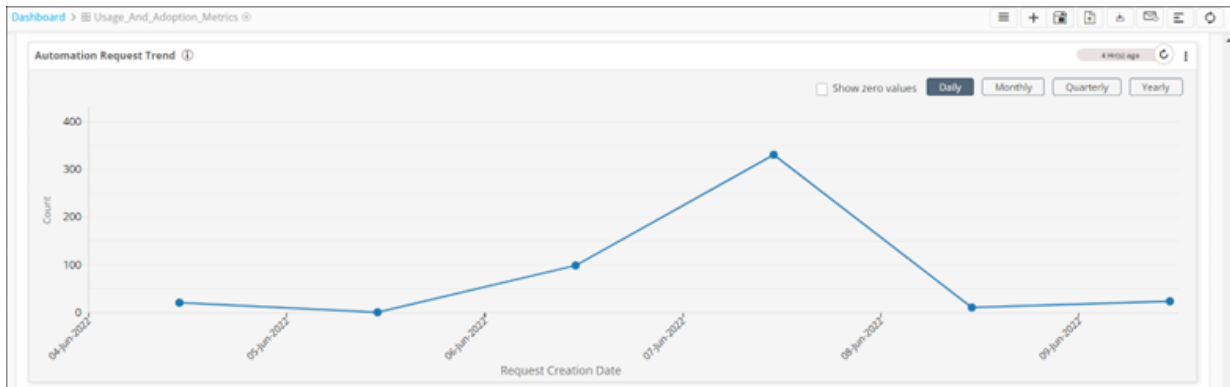
- The **Automation Request by Status** stacked bar graph displays the request status by workflow.



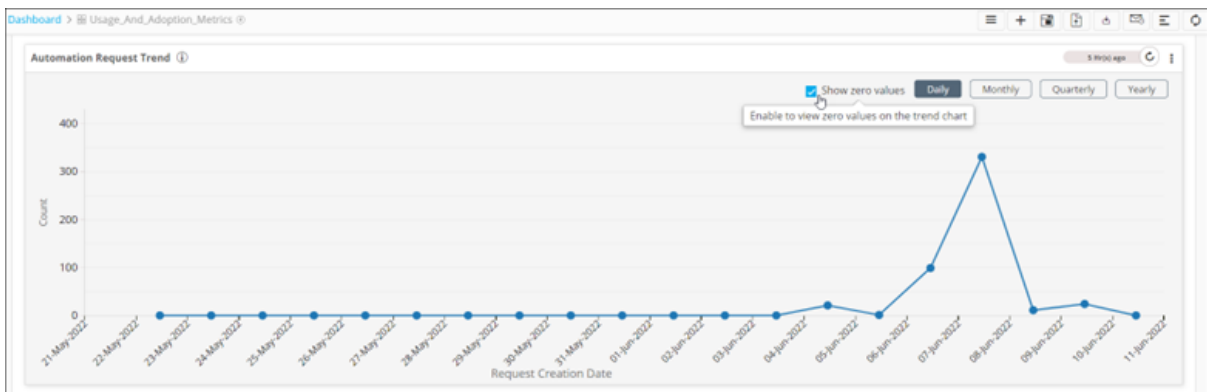
- To drill down a chart to display more levels of information, click any metric.



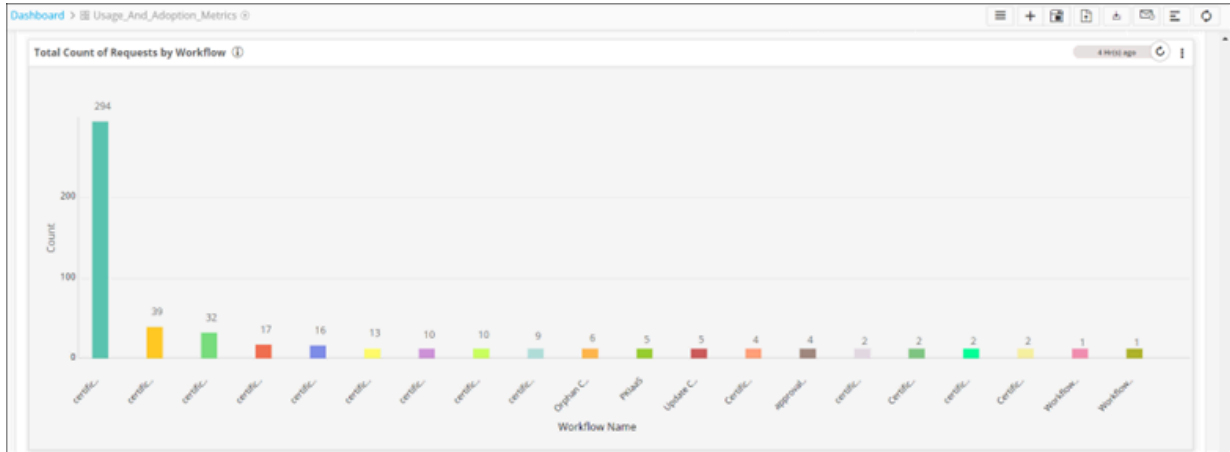
- The **Automation Request Trend** line chart displays the trend of all automation requests.



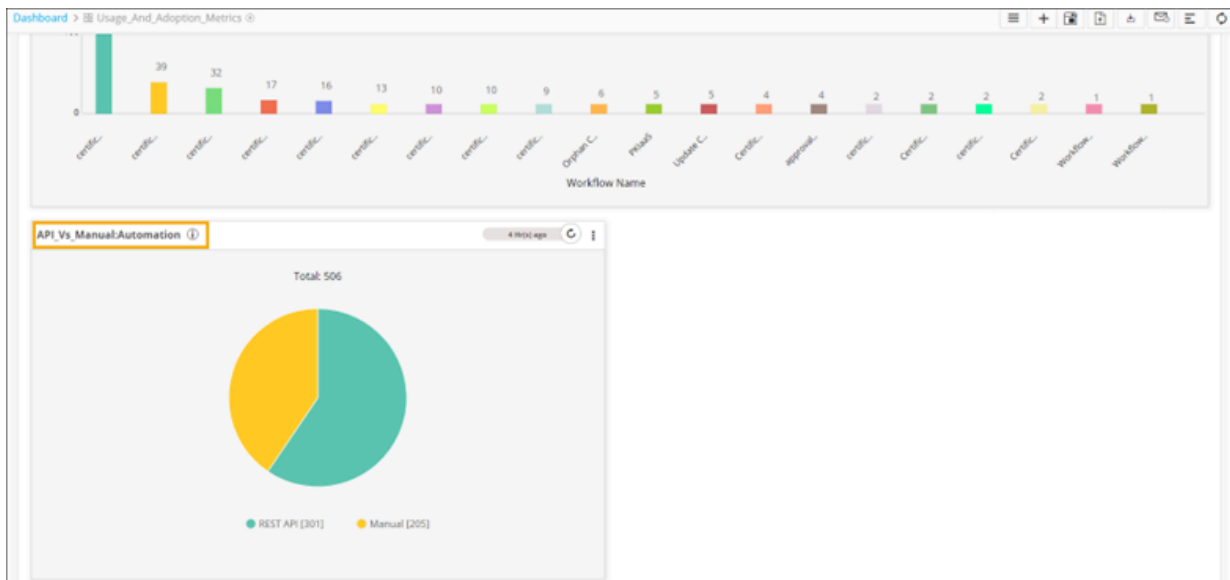
- To display dates on which there were zero logins into AppviewX, select the **Show zero values** checkbox.



- To get data based on the respective timelines, click **Monthly**, **Quarterly**, and **Yearly** buttons.
- The **Total Count of Requests by Workflow** bar graph displays the total count of requests by workflow.

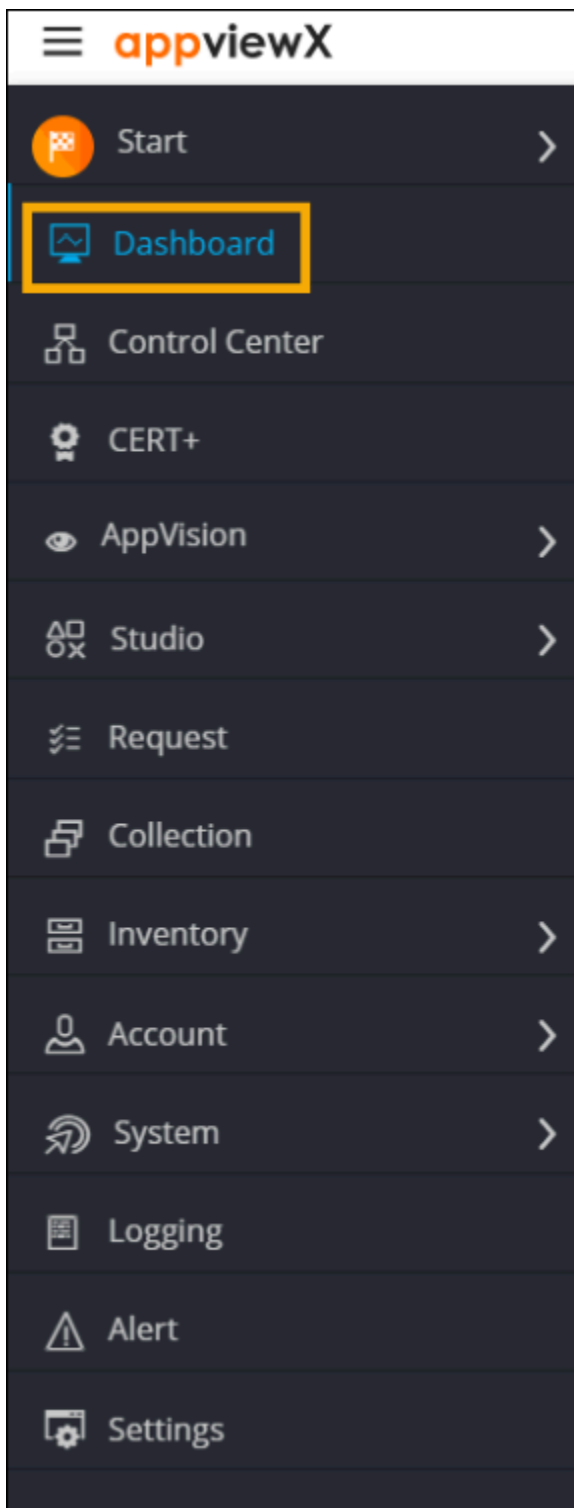


- The **API_vs_Manual:Automation** pie chart displays a list of automation requests triggered either manually or via API.



How to Search for a Dashboard

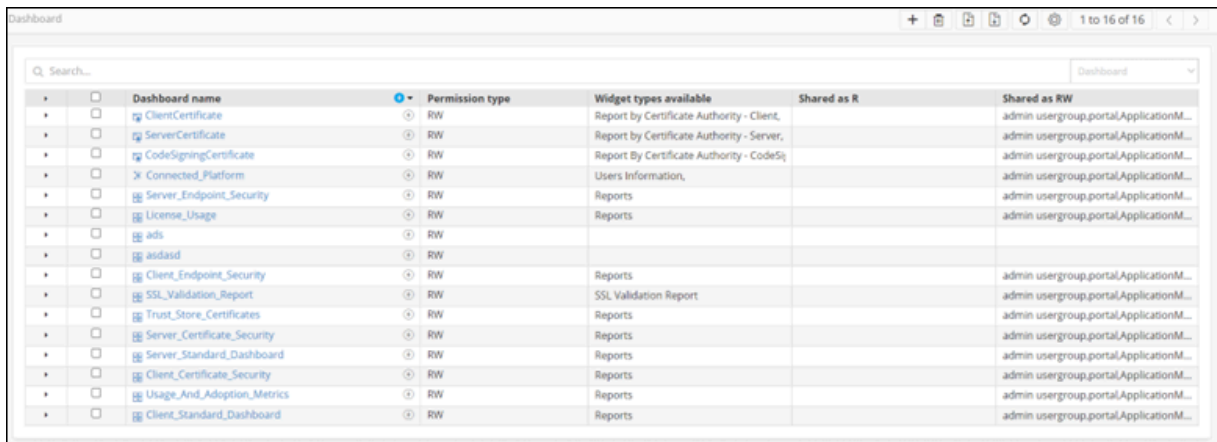
1. From the top left corner of the screen, click .
2. From the menu displayed, select **Dashboard**.



The last opened or pinned dashboard is displayed.

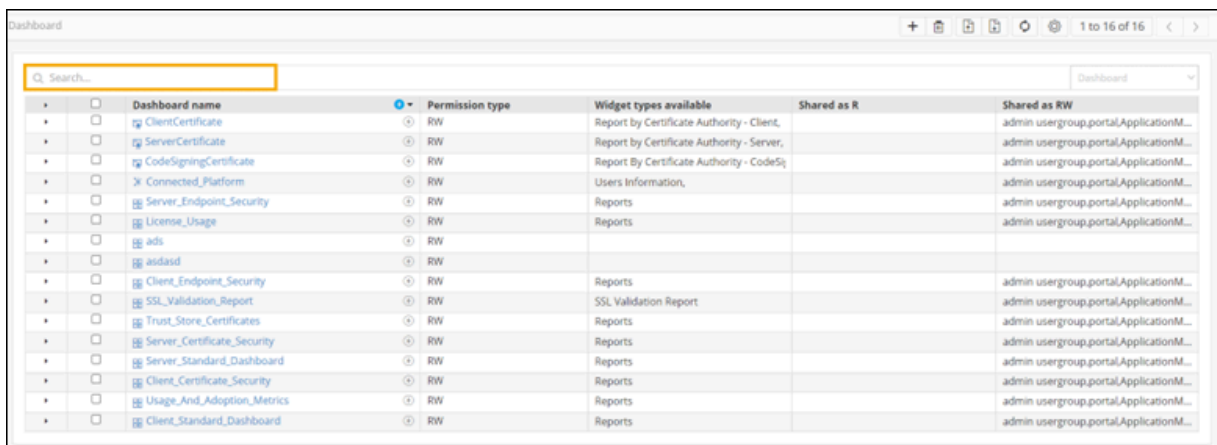
3. To view the **Dashboard** inventory, from the top right corner of the screen, click .

The **Dashboard** inventory page is displayed.



	Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
☐	ClientCertificate	RW	Report by Certificate Authority - Client,		admin usergroup.portalApplicationM...
☐	ServerCertificate	RW	Report by Certificate Authority - Server,		admin usergroup.portalApplicationM...
☐	CodeSigningCertificate	RW	Report By Certificate Authority - CodeSi		admin usergroup.portalApplicationM...
☐	Connected_Platform	RW	Users Information,		admin usergroup.portalApplicationM...
☐	Server_Endpoint_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	License_Usage	RW	Reports		admin usergroup.portalApplicationM...
☐	ads	RW			
☐	asdasd	RW			
☐	Client_Endpoint_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	SSL_Validation_Report	RW	SSL Validation Report		admin usergroup.portalApplicationM...
☐	Trust_Store_Certificates	RW	Reports		admin usergroup.portalApplicationM...
☐	Server_Certificate_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	Server_Standard_Dashboard	RW	Reports		admin usergroup.portalApplicationM...
☐	Client_Certificate_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	Usage_And_Adoption_Metrics	RW	Reports		admin usergroup.portalApplicationM...
☐	Client_Standard_Dashboard	RW	Reports		admin usergroup.portalApplicationM...

4. To search for a dashboard, on the **Dashboard** inventory page, enter the search keyword(s) in the **Search** field.



	Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
☐	ClientCertificate	RW	Report by Certificate Authority - Client,		admin usergroup.portalApplicationM...
☐	ServerCertificate	RW	Report by Certificate Authority - Server,		admin usergroup.portalApplicationM...
☐	CodeSigningCertificate	RW	Report By Certificate Authority - CodeSi		admin usergroup.portalApplicationM...
☐	Connected_Platform	RW	Users Information,		admin usergroup.portalApplicationM...
☐	Server_Endpoint_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	License_Usage	RW	Reports		admin usergroup.portalApplicationM...
☐	ads	RW			
☐	asdasd	RW			
☐	Client_Endpoint_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	SSL_Validation_Report	RW	SSL Validation Report		admin usergroup.portalApplicationM...
☐	Trust_Store_Certificates	RW	Reports		admin usergroup.portalApplicationM...
☐	Server_Certificate_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	Server_Standard_Dashboard	RW	Reports		admin usergroup.portalApplicationM...
☐	Client_Certificate_Security	RW	Reports		admin usergroup.portalApplicationM...
☐	Usage_And_Adoption_Metrics	RW	Reports		admin usergroup.portalApplicationM...
☐	Client_Standard_Dashboard	RW	Reports		admin usergroup.portalApplicationM...

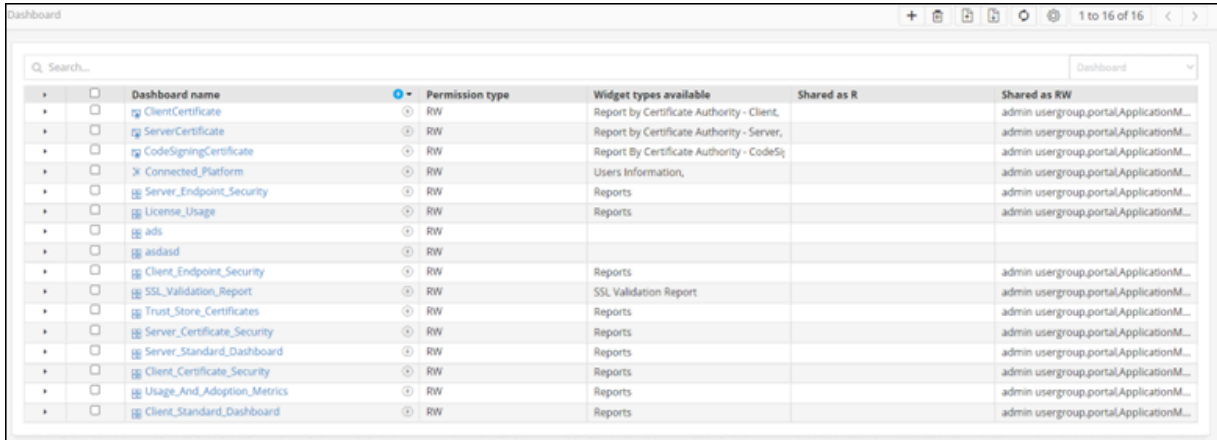
The dashboards, objects, or widgets that match the keyword(s) are displayed.

How to View a Dashboard

1. From the top left corner of the screen, click .
2. From the menu displayed, click **Dashboard**.

The last opened or pinned **Dashboard** is displayed.

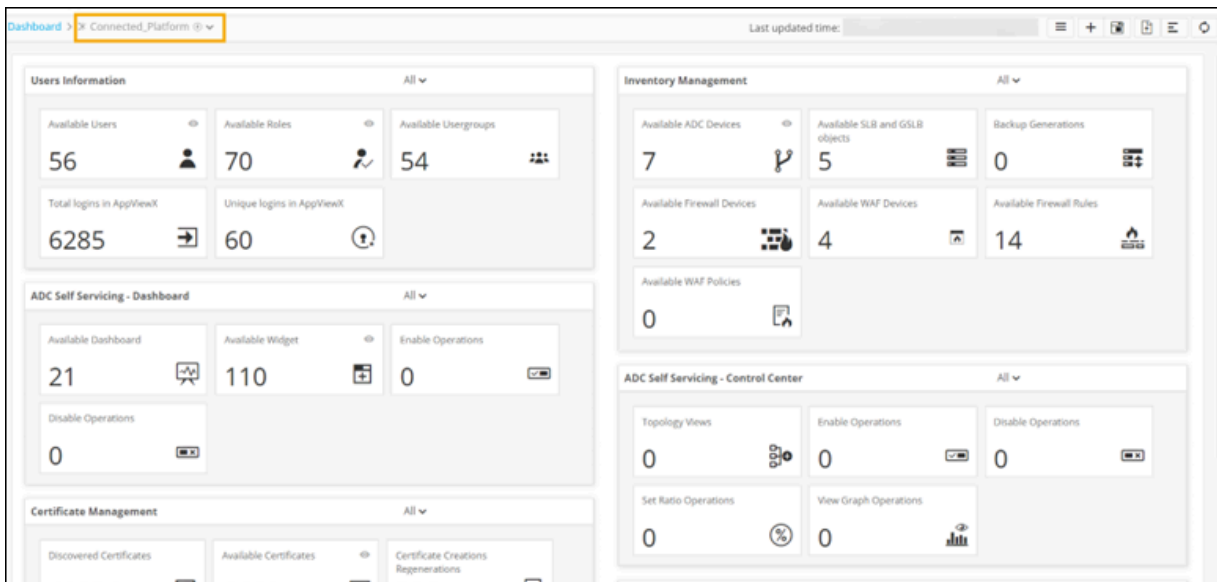
3. To view the **Dashboard** inventory, from the top right corner of the screen, click .
- The **Dashboard** inventory page is displayed.



Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
ClientCertificate	RW	Report by Certificate Authority - Client,		admin usergroup.portalApplicationM...
ServerCertificate	RW	Report by Certificate Authority - Server,		admin usergroup.portalApplicationM...
CodeSigningCertificate	RW	Report By Certificate Authority - CodeSi		admin usergroup.portalApplicationM...
Connected_Platform	RW	Users Information,		admin usergroup.portalApplicationM...
Server_Endpoint_Security	RW	Reports		admin usergroup.portalApplicationM...
License_Usage	RW	Reports		admin usergroup.portalApplicationM...
ads	RW			
asdasd	RW			
Client_Endpoint_Security	RW	Reports		admin usergroup.portalApplicationM...
SSL_Validation_Report	RW	SSL Validation Report		admin usergroup.portalApplicationM...
Trust_Store_Certificates	RW	Reports		admin usergroup.portalApplicationM...
Server_Certificate_Security	RW	Reports		admin usergroup.portalApplicationM...
Server_Standard_Dashboard	RW	Reports		admin usergroup.portalApplicationM...
Client_Certificate_Security	RW	Reports		admin usergroup.portalApplicationM...
Usage_And_Adoption_Metrics	RW	Reports		admin usergroup.portalApplicationM...
Client_Standard_Dashboard	RW	Reports		admin usergroup.portalApplicationM...

4. Click on any Dashboard name. For example: Connected Platform.

The selected dashboard is displayed on the screen.



The following table describes the options available on the **Dashboard** page:

Options	Description
Dashboard name	Displays the name of the current dashboard.
	Allows you to navigate to the Dashboard inventory.
	Allows you to create a dashboard/widget.

Options	Description
	Allows you to save the changes to the widget.
	Allows you to download the entire dashboard as a PDF.
	Allows you to schedule and email reports from the dashboard.
	Allows you to align the widgets on the dashboard.
	Refreshes the dashboard.

How to Pin Reports to a Dashboard

You can pin customized reports to an existing dashboard or a new dashboard. A maximum of 20 reports can be pinned to a dashboard. Pinning a report to the dashboard allows users to visualize different reports in the same place.



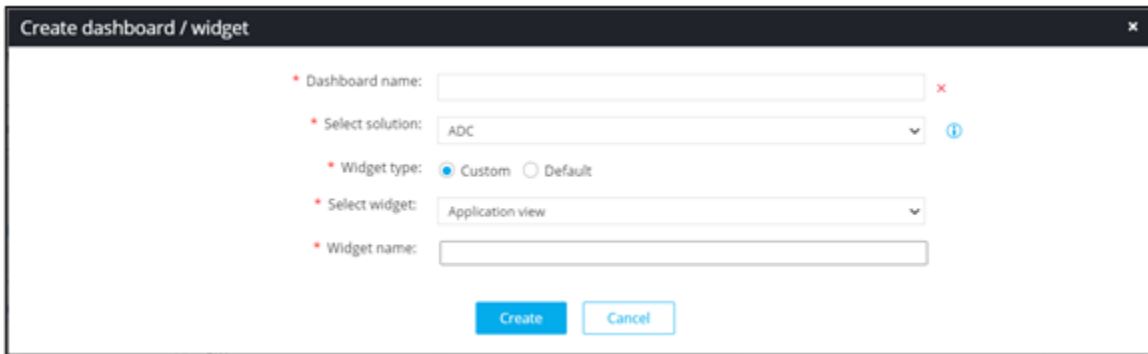
Note: For more information on how to pin a report to the dashboard, click [here](#).

How to Build a Custom Dashboard

You can build a custom dashboard to display a specific set of reports.

1. On the **Dashboard** inventory page, from the top right corner of the screen, click  in the command bar.

The **Create dashboard/widget** popup window is displayed.



Create dashboard / widget

* Dashboard name:

* Select solution:

* Widget type: ☒ Custom ☐ Default

* Select widget:

* Widget name:

Create Cancel

2. Enter or select the field information.

The following table describes the field description to create a custom dashboard:

Field	Description
*Dashboard name	Enter the name of the dashboard.
*Select solution	ADC is the default selection.
*Widget type	Select the type of widget. The possible widget types are: • Custom: Choose this option to build a customized widget. • Default: Choose this option to select the default widget.
*Select widget	Select an appropriate widget from the customized widgets in the dropdown list.
*Widget name	Enter the name of the widget.
The asterisk (*) symbol indicates mandatory fields.	

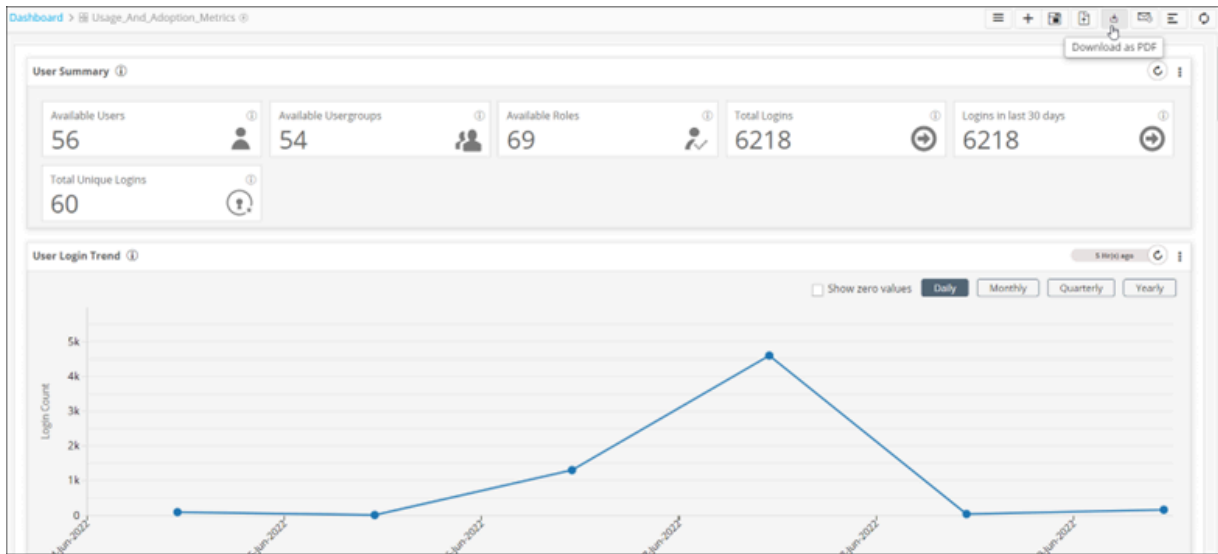
3. Click **Create**.

How to Download a Dashboard

You can also download entire dashboards as a PDF to your device.

1. From the top left corner of the screen, click .
2. From the menu displayed, select **Dashboard**.
3. On the **Dashboard** inventory page, click on a dashboard name.
The selected dashboard is displayed on the screen.

4. To download the dashboard as a PDF file, from the top right corner of the screen, click  .



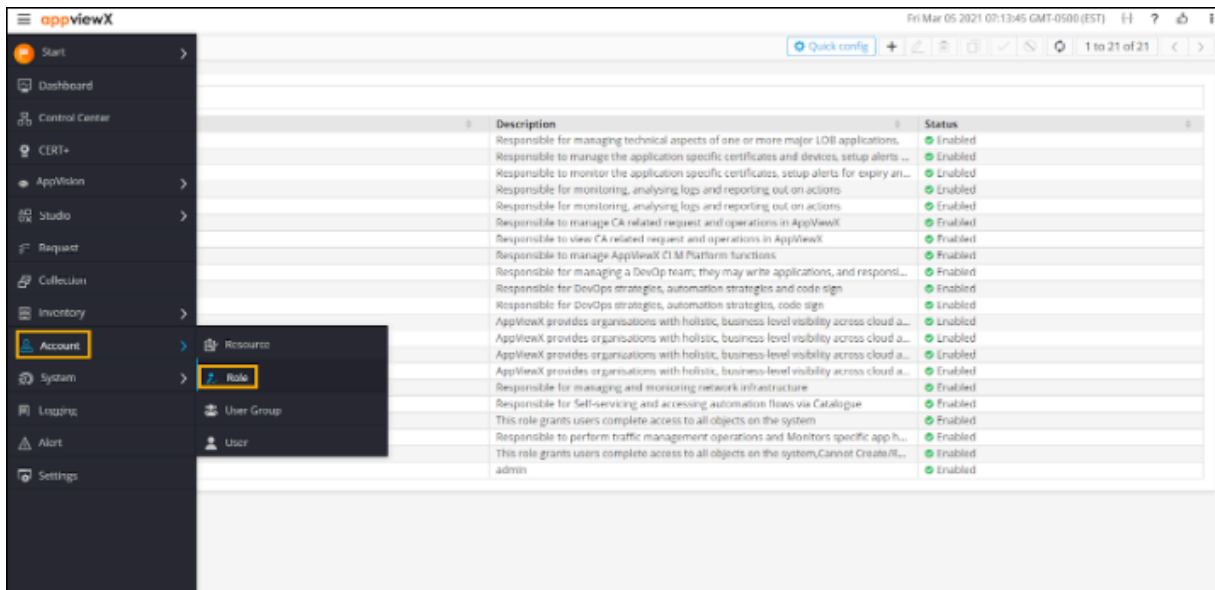
The dashboard is downloaded to your device as a PDF.

Chapter 5: Role Based Access Control

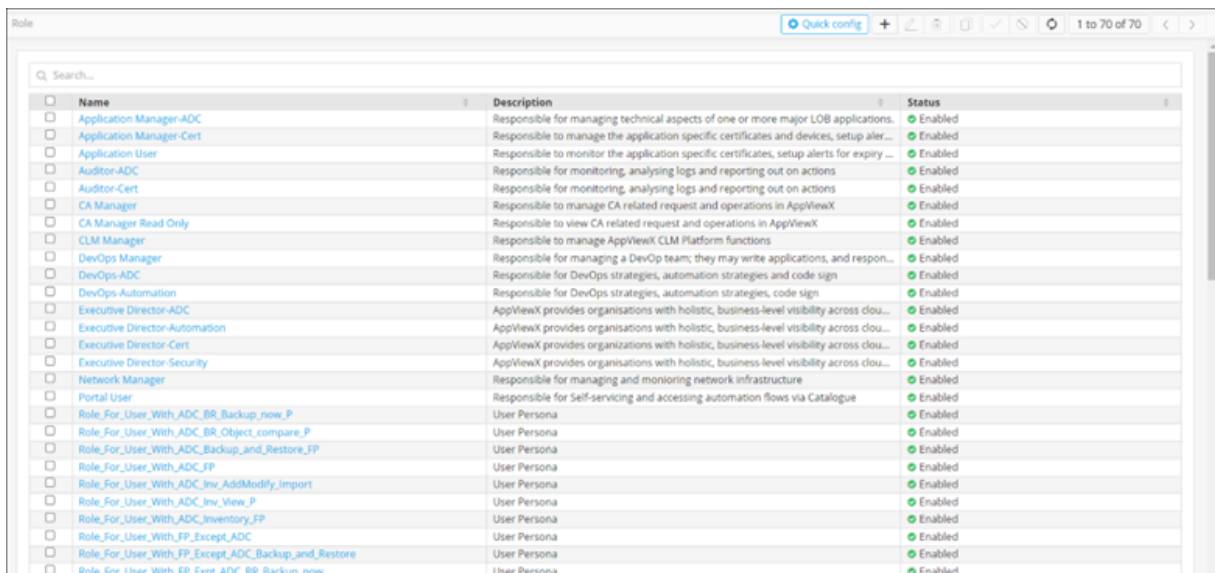
Role based access control (RBAC) implies restricting authorized users to access certain aspects of the system. With RBAC, users can be granted access to only certain aspects of a system or platform and prevent them from accessing other information or systems.

To get an overview of the actions authorized for a particular user:

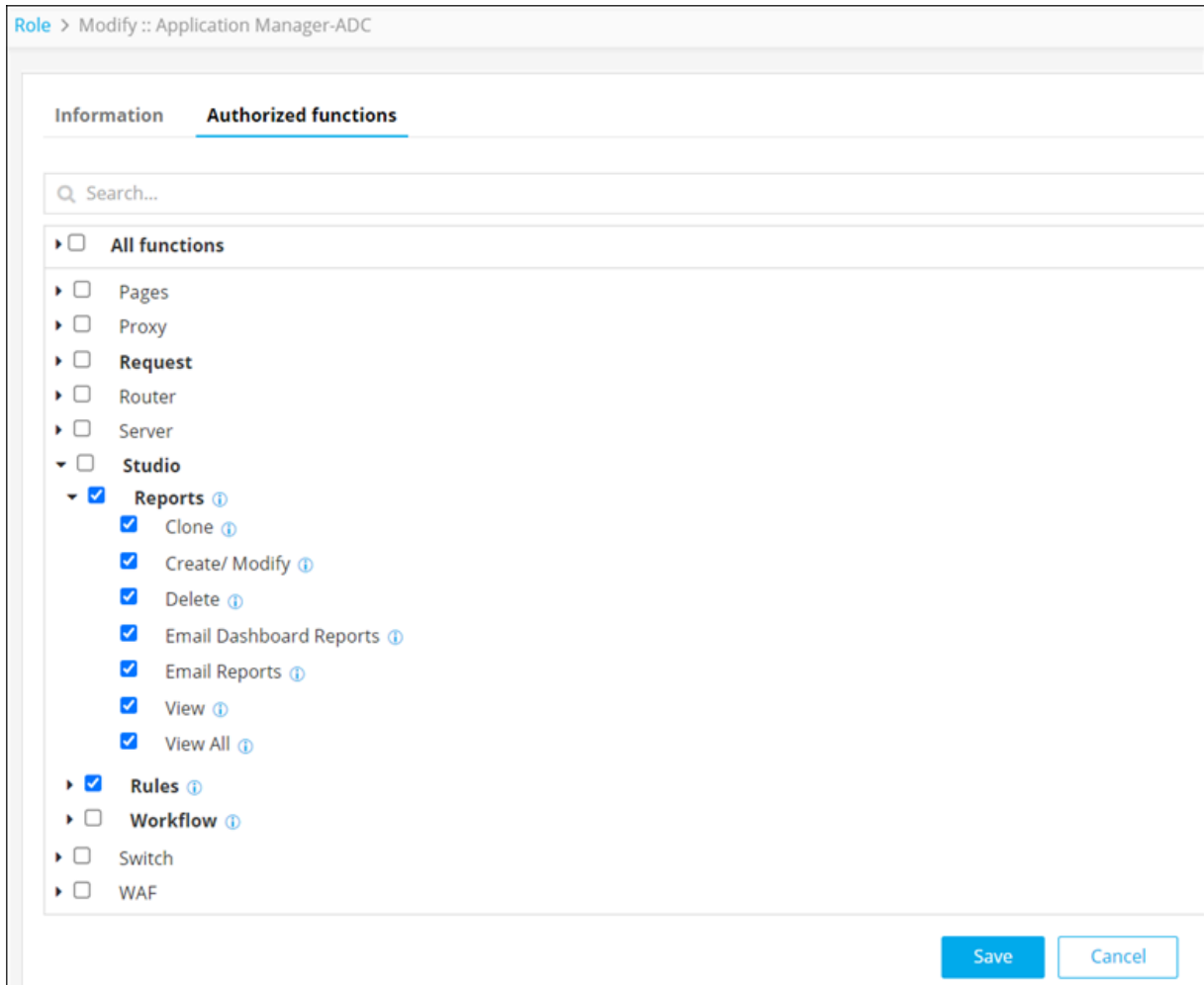
1. From the top left corner of the screen, click .
2. From the menu displayed, select **Account > Role**.



The **Role** page is displayed.



3. On the **Role** page, under the **Name** column, click on the name for which you want to see the permissions.
4. To see the list of actions defined for the selected user, click **Authorized functions**.
5. Under the **Authorized functions** tab, expand **Studio** and click **Reports**. A selected checkbox indicates that the corresponding action has been authorized for the user.



The following table describes the various actions that can be authorized or restricted for a user in the **Reports** module:

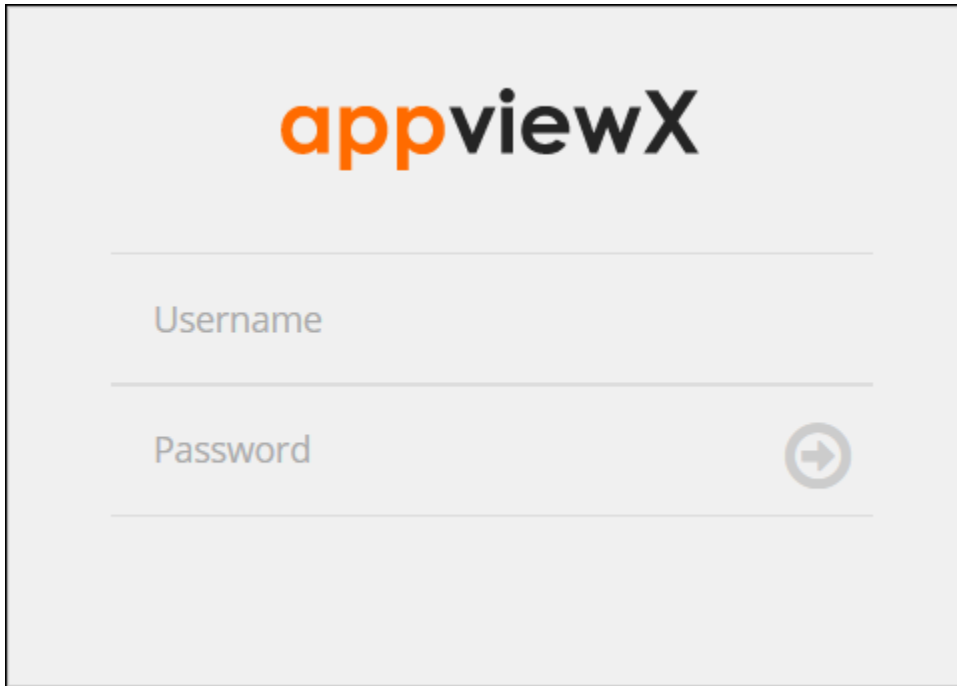
Action	Description
Clone	Provision to allow or restrict a user to clone a report.
Create/Modify	Provision to allow or restrict a user to create or modify a report.
Delete	Provision to allow or restrict a user to delete an existing report.

Action	Description
Email Dashboard Reports	Provision to allow or restrict user access to email dashboards in PDF format.
Email Reports	Provision to allow or restrict user access to email reports in My Reports, Store, Widget in PDF format and manage scheduling.
View	Provision to allow or restrict a user to view detailed information on existing reports created by the user who is logged in.
View All	Provision to allow or restrict a user to view detailed information on existing reports created for all the users.

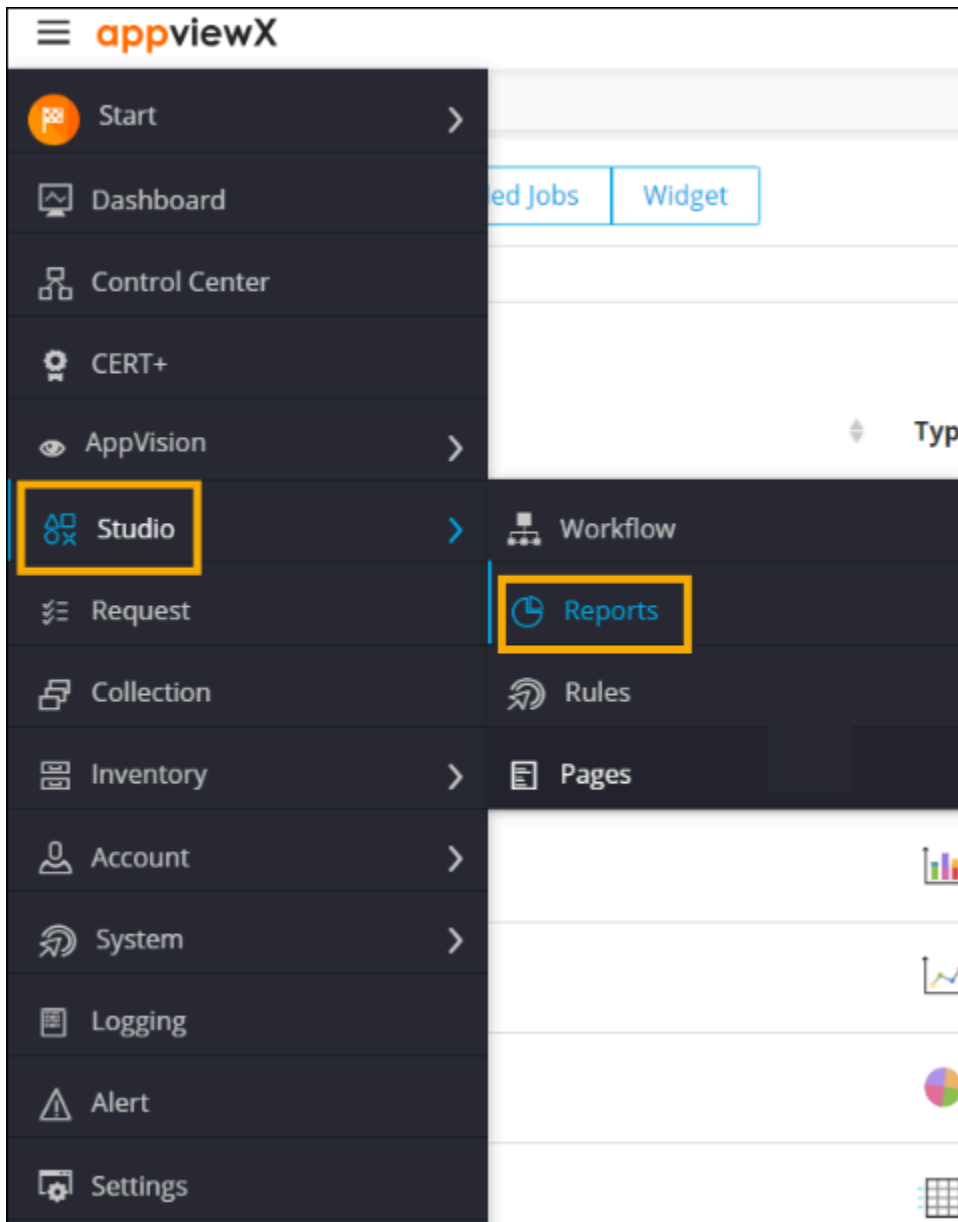
Chapter 6: Accessing the Report Builder

To access the **Report Builder** tool:

1. Log into **AppViewX**.



2. From the top left corner of the screen, click .
3. From the menu displayed, select **Studio > Reports**.



The **Reports : My Reports** page is displayed, with the **My Reports** tab open by default. This page is the Reports inventory page.

Reports :: My reports

My reports Store Scheduled jobs Widget

Search... Select... Create new report Actions Refresh 1 to 18 of 18 < >

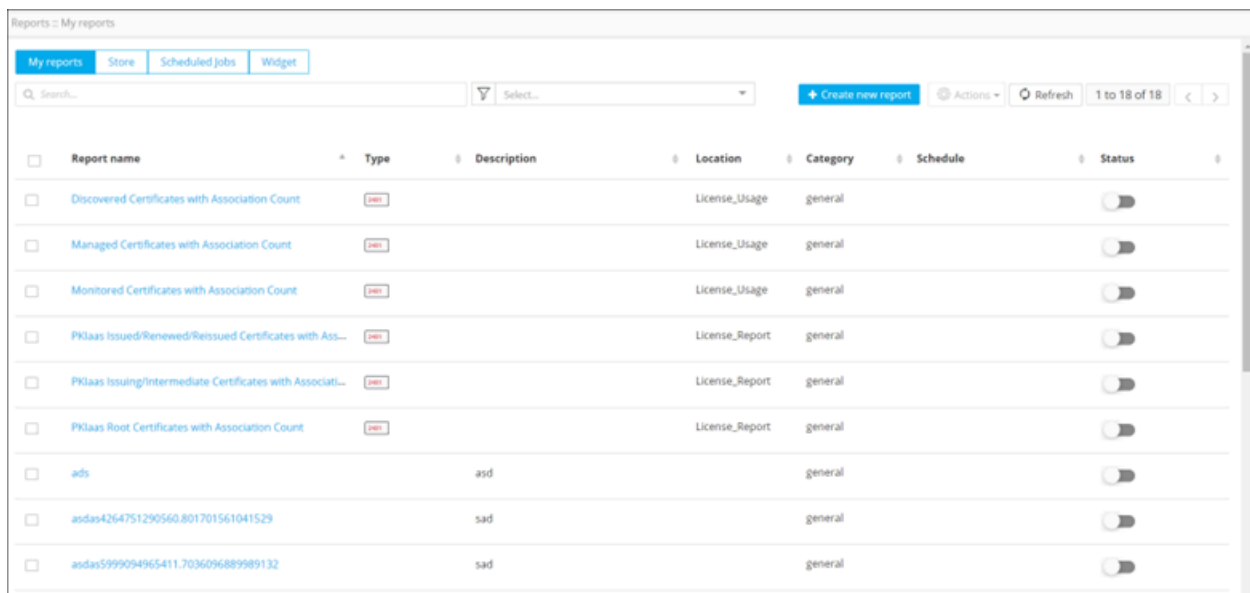
☐	Report name	Type	Description	Location	Category	Schedule	Status
☐	Discovered Certificates with Association Count	PKIas		License_Usage	general		☒
☐	Managed Certificates with Association Count	PKIas		License_Usage	general		☒
☐	Monitored Certificates with Association Count	PKIas		License_Usage	general		☒
☐	PKIaas Issued/Renewed/Reissued Certificates with Ass...	PKIas		License_Report	general		☒
☐	PKIaas Issuing/Intermediate Certificates with Associati...	PKIas		License_Report	general		☒
☐	PKIaas Root Certificates with Association Count	PKIas		License_Report	general		☒
☐	ads		asd		general		☒
☐	asdas4264751290560.801701561041529		sad		general		☒
☐	asdas5999094965411.7036096889989132		sad		general		☒

Chapter 7: Reports Inventory

- Overview
- My Reports
- Store
- Scheduled jobs
- Widget

Overview

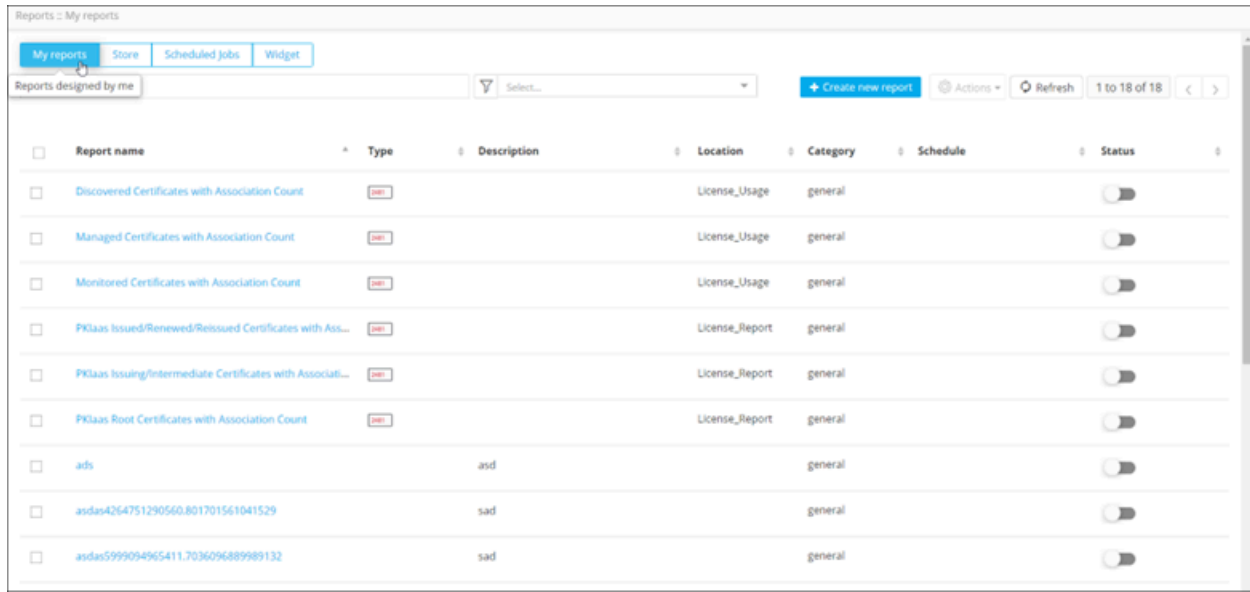
The **Reports :: My Reports** page gives a consolidated view of all the aspects of the Report builder. The **My Reports** tab is open on this page by default.



☐	Report name	Type	Description	Location	Category	Schedule	Status
☐	Discovered Certificates with Association Count	View		License_Usage	general		☒
☐	Managed Certificates with Association Count	View		License_Usage	general		☒
☐	Monitored Certificates with Association Count	View		License_Usage	general		☒
☐	PKIaas Issued/Renewed/Reissued Certificates with Ass...	View		License_Report	general		☒
☐	PKIaas Issuing/Intermediate Certificates with Associati...	View		License_Report	general		☒
☐	PKIaas Root Certificates with Association Count	View		License_Report	general		☒
☐	ads		asd		general		☒
☐	asdas4264751290560.801701561041529		sad		general		☒
☐	asdas5999094965411.7036096889989132		sad		general		☒

My Reports

The **Reports :: My reports** page shows the list of reports created by the user using the report builder.



The following table describes the options available under the **My reports** page:

Options	Description
Search bar	Searches for the given keyword(s) in the field and produces results featuring the searched keyword(s).
	Allows you to filter reports according to different categories.
Create new report	Allows you to create a new custom report.
Actions	Allows you to perform actions (pin, bulk, clone, delete) on the reports.  Note: This option is enabled only when a report(s) is selected.
Refresh	Refreshes the page.
Report name	Displays the names of the reports in alphabetical order (A to Z and Z to A).
Type	Displays reports according to the type - pie, donut, bar, stacked bar, grid, line metric.
Description	Displays a brief description of the report.
Location	Displays the location of the report on the dashboard.
Category	Displays the category of the report -

Options	Description
	• General: This is a default category. • Certificate: This relates to Certificate reports specifically. • ADC: This relates specifically to ADC reports.
Schedule	Displays the date and time of a scheduled report.
Status	Displays whether a report has been enabled or is disabled.

Store

The **Reports :: Store** page shows a list of ready-to-use reports made available to users.

Report name	Type	Description	Location	Category	Schedule	Status
Total Application Services or Objects by Type		Count of all Application Services/Objects...	License_Usage	general	2022-06-11 08:39	
Total ADC Application Services or Objects by Type		Count of all Primary ADC Application Se...	License_Usage	general	2022-06-11 08:38	
Total Application Services or Objects		Count of all Application Services/Objects...	License_Usage	general	2022-06-11 08:37	
Total Devices		Count of all Devices in Inventory (ADC, ...	License_Usage	general	2022-06-11 08:36	
Total ADC Devices by Type		Count of all ADC Devices in Inventory se...	License_Usage	general	2022-06-11 08:35	
Total Devices by Type		Count of all Devices in Inventory segre...	License_Usage	general	2022-06-11 08:34	
Alert Metric		AppViewX Alerts across Devices and Ap...		ADC	2022-06-11 02:44	
Secondary Object Snapshot		Snapshot of Secondary objects discover...		ADC	2022-06-11 02:44	
Object Snapshot		Snapshot of Primary objects discovered ...		ADC	2022-06-11 02:44	

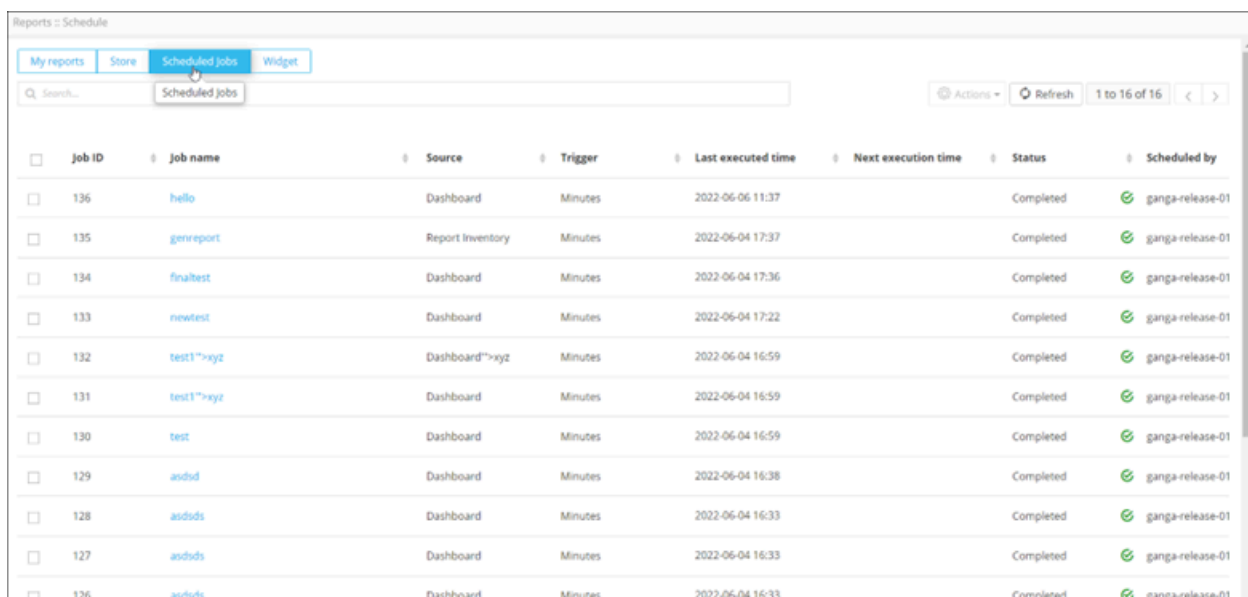
The following table describes the options available under the **Store** page:

Options	Description
Search bar	Searches for the given keyword(s) in the field and produces results featuring the searched keyword(s).
	Allows you to filter reports according to different categories.
Actions	Allows you to perform actions (pin, bulk, clone, delete) on the reports. Note: This option is enabled only when a report(s) is selected.

Options	Description
Refresh	Refreshes the page.
Report name	Displays the names of the reports in alphabetical order (A to Z and Z to A).
Type	Displays reports according to the type - pie, donut, bar, stacked bar, grid, line metric.
Description	Displays a brief description of the report.
Location	Displays the location of the report on the dashboard.
Category	Displays the category of the report - • General: This is a default category. • Certificate: This relates to Certificate reports specifically. • ADC: This relates specifically to ADC reports.
Schedule	Displays the date and time of a scheduled report.
Status	Displays whether a report has been enabled or is disabled.

Scheduled jobs

The **Reports :: Schedule** page shows a list of all the scheduled jobs or the emails that have been scheduled by a user to trigger at pre-set time intervals.



The screenshot shows the 'Reports :: Schedule' page with a navigation bar containing 'My reports', 'Store', 'Scheduled jobs' (selected), and 'Widget'. Below the navigation bar is a search bar and a 'Scheduled jobs' button. The main content area displays a table of scheduled jobs with columns: Job ID, Job name, Source, Trigger, Last executed time, Next execution time, Status, and Scheduled by. The table lists 11 jobs, all with a status of 'Completed' and scheduled by 'ganga-release-01'.

Job ID	Job name	Source	Trigger	Last executed time	Next execution time	Status	Scheduled by
136	hello	Dashboard	Minutes	2022-06-06 11:37		Completed	ganga-release-01
135	genreport	Report Inventory	Minutes	2022-06-04 17:37		Completed	ganga-release-01
134	finaltest	Dashboard	Minutes	2022-06-04 17:36		Completed	ganga-release-01
133	newtest	Dashboard	Minutes	2022-06-04 17:22		Completed	ganga-release-01
132	test1~xyz	Dashboard~xyz	Minutes	2022-06-04 16:59		Completed	ganga-release-01
131	test1~xyz	Dashboard	Minutes	2022-06-04 16:59		Completed	ganga-release-01
130	test	Dashboard	Minutes	2022-06-04 16:59		Completed	ganga-release-01
129	asdsd	Dashboard	Minutes	2022-06-04 16:38		Completed	ganga-release-01
128	asdsd	Dashboard	Minutes	2022-06-04 16:33		Completed	ganga-release-01
127	asdsd	Dashboard	Minutes	2022-06-04 16:33		Completed	ganga-release-01
126	asdsd	Dashboard	Minutes	2022-06-04 16:33		Completed	ganga-release-01

The following table describes the options available under the **Scheduled Jobs** tab:

Options	Description
Search bar	Searches for the given keyword(s) in the field and produces results featuring the searched keyword(s).
Refresh	Refreshes the page.
Job ID	Displays the Job ID.
Job name	Displays the Job name.
Source	Displays the source of the scheduled job.
Trigger	Displays the frequency at which the job is scheduled to be triggered.
Last executed time	Displays the time when the job was last executed.
Next execution time	Displays the time when the job will be executed next.
Status	Displays the status (pause/resume) of the job. You can click on the green arrow to change the status.
Scheduled by	Displays the name of the user who scheduled the job.



Note: For more information on scheduling reports, click [here](#).

Widget

A widget allows you to arrange data in a visually striking display. Only metric charts can be used to create widgets. The **Reports :: Canvas** page shows the list of pre-built widgets available for the user.

Reports :: Canvas

My reports Store Scheduled Jobs **Widget**

Q Search... Arrange reports in widget + Create new widget Actions Refresh 1 to 7 of 7 < >

☐	Widget name	Description	Location	Status
☐	Automation Request Summary	Snapshot of Automation Request status and trend	Usage_And_Adoption_Metrics	☒
☐	Asset Inventory	Snapshot of all the device assets in the inventory	Usage_And_Adoption_Metrics	☒
☐	Certificate Lifecycle Management	Snapshot of Certificate actions performed	Usage_And_Adoption_Metrics	☒
☐	Certificate - Environment Snapshot	Snapshot of Certificates management, monitored	Usage_And_Adoption_Metrics	☒
☐	Application Delivery - Environment Snapshot	Snapshot of application delivery	Usage_And_Adoption_Metrics	☒
☐	Application Service Actions	Snapshot of application service actions performed	Usage_And_Adoption_Metrics	☒
☐	User Summary	Snapshot of the user, login summary and trend	Usage_And_Adoption_Metrics	☒

This table describes the options available under the **Widget** page:

Options	Description
Search bar	Searches for the given keyword(s) in the field and produces results featuring the searched keyword(s).
Create new widget	Allows you to create a new widget.
Actions	Allows you to perform actions (pin, bulk, clone, delete) on the reports.  Note: This option is enabled only when a report(s) is selected.
Refresh	Refreshes the page.
Widget name	Displays the names of the widget.
Description	Displays a brief description of the widget.
Location	Displays the location of the widget on the dashboard.
Status	Displays whether a widget has been enabled or is disabled.

Chapter 8: Creating a Report/BYOR

- Overview
- Build
- Chart Configuration
- Chart Drilldown

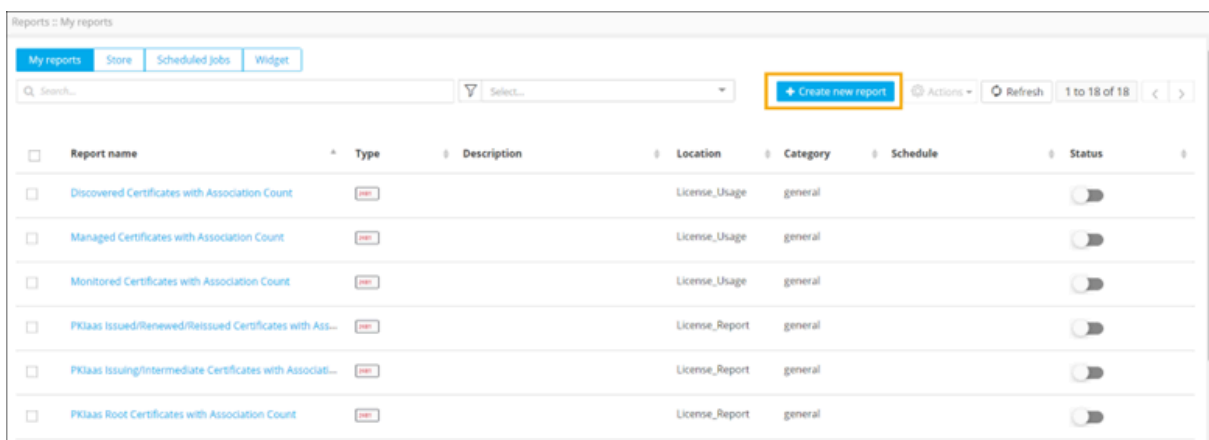
Overview

There are three steps involved in creating a report using AppViewX's report builder tool.

- Build
- Chart Configuration
- Chart Drilldown

Build

1. To create a customized report, on the **My Reports** page, click **Create New Report**.



2. On the **Reports :: My reports > Create :: basicinfo** page, under the **BUILD** section, enter or select the required field information.

Reports :: My reports > Create :: basicInfo

BUILD CHART CONFIGURATION CHART DRILLDOWN

* Report name
Devices based on Vendors

Description
Display devices by vendor

* Select category
general + ▾

- ADC
- certificate
- general**

The following table describes the field information in this section:

Field	Description
*Report name	Enter a valid report name. For example: Devices based on vendors.
Description	Enter a valid description of the report. For example: Display devices by vendor.
*Select category	Select category from the options available in the drop down menu or click + to add a new category. • Certificate - Select category as certificate for creating certificate related reports specifically. • ADC - Select category as ADC for building ADC related reports specifically. • General - Select category as general for all reports.
The asterisk (*) symbol indicates mandatory fields.	

- To query certificates based on role permissions, select the **ACL Restricted** check box.

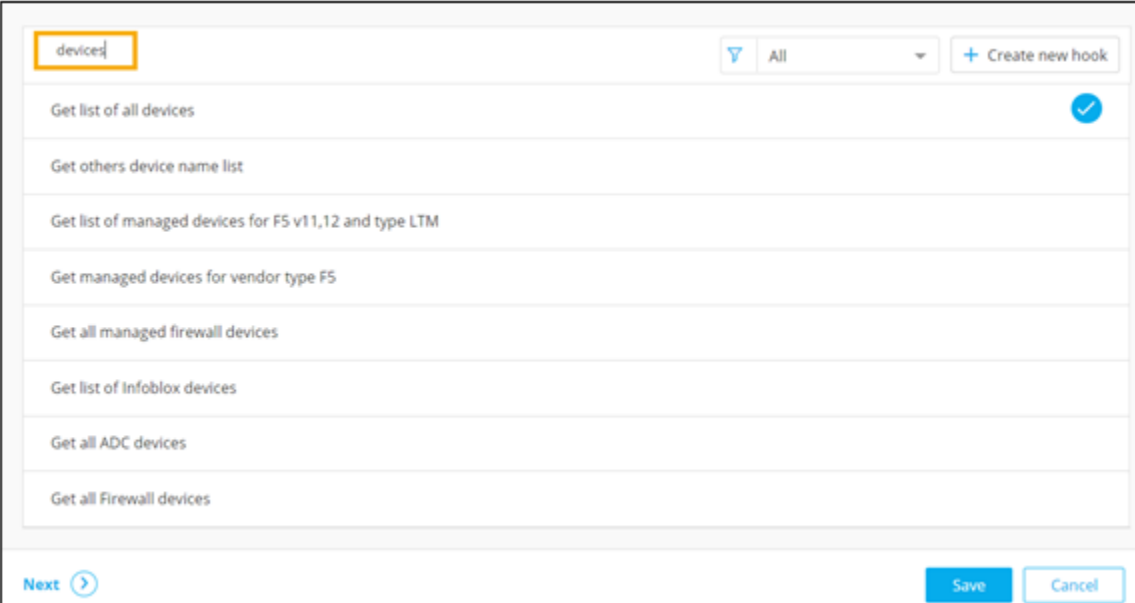


☒ ACL Restricted 



Note: Check this box specifically for creating certificate related reports.

4. To query report data, either select a preexisting hook or click **Create new Hook**.



The interface shows a search bar with 'devices' entered. Below it is a list of hooks with a blue checkmark next to 'Get list of all devices'. At the bottom are 'Next', 'Save', and 'Cancel' buttons.

Hook Name	Status
Get list of all devices	Selected (Blue Checkmark)
Get others device name list	Not Selected
Get list of managed devices for FS v11,12 and type LTM	Not Selected
Get managed devices for vendor type FS	Not Selected
Get all managed firewall devices	Not Selected
Get list of Infoblox devices	Not Selected
Get all ADC devices	Not Selected
Get all Firewall devices	Not Selected



Note: For more information on creating hooks, click [here](#).

5. To save this basic information on the report, click **Save**.
6. To go to the next stage of report building, click **Next**.
- The **CHART CONFIGURATION** section is displayed.

Chart Configuration

- [Overview](#)
- [How to Design a Custom Pie Chart](#)
- [How to Design a Custom Donut Chart](#)
- [How to Design a Custom Bar Chart](#)
- [How to Design a Custom Stacked Bar Chart](#)
- [How to Design a Custom Grid Chart](#)
- [How to Design a Custom Line Chart](#)
- [How to Design a Custom Metric Chart](#)

Overview

The chart configuration page lists seven types of chart options that can be selected for creating reports. These options are:

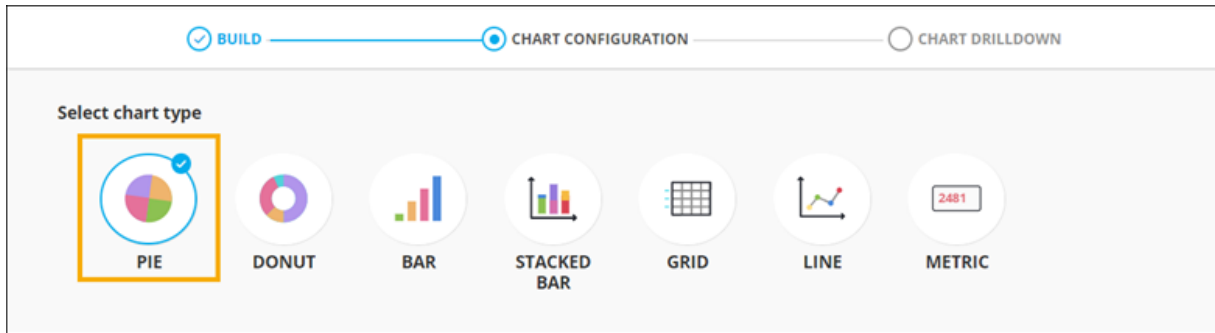
- Pie Chart
- Donut
- Bar
- Stacked Bar
- Grid
- Line
- Metric

How to Design a Custom Pie Chart

Creating a report using a pie chart allows you to display multiple classes of data and their proportions. It helps to summarize a large data set visually. It is easy to understand and requires minimal explanation.

To design a custom pie chart:

1. [Build](#) a report.
2. Under the **CHART CONFIGURATION** section, **Select chart type** as **PIE**.



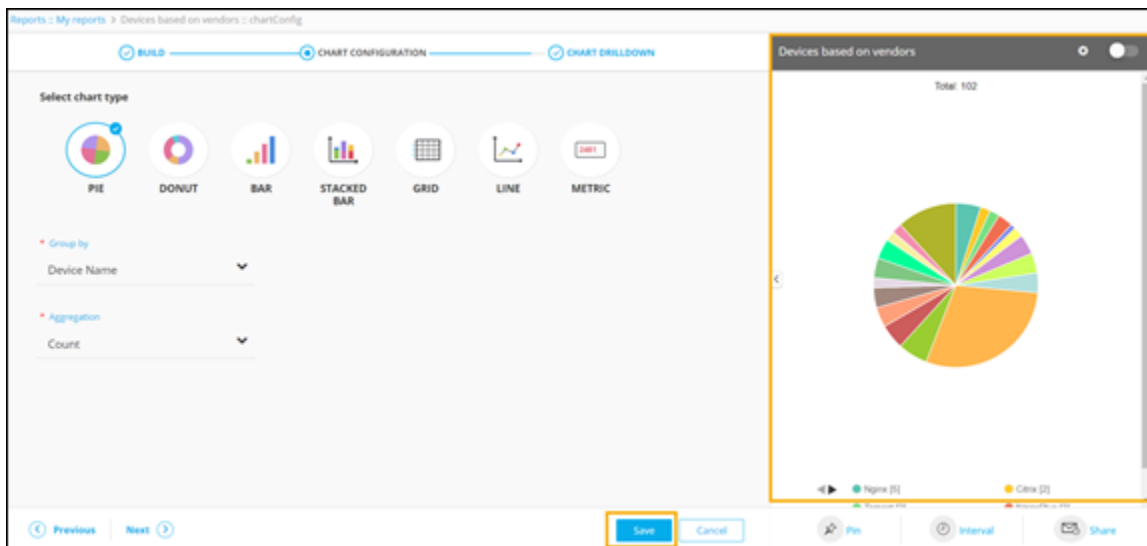
3. Enter or select the information required in each of the fields.

The following table describes the field information in this section:

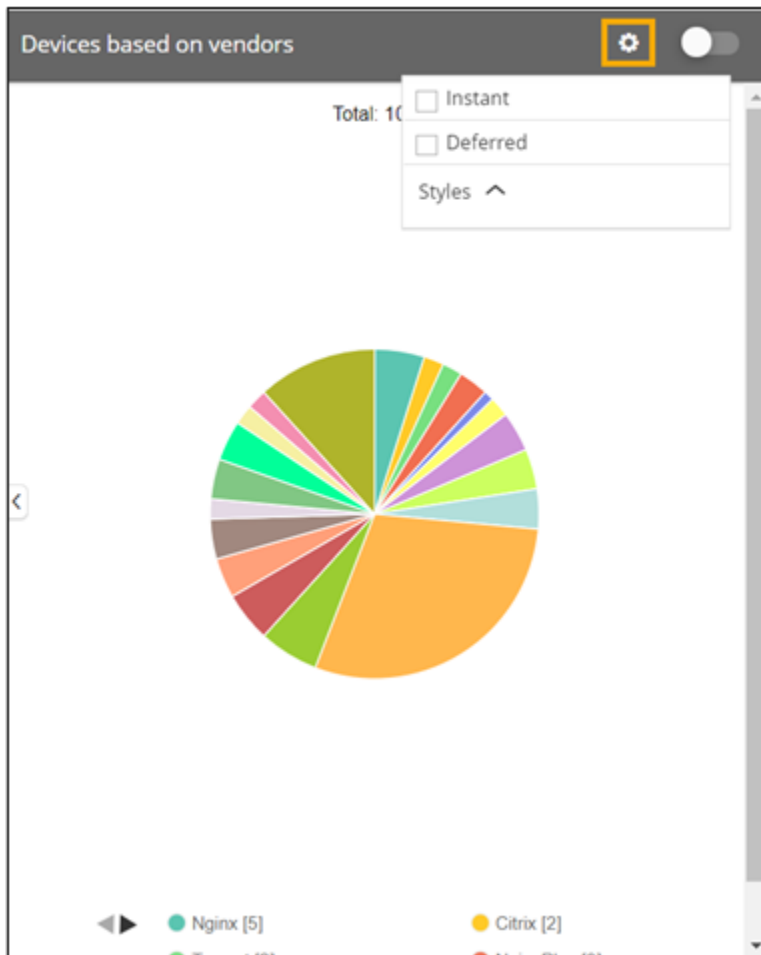
Field	Description
*Group by	Select a value from the dropdown menu on the basis of which report data will be grouped. For example: Device Name .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save**.

A preview of the pie chart is generated on the right side of the screen.

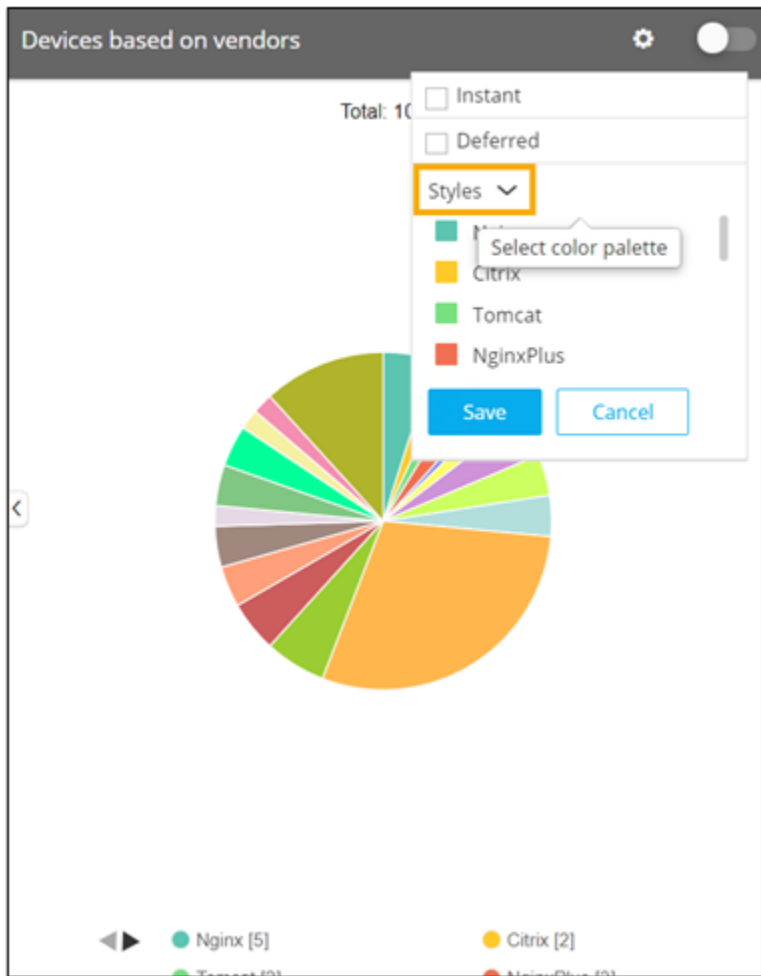


5. To select the data loading pattern, click .

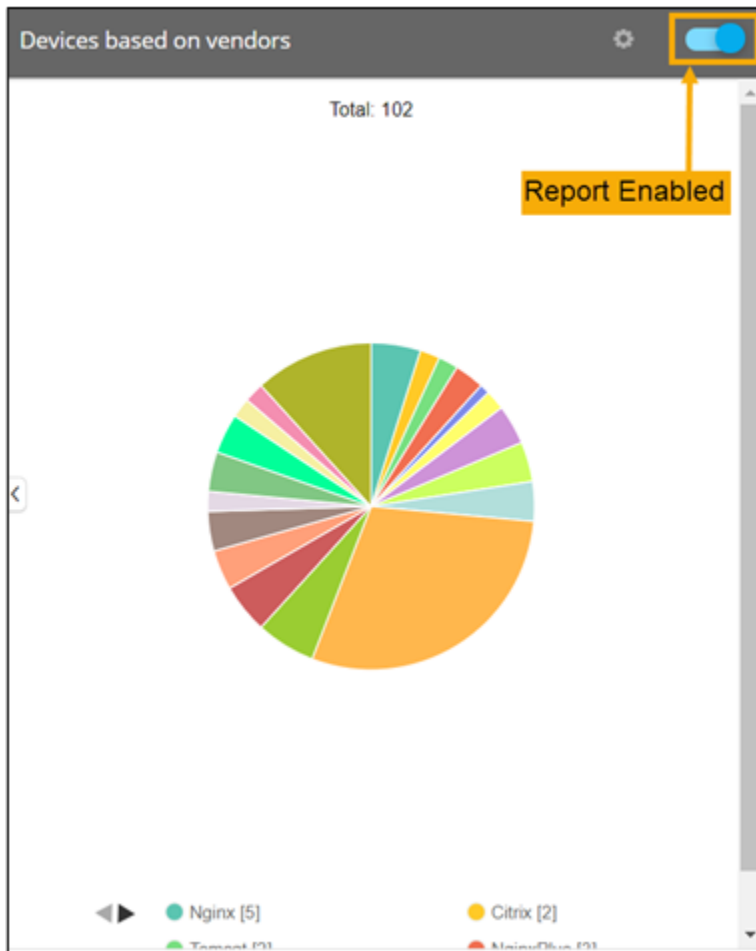


- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
- **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.

6. To change the style/font color of their pie chart, click **Styles**.



7. To enable the report, turn on the toggle.



8. Click **Next**.

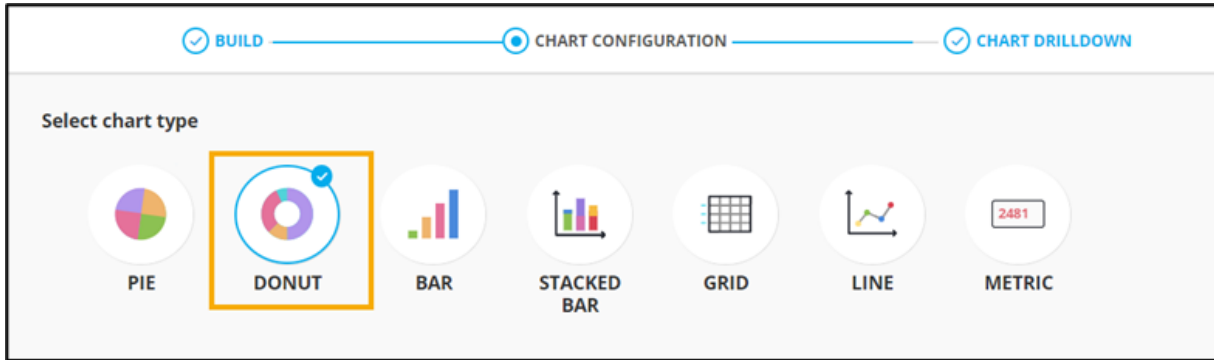
The **CHART DRILLDOWN** section is displayed.

How to Design a Custom Donut Chart

A donut chart, similar to a pie chart, allows you to compare between categories and visualize part to whole relationships. A donut chart has the added advantage of having a blank space in the middle where extra information can be supplemented.

To design a custom donut chart:

1. **Build** a report.
2. Under the **CHART CONFIGURATION** section, select the **DONUT** chart.



3. Enter or select the information required in each of the fields.

* Group by

Device Name

* Aggregation

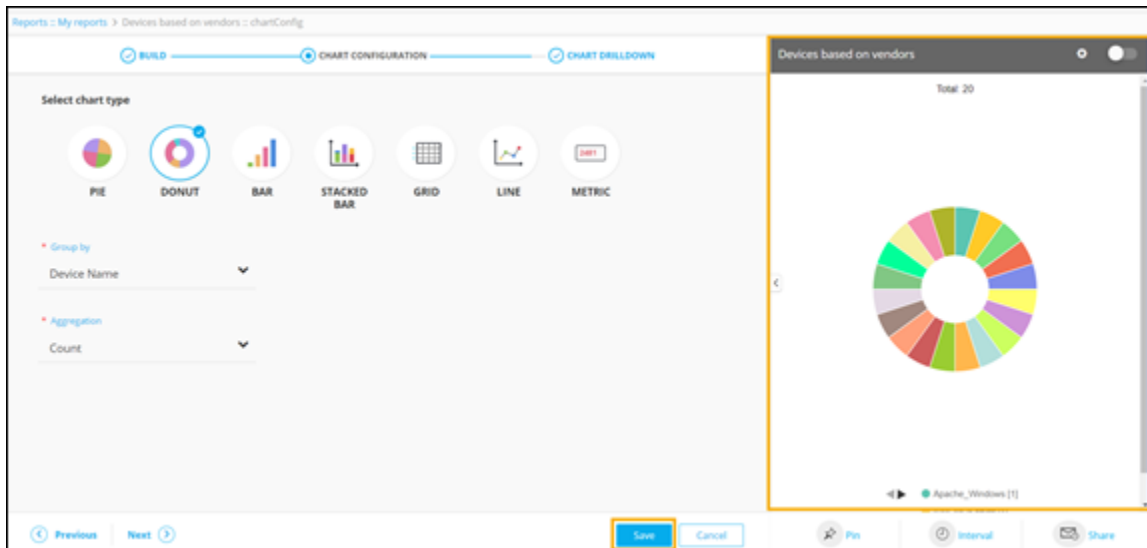
Count

The following table describes the field information in this section:

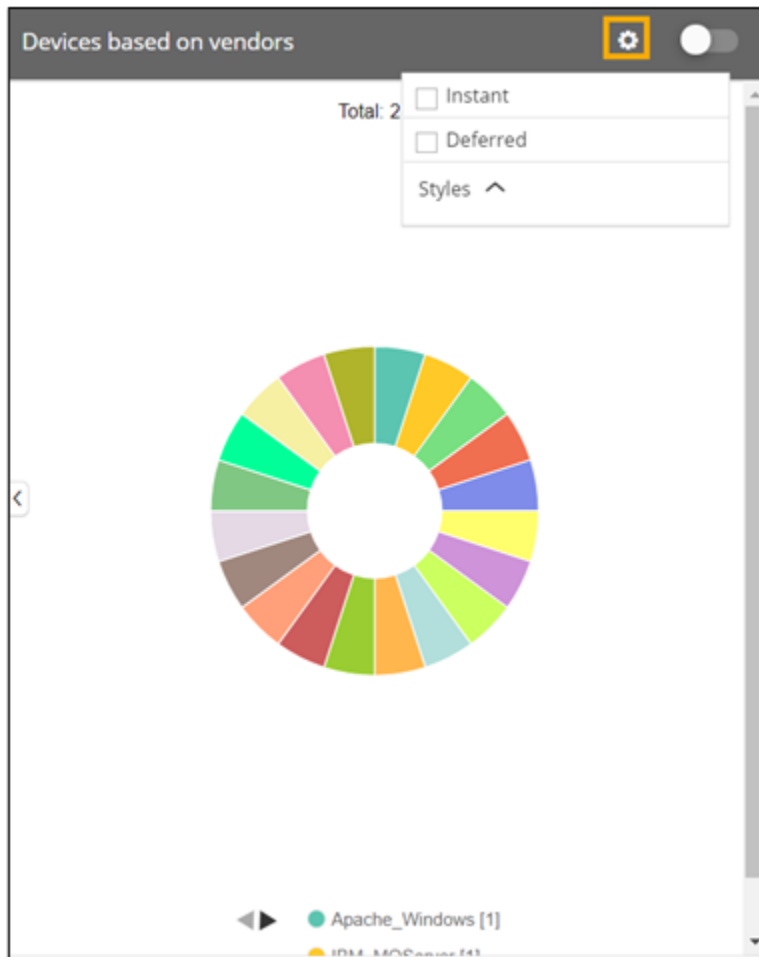
Field	Description
*Group by	Select a value from the dropdown menu on the basis of which report data will be grouped. For example: Device Name .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save**.

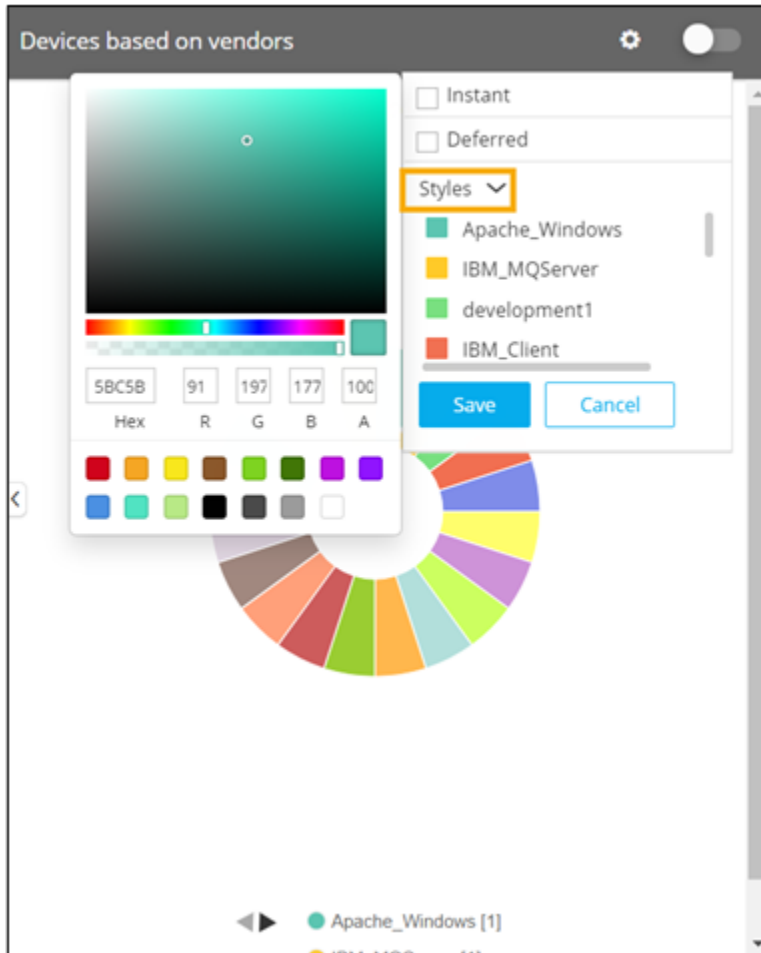
A preview of the donut is generated on the right side of the screen.



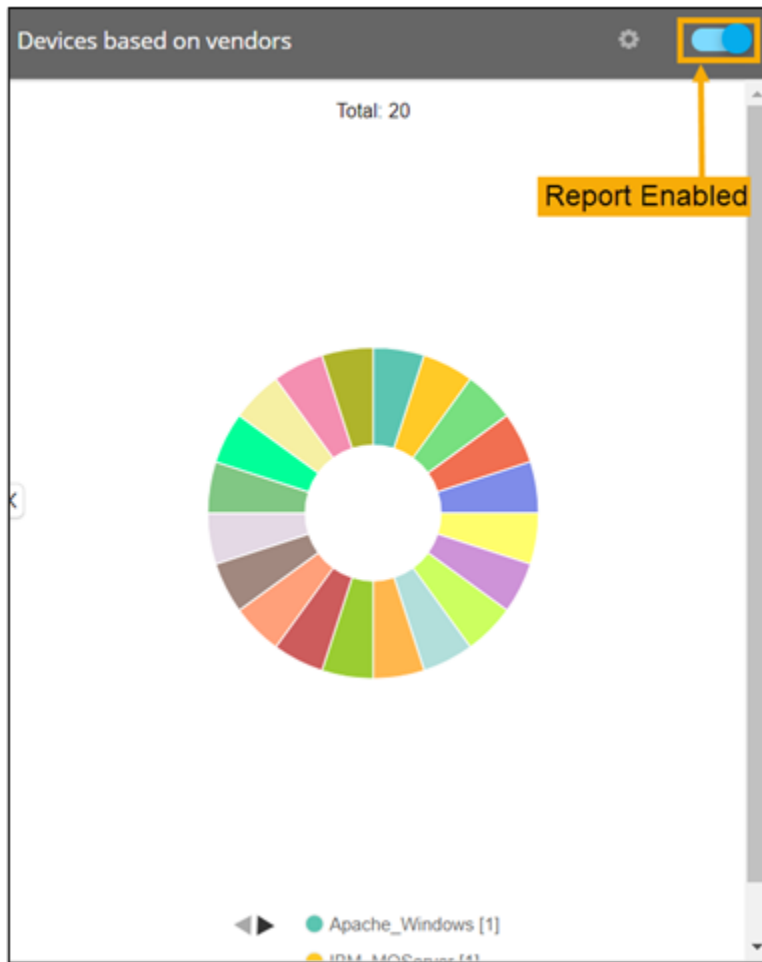
5. To select the data loading pattern, click .



- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
 - **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.
6. To change the style/font color of the donut, click **Styles**.



7. To enable the report, turn on the toggle.



8. Click **Next**.

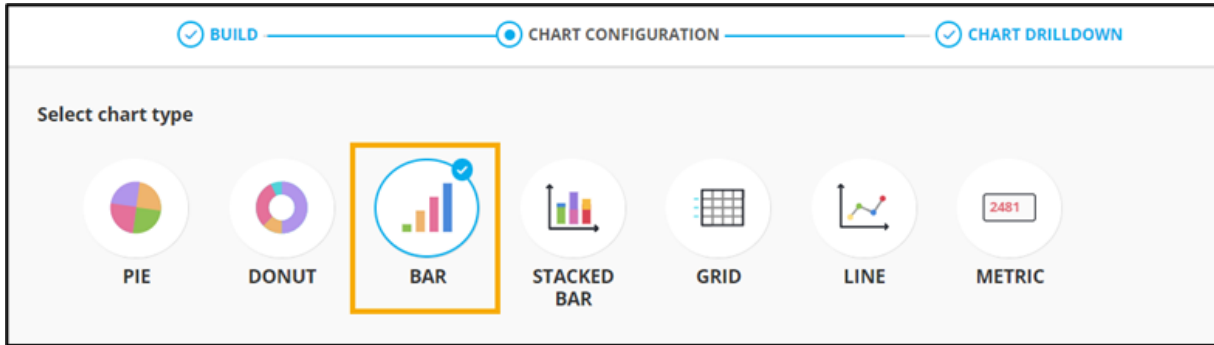
The **CHART DRILLDOWN** section is displayed.

How to Design a Custom Bar Chart

A bar chart allows you to compare data across different categories. It is especially useful for measuring changes in data over longer periods of time or measuring larger changes in data.

To design a custom bar Chart:

1. **Build** a report.
2. Under the **CHART CONFIGURATION** section, select the **BAR** chart.



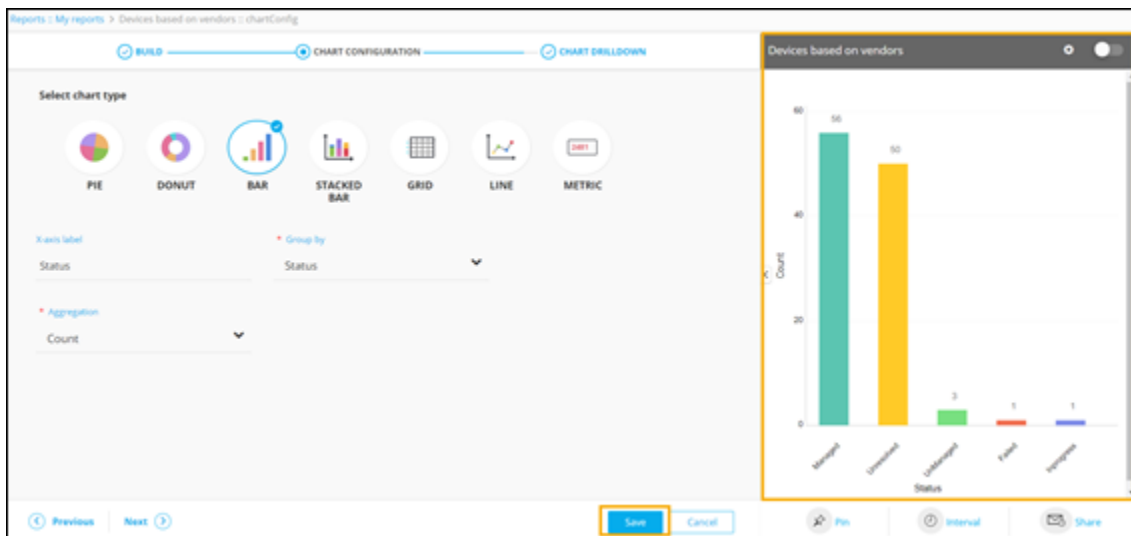
3. Enter or select the information required in each of the fields.

The following table describes the field information in this section:

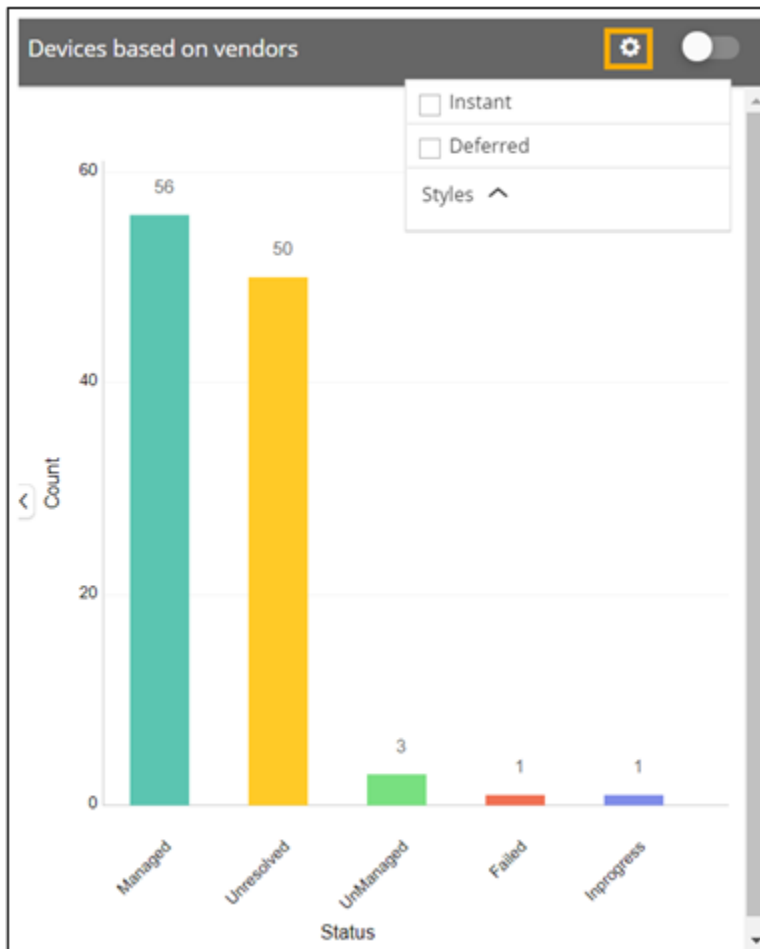
Field	Description
X-axis label	Enter the criteria for the X-axis label. For example: Status .
*Group by	Select a value from the drop down menu on the basis of which data will be grouped. For example: Status . This will generate a report that shows the status of devices as managed, unmanaged and so on.
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save**.

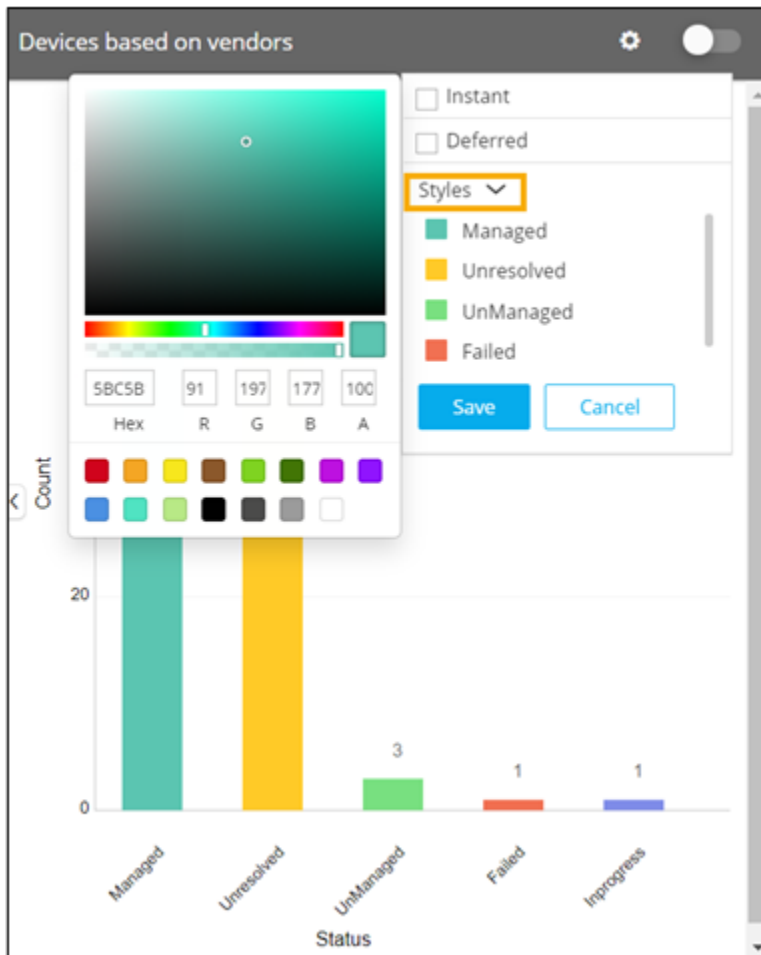
A preview of the bar chart is generated on the right side of the screen.



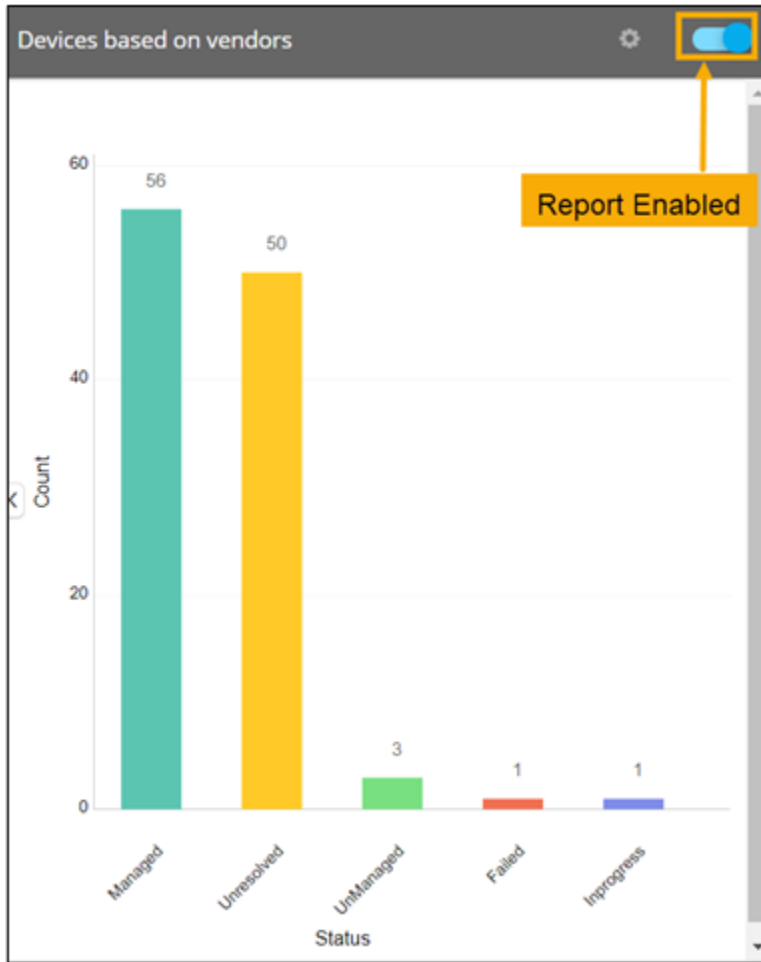
5. To select the data loading pattern, click .



- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
 - **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.
6. To change the style/font color of the bar chart, click **Styles**.



7. To enable the report, turn on the toggle.



8. Click **Next**.

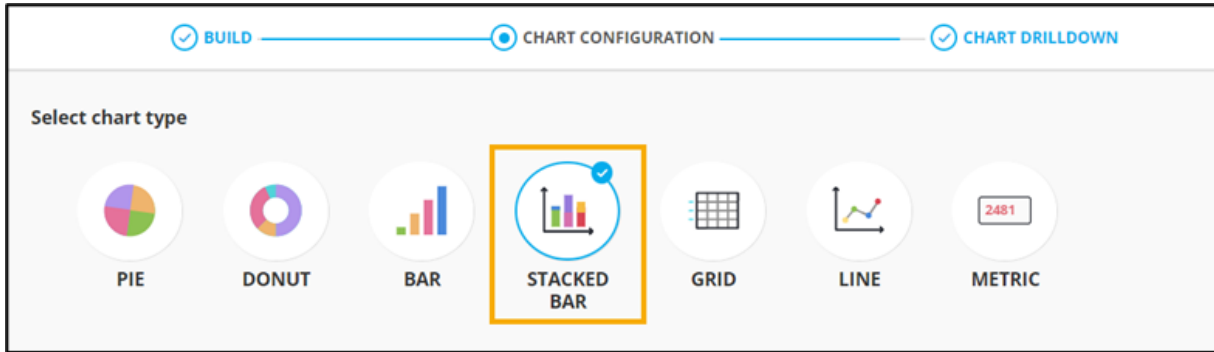
The **CHART DRILLDOWN** section is displayed.

How to Design a Custom Stacked Bar Chart

A stacked bar chart is useful for comparing data across several categories as well as analysing the relation between sub-categories. In a stacked bar, each bar is divided into segments which represent different categories within that single bar category.

To design a custom stacked bar chart:

1. **Build** a report.
2. Under the **CHART CONFIGURATION** section, select the **STACKED BAR** chart.



3. Enter or select the information required in each of the fields.

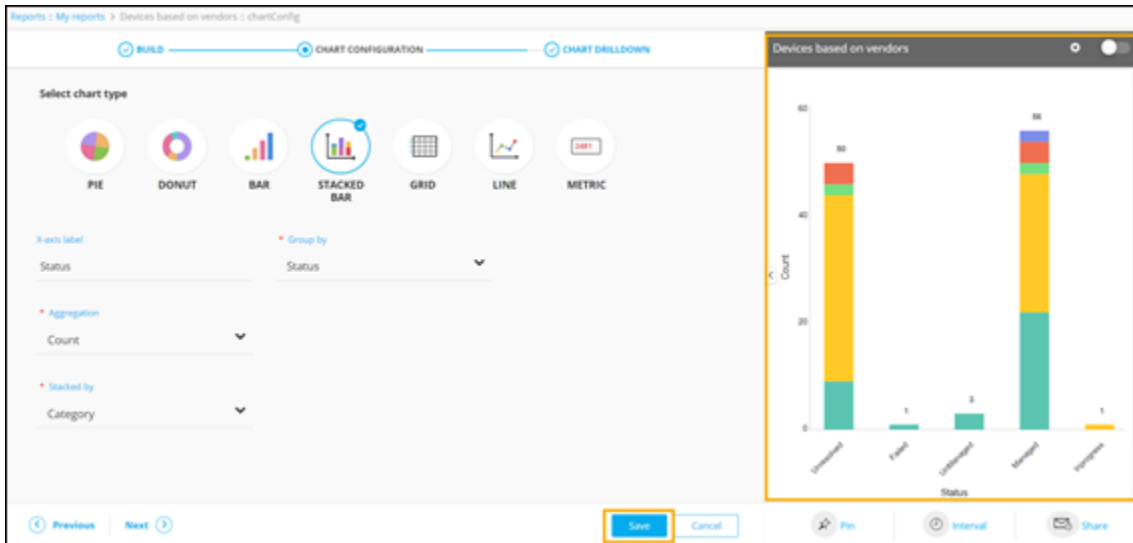
The following table describes the field information in this section:

Field	Description
X-axis label	Enter the criteria for the X-axis label. For example: Status .
*Group by	Select a value from the drop down menu on the basis of which report data will be grouped. For example: Status .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.

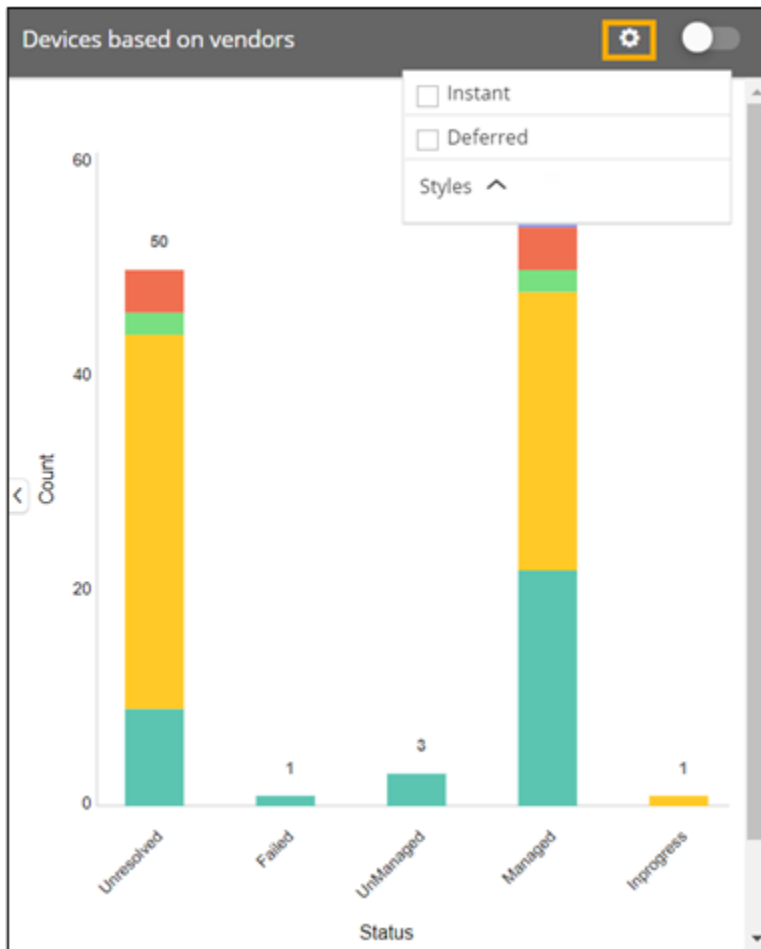
Field	Description
*Stacked by	Select the parameter from the drop down menu on the basis of which the data will be stacked in the chart. For example: Category of device.
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save**.

A preview of the stacked bar chart is generated on the right side of the screen.

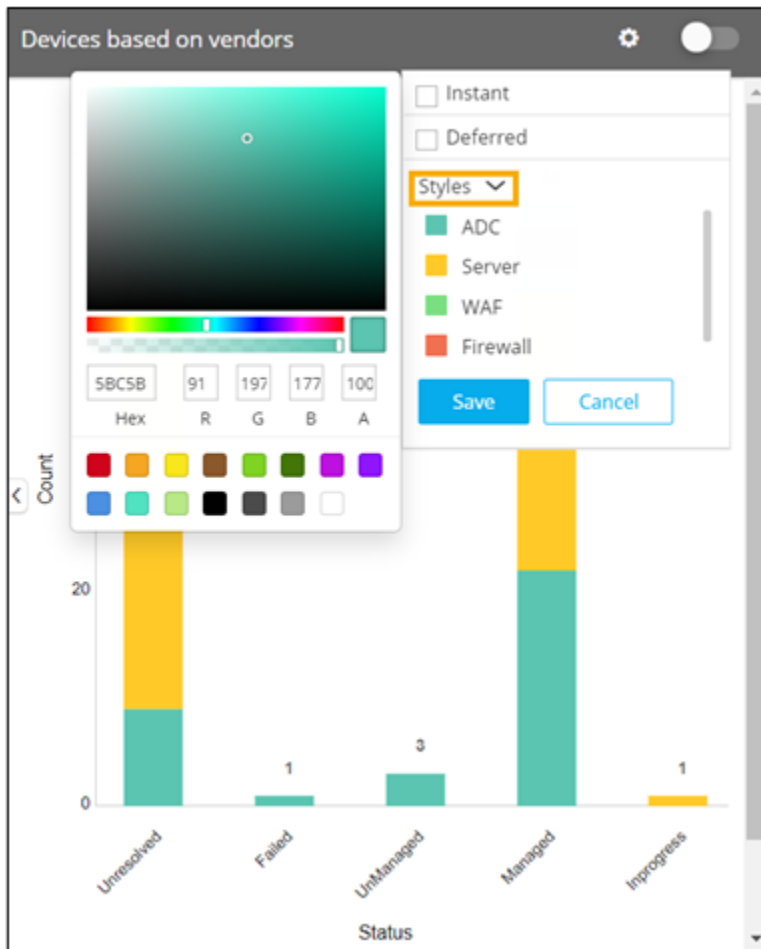


5. To select the data loading pattern, click .

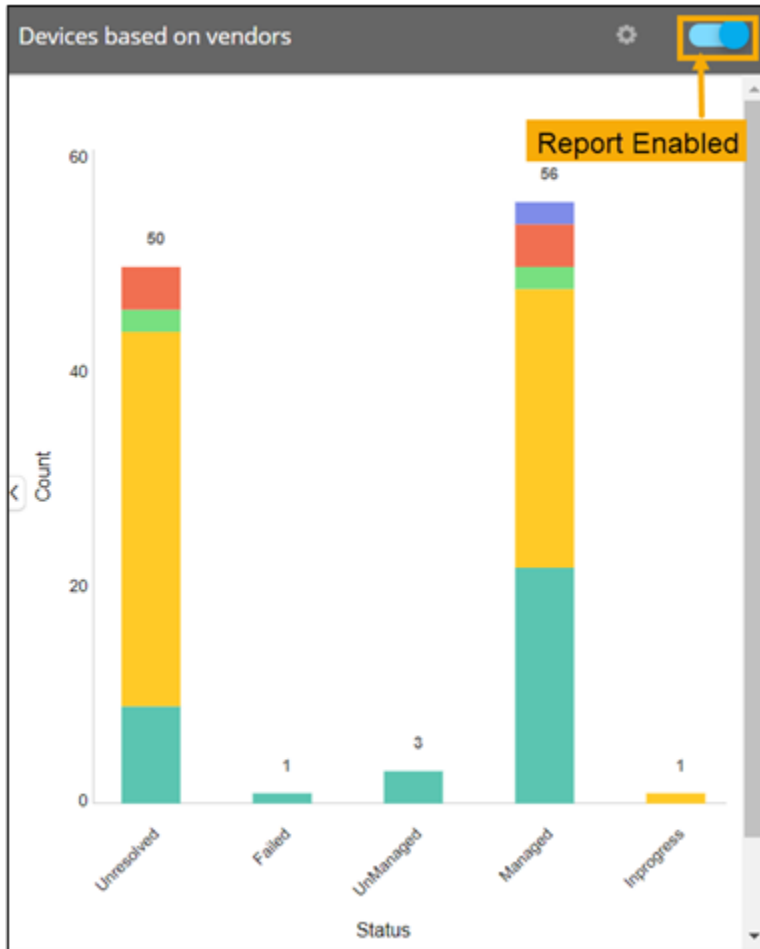


- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
- **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.

6. To change the style/font color of the stacked bar chart, click **Styles**.



7. To enable the report, turn on the toggle.



8. Click **Next**.

The **CHART DRILLDOWN** section is displayed.

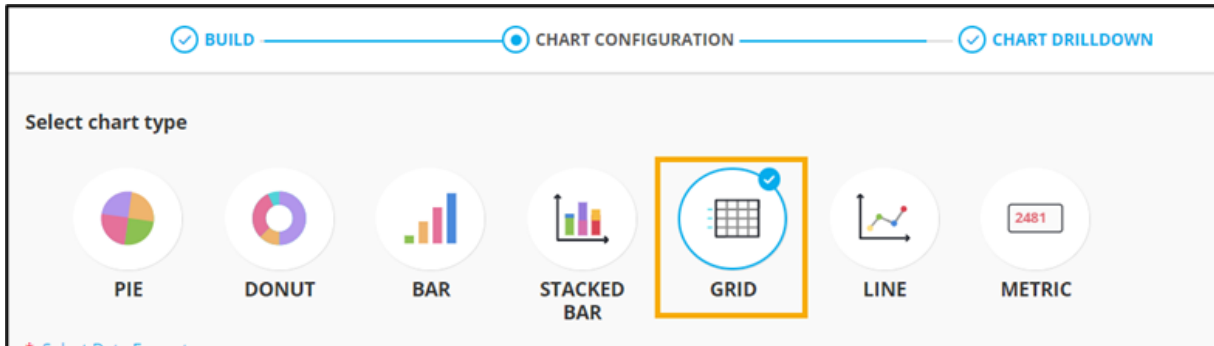
How to Design a Custom Grid Chart

A grid is a tabular representation of data with each row displaying specific information pertaining to selected fields in the columns.

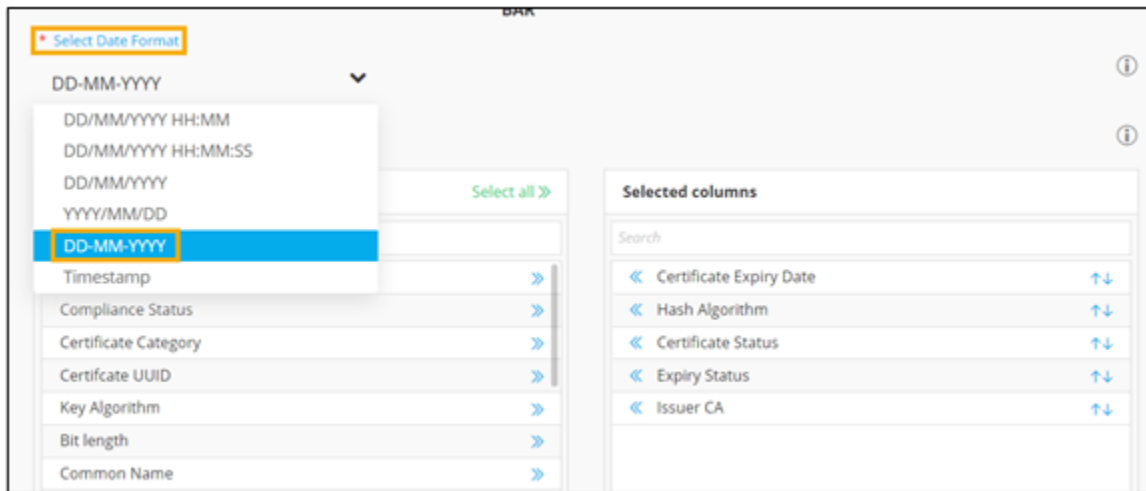
- The grid chart supports server side search functionality.
- It also supports server side sorting, where you can sort the report data in ascending or descending order.
- Grid chart also has provision for downloading high volumes of data in Excel or CSV formats.
- Date formats are customizable for grid charts as per user needs. You can select the specific date format from the dropdown.

To design a custom grid chart:

1. [Build](#) a report.
2. Under the **CHART CONFIGURATION** section, select the **GRID** chart.



3. **Select Date Format** from the dropdown.



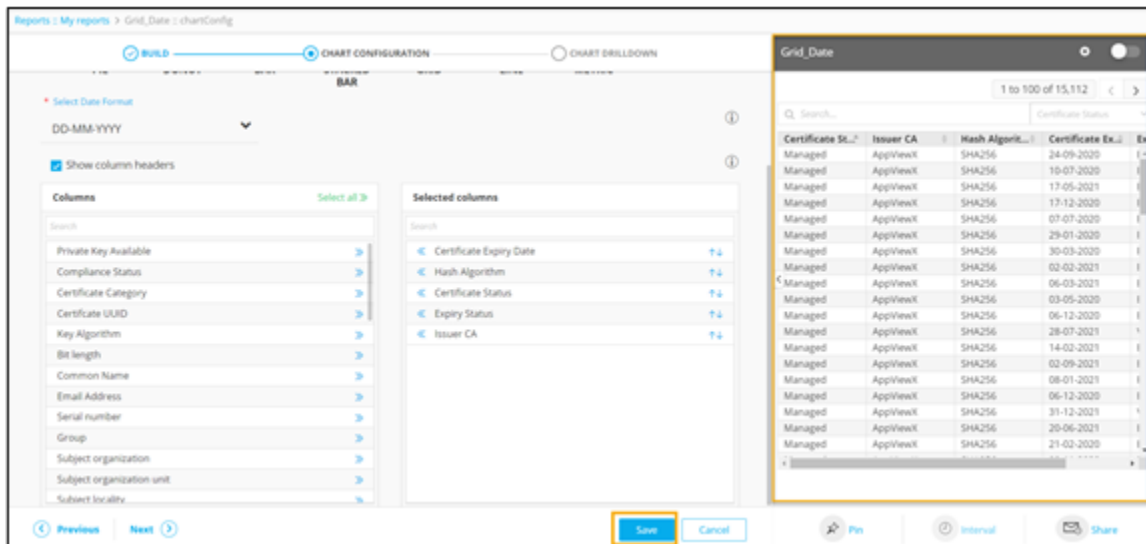
4. To configure the column headers to be displayed within the grid, click .



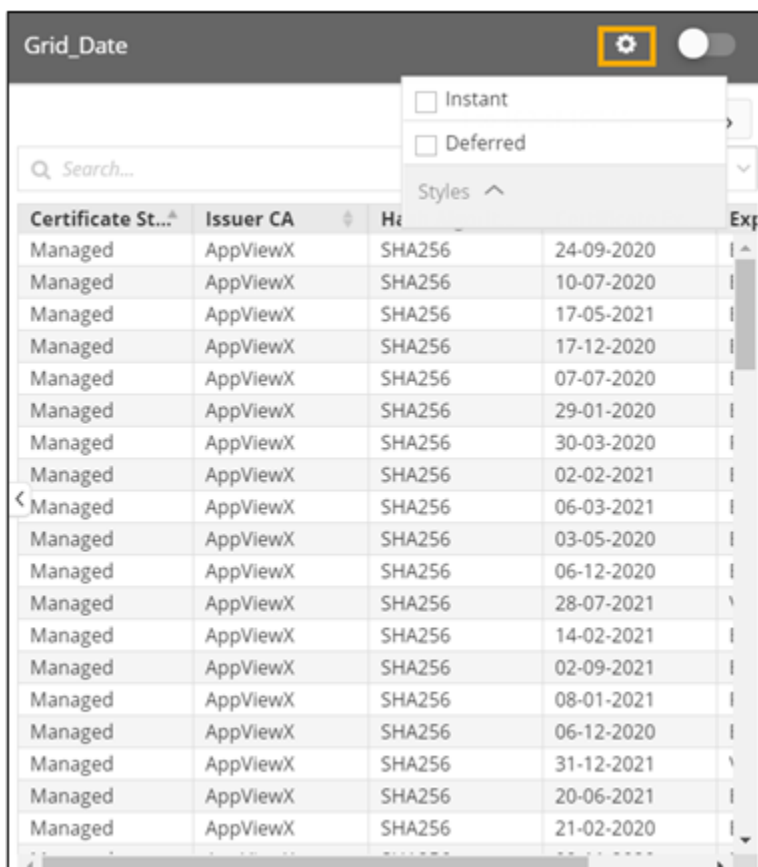
Tip: To arrange the order in which **Selected columns** are displayed in the grid, click .

5. Click **Save**.

A preview of the grid chart is generated on the right side of the screen.

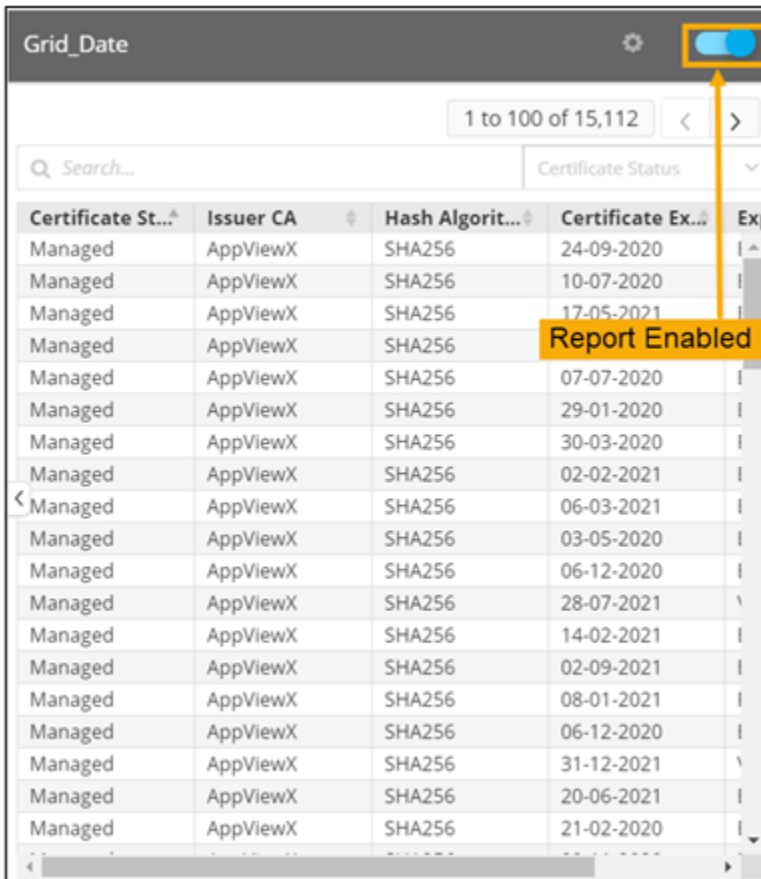


6. To select the data loading pattern, click .



- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
- **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.

7. To enable the report, turn on the toggle.



Note: Color code mapping is not applicable to the grid chart.

8. Click **Next**.

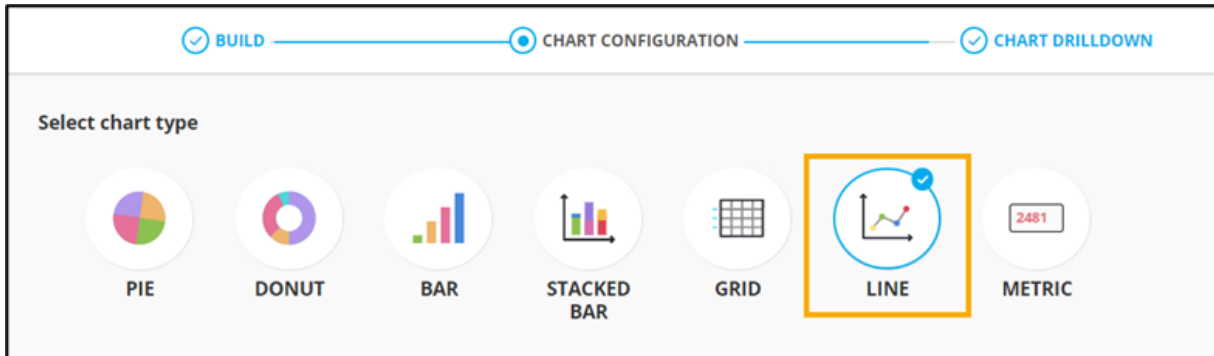
The **CHART DRILLDOWN** section is displayed.

How to Design a Custom Line Chart

Line charts are a simple and quick way of tracking changes over a period of time. They are a better choice for tracking changes over a short period of time. A line chart can also be used to compare changes for multiple groups over the same period of time.

To design a custom line chart:

1. [Build](#) a report.
2. Under the **CHART CONFIGURATION** section, select the **LINE** chart.



3. Enter or select the information required in each of the fields.

The screenshot shows the configuration fields for the chart. The 'X-axis label' field is set to 'Creation Date'. The '* Group by' field is set to 'Creation Date'. The '* Date format' field is set to 'Monthly'. The '* Aggregation' field is set to 'Count'.

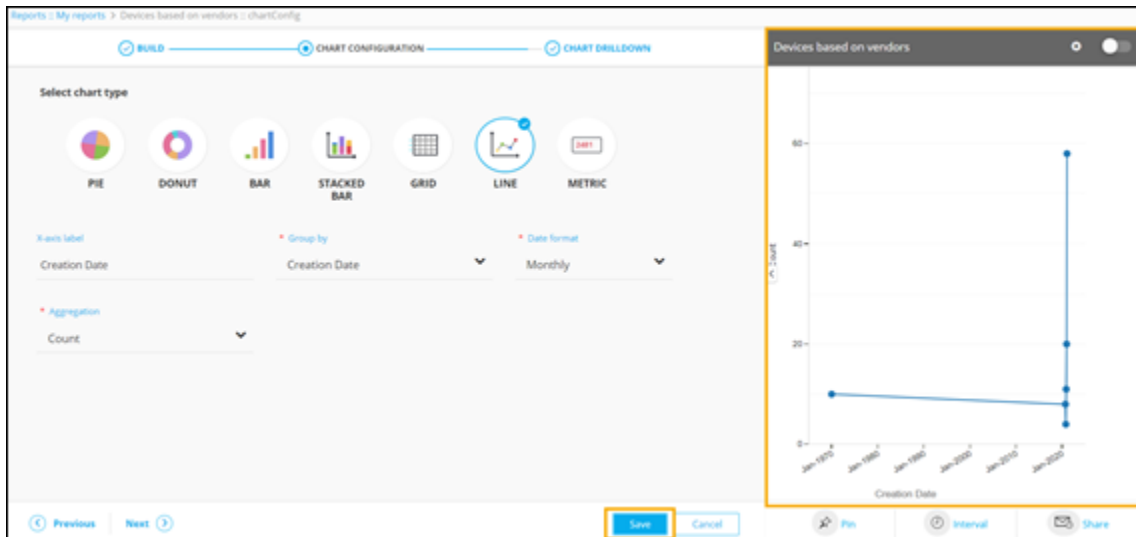
The following table describes the field information in this section:

Field	Description
X-axis label	Enter the criteria for the X-axis label. For example: Creation Date .
*Group by	Select a value from the dropdown on the basis of which report data will be grouped. For example: Creation Date .
*Date format	Select a valid date format from the dropdown menu. For example: Monthly .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.

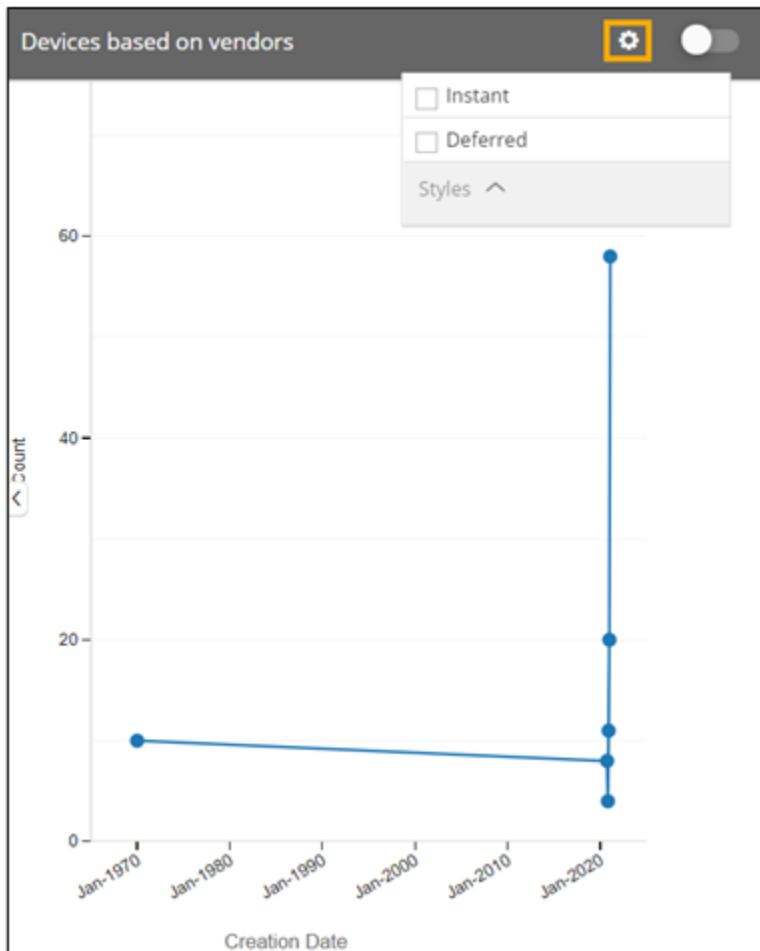
Field	Description
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save**.

A preview of the line chart is generated on the right side of the screen.

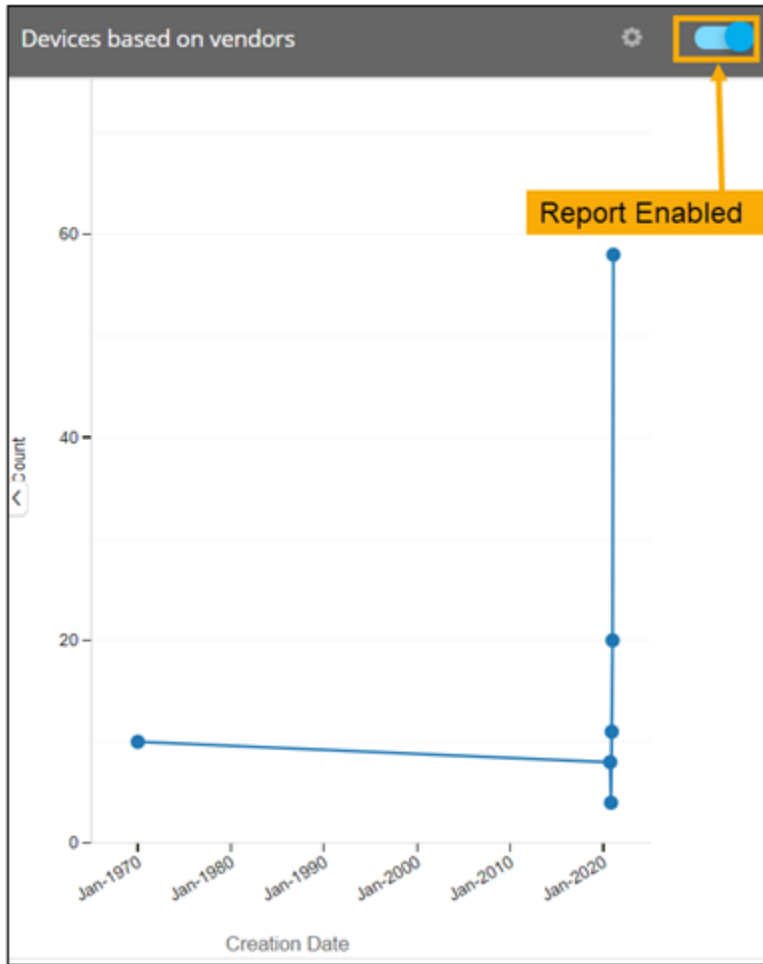


5. To select the data loading pattern, click .



- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
- **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.

6. To enable the report, turn on the toggle.



Note: Color code mapping is not applicable to the line chart.

7. Click **Next**.

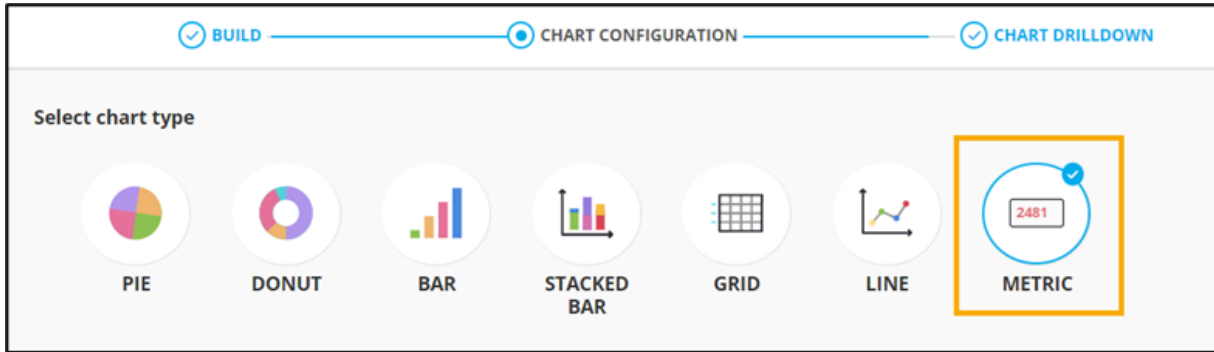
The **CHART DRILLDOWN** section is displayed.

How to Design a Custom Metric Chart

A metric chart displays specific information about a process and its functioning. It allows you to highlight a metric on the dashboard, giving instant information about the data and helps in tracking progress.

To design a custom metric chart:

1. **Build** a report.
2. Under the **CHART CONFIGURATION** section, select the **METRIC** chart.



3. Enter or select the information required in each of the fields.

Chart title
Devices based on vendors

* **Aggregation**
Count

Chart formatting

* **Select chart size**
☒ Small
 ☐ Medium
 ☐ Large

* **Select alignment**
☒ Left
 ☐ Center

* **Select font colour**

Select icon

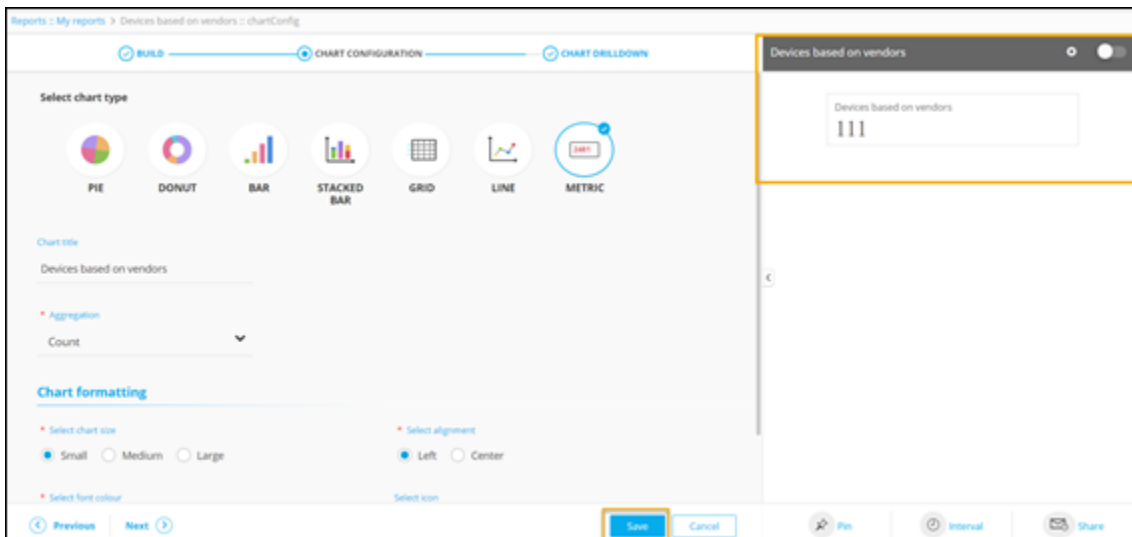
The following table describes the field information in this section:

Field	Description
Chart Title	Enter the chart title. For example: Devices based on vendors.
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field.

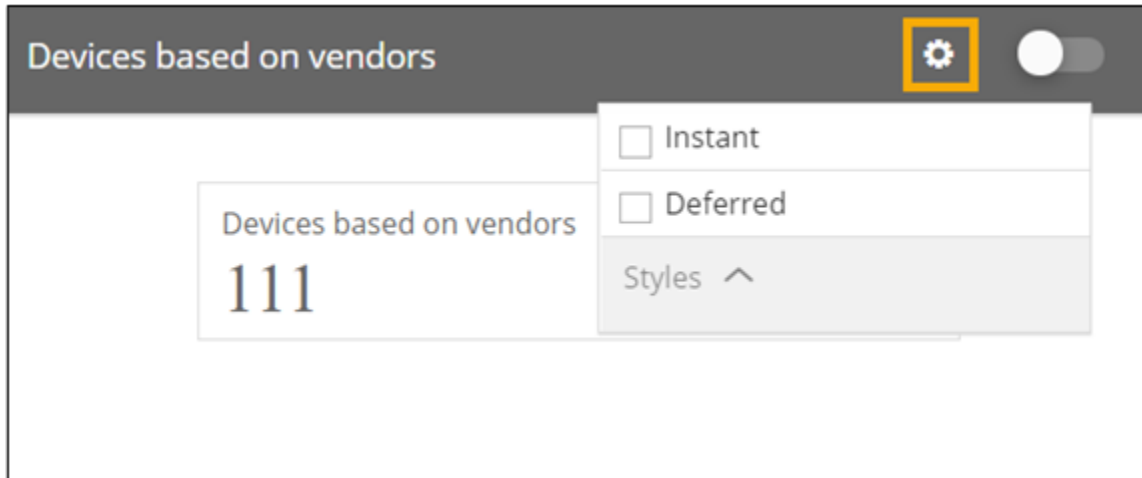
Field	Description
	• Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
*Select chart size	Select the metric size. For example, Small.
*Select alignment	Select the placement of the metric on the screen. For example: Left .
*Select font color	Select the color of the font on the metric.
Select icon	Select an icon for the metric chart from the dropdown menu.
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save**.

A preview of the metric chart is generated on the right side of the screen.

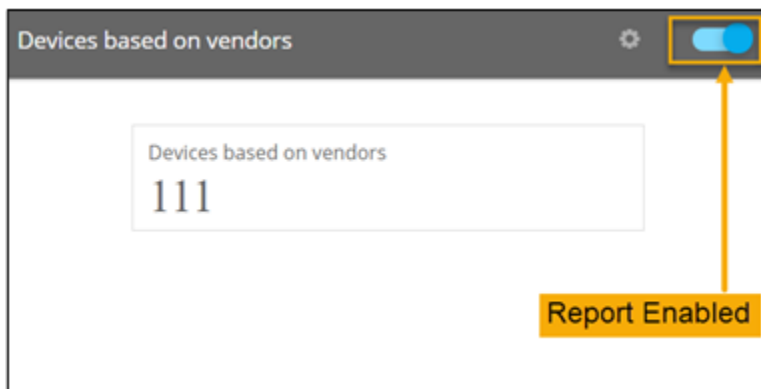


5. To select the data loading pattern, click .



- **Instant:** This option allows you to enable live data loading and see changes in data immediately. This can be used in the case of small databases.
- **Deferred:** This option allows you to enable lazy data loading and is useful in the case of larger databases. The default time interval for this is set at 30 minutes.

6. To enable the report, turn on the toggle.



Note: Color code mapping is not applicable to the metric chart.

7. Click **Next**.

The **CHART DRILLDOWN** section is displayed.

Chart Drilldown

This section of the report builder allows you to make reporting more interactive and engaging by supplementing additional details within a chart. Adding a drilldown to your report helps in visualizing

specific data pertaining to information displayed in the chart with a single click of the mouse. Drilldown also lightens the load on the server by presenting only a single layer of data at a time, which also significantly enhances the reporting performance.

- [How to Set a Redirect URL](#)
- [How to Add a Drilldown Chart](#)

How to Set a Redirect URL

You can enter a URL to redirect to any web page or another existing report directly from the chart (within AppViewX pages).

To add a redirect URL:

1. [Build](#) a report.
2. [Design](#) a custom chart.
3. Under the **CHART DRILLDOWN** section, enter or select the field information.

The following table describes the field information required in this section:

Field	Description
Do you want to add a drill down to the chart?	To add a drilldown to the chart, select this checkbox.
*Select drill down type	Select Set redirect URL .
*Page URL	Enter a valid URL.
The asterisk (*) symbol indicates mandatory fields.	

4. Click **Save & Enable**.

☒ Do you want to add drill down to the chart?

* Select drill down type ☒ Set redirect URL ⓘ ☐ Chart ⓘ

* Page URL

certificate/server
E.g: certificate/inventroy

[Previous](#) **Save & Enable** Cancel

How to Add a Drilldown Chart

1. Under the **CHART DRILLDOWN** section, enter or select the field information.

Reports :: My reports > Devices based on vendors :: chartDrilldown

✓ BUILD ——— ✓ CHART CONFIGURATION ——— ● CHART DRILLDOWN

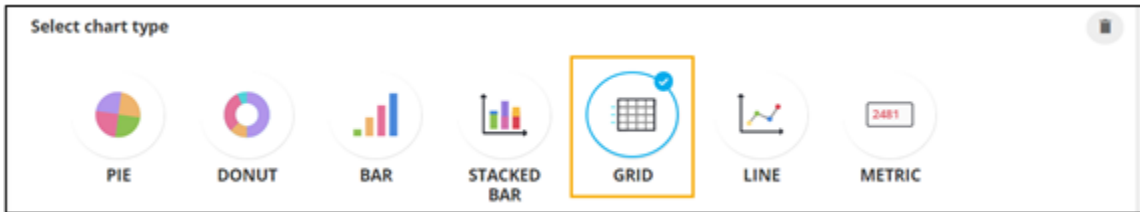
☒ Do you want to add drill down to the chart?

* Select drill down type ☐ Set redirect URL ⓘ ☒ Chart ⓘ

The following table describes the field information required in this section:

Field	Description
Do you want to add a drill down to the chart?	Check this box to add a drilldown to the chart.
*Select drill down type	Select Chart as the drilldown type.
The asterisk (*) symbol indicates mandatory fields.	

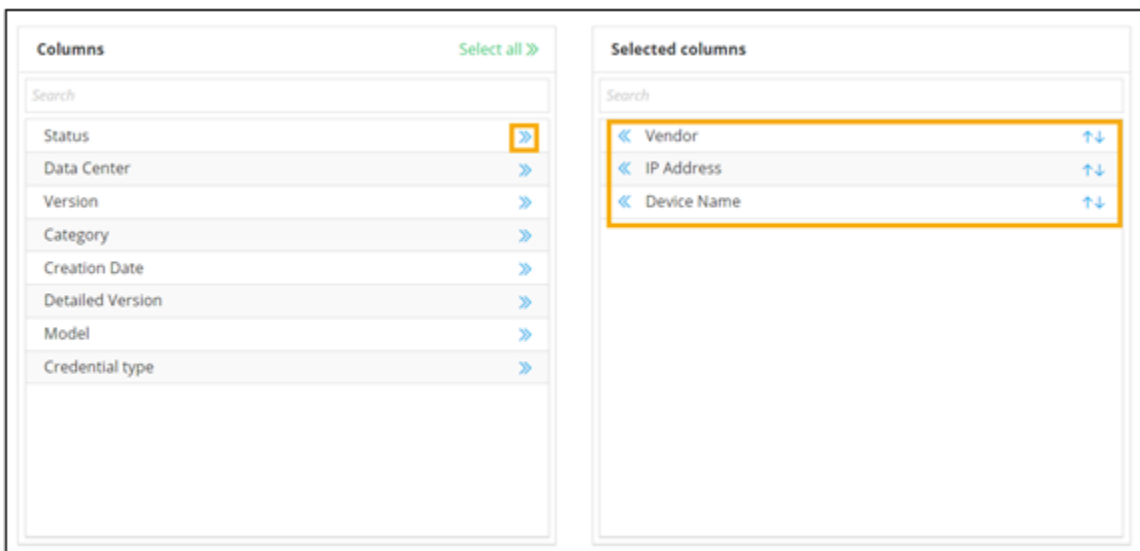
2. Select the **GRID** chart.



3. Enter a suitable **Chart title**.

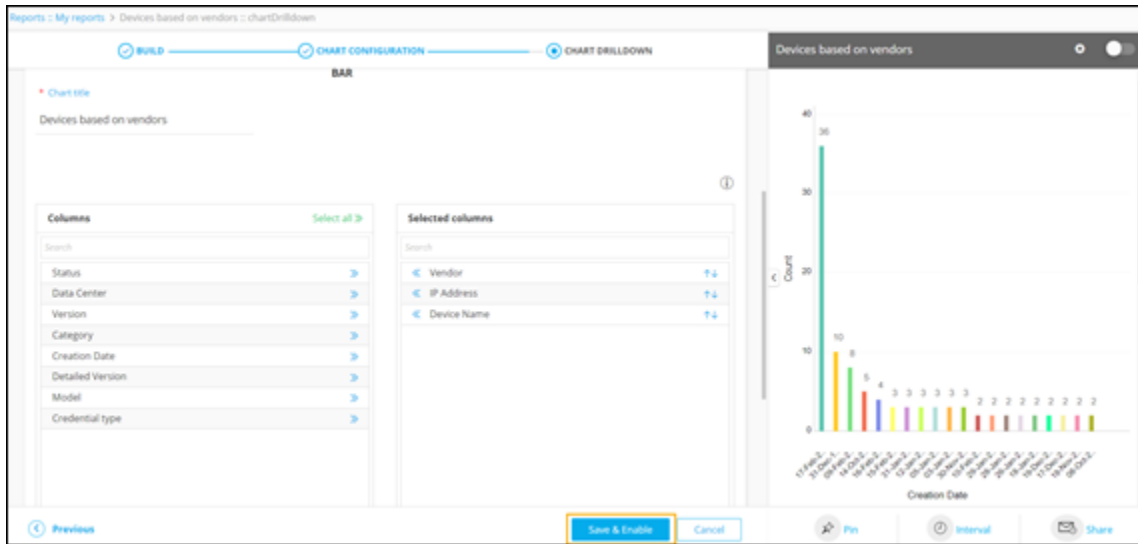


4. To configure the column headers to be displayed within the grid, click . Selected columns are displayed on the right side.



Note: To remove a column, click .

5. To enable the chart, click **Save & Enable**.



6. To get more information on the devices in the drilldown, click on any of the bars on the bar chart.

Devices based on vendors		
Devices based on vendors		
1 to 4 of 4		
Search...		
Vendor	IP Address	Device Name
IIS		PTPLD180
F5	192.168.41.251	192.168.41.251
F5	192.168.41.233	gs-f5-pe15.lab.appviewx.net
IIS		APPVIEWXDC01



Note: You can add up to five levels of drilldown charts to a report.

Chapter 9: Sharing your Reports

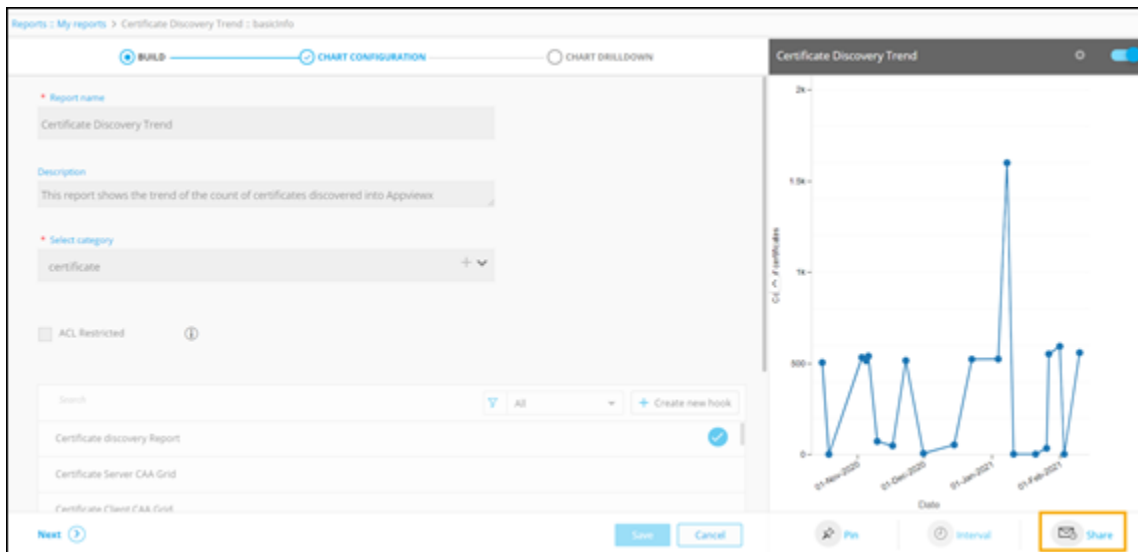
- Overview
- How to Email reports as PDF
- How to Schedule reports

Overview

Once a report is generated, it can be emailed either as inline content or as a PDF attachment. You can also schedule reports to be generated on a recurring basis.

How to Email reports as PDF

1. Under the **BUILD** section, from the bottom right corner of the screen, click **Share**.



A popup window to **Schedule reports** is displayed.

Schedule reports

General Not filled

* Subject ⓘ
Enter subject

* To CC

Add Recipients

Normal **B** *I* U

Compose email...

Schedule Not filled +

Save Cancel

2. In the **Schedule reports** window, under the **General** section, enter all the required field information. The following table describes all the fields in the **General** section:

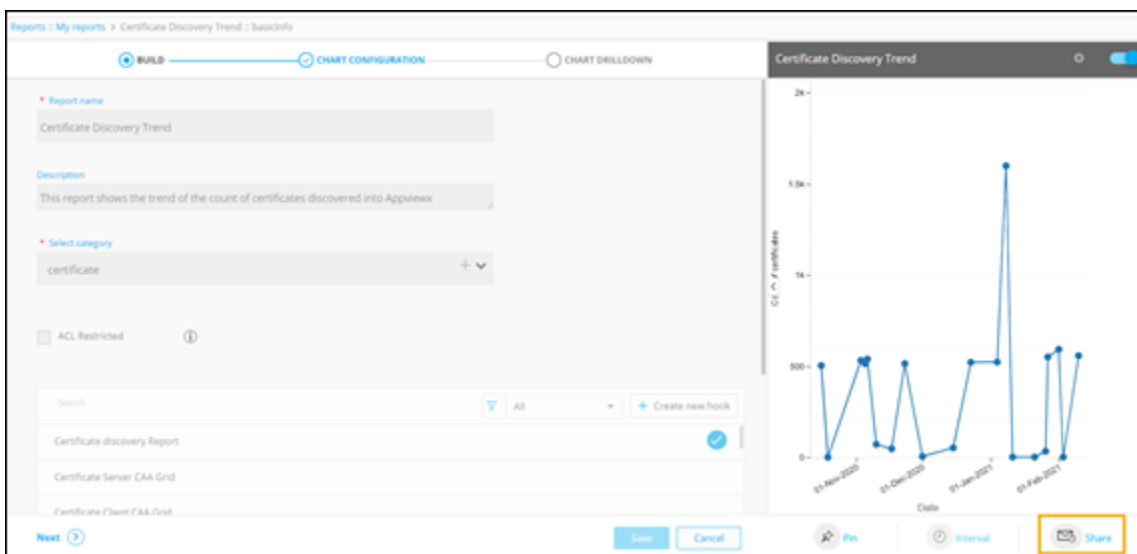
Field	Description
*Subject	Enter a subject for the email which will also be populated under Scheduled Jobs on the Reports :: Schedule page.
*To	Enter the names of the recipients of the email. Two options are available here: • Add single/multiple email addresses. • Add user groups(s).

Field	Description
Email body/text	Compose the email.
The asterisk (*) symbol indicates mandatory fields.	

How to Schedule reports

Reports can be scheduled to be generated on a recurring basis.

1. Under the **BUILD** section, from the bottom right corner of the screen, click **Share**.



A popup window to **Schedule reports** is displayed.

Schedule reports [X]

General [Not filled] [—]

* Subject ⓘ
Enter subject

* To [CC] [Person Icon]

Add Recipients

Normal [B] [I] [U] [List Icons] [A] [Background Color] [Text Color]

Compose email...

Schedule [Not filled] [+]

[Save] [Cancel]

2. In the **Schedule reports** window, under the **Schedule** section, enter/select the field information.

Schedule

Completed

* Starts on

01/18/2021 07:13

* Repeat every

1

Minute(s)

* Ends

☐ Never
 ☒ On
 ☐ After

01/19/2021 05:14

Save

Cancel

The following table describes the fields in the **Schedule** section:

Field	Description
*Starts on	Select the date on which report is to be scheduled.
*Repeat every	Select the numeric value and the frequency of recurrence as minutes, hours, days, weeks, months, or years.
*Ends	Select when the report should stop recurring. The options available are: • Never • On a specific date. • After a set number of occurrences.
The asterisk (*) symbol indicates mandatory fields.	

3. Click **Save**.

The scheduled report will be displayed on the **Reports :: Schedule** page.

Reports : Schedule

My reports Store Scheduled jobs Widget

Q Search...

Refresh 1 to 6 of 6 < >

Job ID	Job name	Source	Trigger	Last executed time	Next execution time	Status	Scheduled by
181	Test Report	Report Inventory	Minutes	2021-02-18 05:39	2021-02-18 05:41	Paused	admin
179	Email ReportTest	Report Inventory	Minutes	2021-02-18 05:40	2021-02-18 05:42	Paused	admin
178	Test_Report_Email	Report Inventory	Minutes	2021-02-18 03:29		Completed	admin
177	Report check	Report Inventory	Daily		2021-02-19 02:30	Paused	admin
176	Test Report	Report Inventory	Minutes	2021-02-18 02:19		Completed	admin
147	Checking Email	Report Inventory	Minutes	2021-01-18 07:35	2021-01-18 07:36	Scheduled	admin

4. To disable/pause the scheduled job, click  .

The scheduled job is paused.

Reports : Schedule

My reports Store Scheduled jobs Widget

Q Search...

Refresh 1 to 6 of 6 < >

Job ID	Job name	Source	Trigger	Last executed time	Next execution time	Status	Scheduled by
181	Test Report	Report Inventory	Minutes	2021-02-18 05:39	2021-02-18 05:41	Paused	admin
179	Email ReportTest	Report Inventory	Minutes	2021-02-18 05:40	2021-02-18 05:42	Paused	admin
178	Test_Report_Email	Report Inventory	Minutes	2021-02-18 03:29		Completed	admin
177	Report check	Report Inventory	Daily		2021-02-19 02:30	Paused	admin
176	Test Report	Report Inventory	Minutes	2021-02-18 02:19		Completed	admin
147	Checking Email	Report Inventory	Minutes	2021-01-18 07:35	2021-01-18 07:36	Paused	admin

5. To resume the scheduled job, click  .

Chapter 10: Hooks

- [Overview](#)
- [Using Preexisting Hooks to Build Reports](#)
- [Using Query Explorer to build Reports](#)
- [Using Scripts to build Reports](#)
- [Using REST API to build Reports](#)
- [How to Create a New Hook](#)
- [How to Reuse Hooks](#)

Overview

A hook is a mechanism used to query and retrieve data from different sources such as database, device, or external vendors, and leverage them as part of the report building process.

The mode of query can be one of the following:

- Query Explorer (GUI based)
- Script (Python)
- REST API

Using Preexisting Hooks to Build Reports

You can build customized reports by using preexisting hooks from the **Hooks Inventory**.



Note: For more information on the **Hooks Inventory**, refer to the Visual Workflow User Guide.

- [Example 1](#)
- [Example 2](#)

Example 1

The report builder can be used to build a report to get a list of devices based on vendors using a preexisting hook.

1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, enter or select the required field information.

Reports > My reports > Create > basicInfo

BUILD CHART CONFIGURATION CHART DRILLDOWN

* Report name
Devices based on vendors

Description
Devices based on the vendor names

* Select category
general + v

The following table describes the various fields in this section:

Field	Description
*Report name	Enter a valid report name. For example: Devices based on vendors .
Description	Enter a valid description. For example: Devices based on the vendor names .
*Select category	Select the category as general from the dropdown list.
The asterisk (*) symbol indicates mandatory fields.	

3. To search for and select the appropriate hook from the preexisting inventory, type the keyword in the search bar.
4. To select the hook, click .

devices ▼ All + Create new hook

Get others device name list

Get list of all devices ✎ ✓

Get list of managed devices for FS v11,12 and type LTM

Get managed devices for vendor type FS

Get all managed firewall devices

Get list of Infoblox devices

Get all ADC devices

Get all Firewall devices

Next ➤ Save Cancel

5. To save your selections, click **Next**.
6. Under the **CHART CONFIGURATION** section, select the **BAR** chart.

Reports :: My reports > Devices based on vendors :: chartConfig

✓ BUILD ● CHART CONFIGURATION ○ CHART DRILLDOWN

Select chart type

PIE DONUT **BAR** STACKED BAR GRID LINE METRIC

7. Enter or select the field information.

X-axis label * Group by

Vendor Vendor ▼

* Aggregation

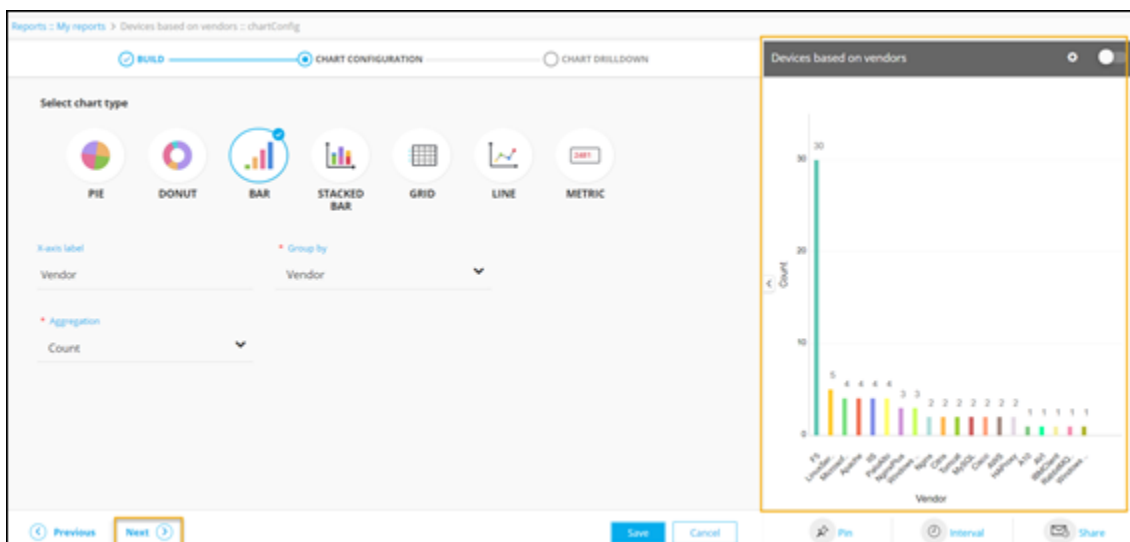
Count ▼

The following table describes the various fields in this section:

Field	Description
X-axis label	Enter criteria for the X-axis label. For example: Vendor .
*Group by	Select a value from the drop down menu on the basis of which report data will be grouped. For example: Vendor .
*Aggregation	Select the calculation to be done on the report data for the dropdown. For example, count to get the number of devices by name. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
The asterisk (*) symbol indicates mandatory fields.	

8. To save chart configuration, click **Next**.

A preview of the bar chart is displayed on the right side of the screen.



9. To add a drill down to the chart, select the check box as shown in the following image.

Reports :: My reports > Devices based on vendors :: chartDrilldown

☒ BUILD
 ☒ CHART CONFIGURATION
 ☐ CHART DRILLDOWN

☐ Do you want to add drill down to the chart?

10. Select drill down type as **Chart**.

Reports :: My reports > Devices based on vendors :: chartDrilldown

☒ BUILD
 ☒ CHART CONFIGURATION
 ☐ CHART DRILLDOWN

☒ Do you want to add drill down to the chart?

* Select drill down type
 ☐ Set redirect URL ⓘ
 ☒ Chart ⓘ

11. Select chart type as **GRID**.

Select chart type

☐ PIE
 ☐ DONUT
 ☐ BAR
 ☐ STACKED BAR
 ☒ GRID
 ☐ LINE
 ☐ METRIC

12. Enter an appropriate **Chart title**.

Select chart type

☐ PIE
 ☐ DONUT
 ☐ BAR
 ☐ STACKED BAR
 ☒ GRID
 ☐ LINE
 ☐ METRIC

* Chart title
 Devices based on vendors

13. To configure the column headers to be displayed within the grid, click . **Selected columns** are displayed on the right side.

Columns Select all >>

Search

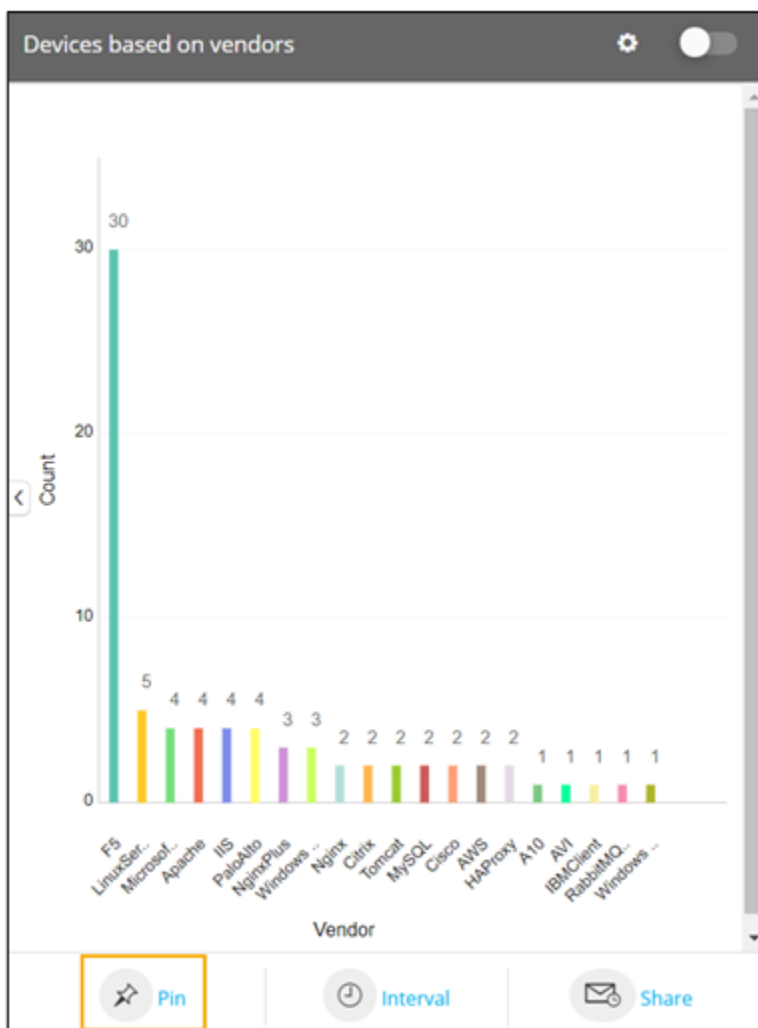
Status	>>
Data Center	>>
Version	>>
Vendor	>>
Category	>>
Creation Date	>>
Detailed Version	>>
Model	>>
Credential type	>>

Selected columns

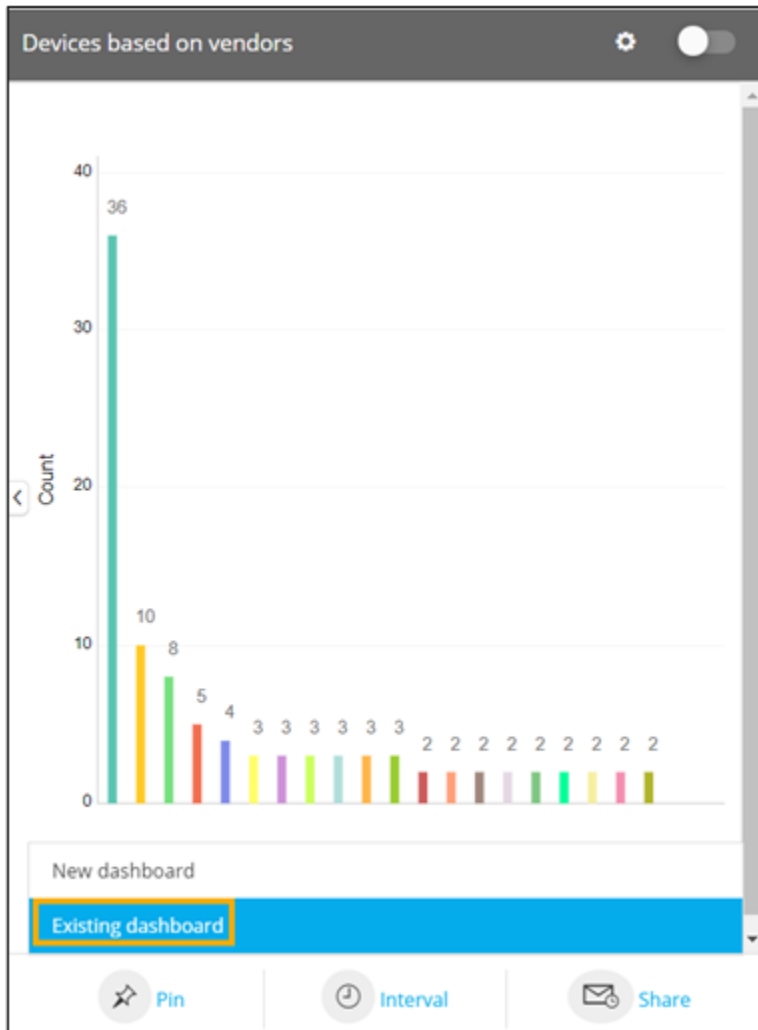
Search

<< IP Address	↑↓
<< Device Name	↑↓

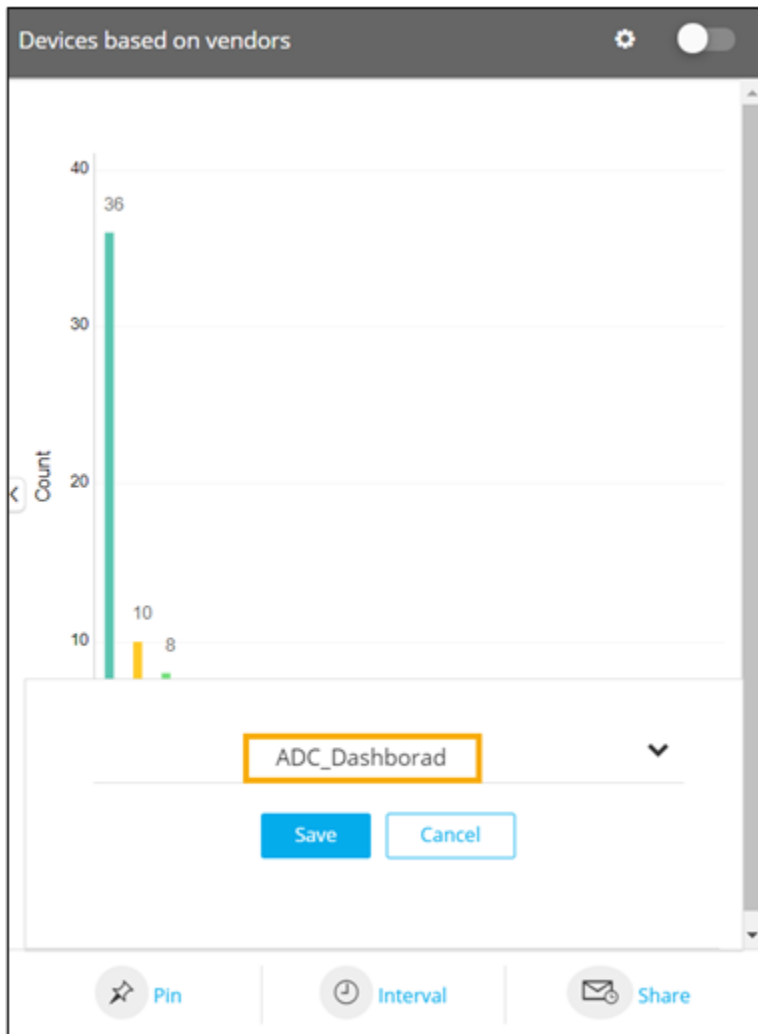
14. To pin the report to a dashboard, click **Pin**.



15. To pin the report to an existing dashboard, select **Existing dashboard** from the options.

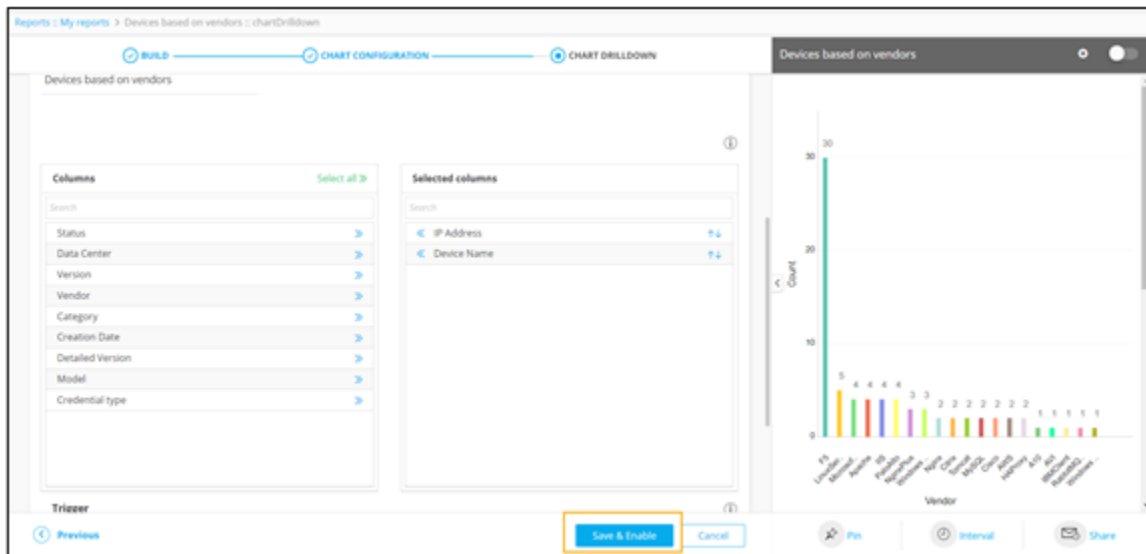


16. Select a dashboard from the list.



17. Click **Save**.

18. To enable the report, click **Save & Enable**.

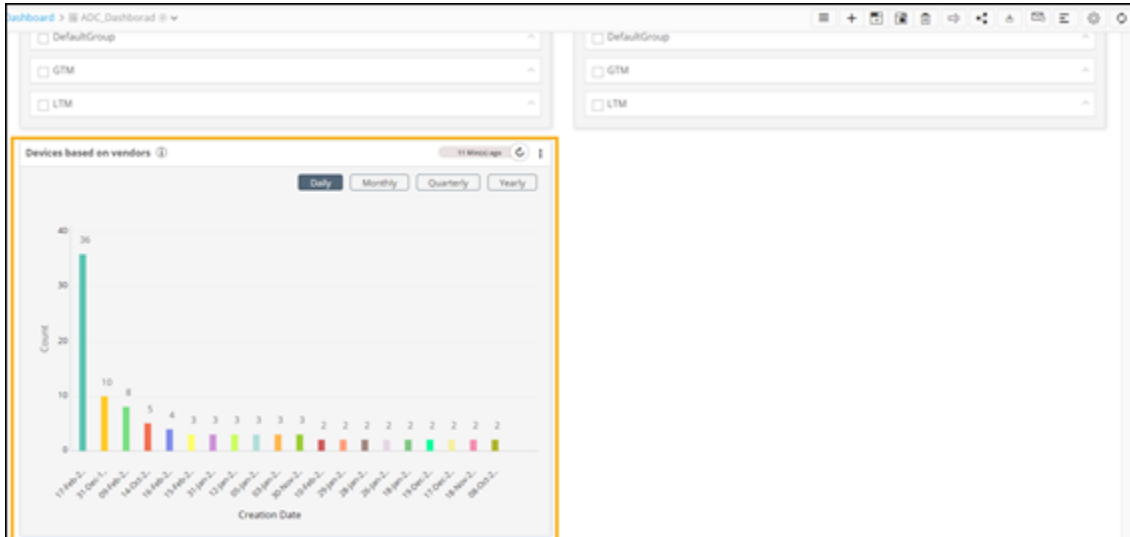


19. To view this report on the dashboard, search for the dashboard in the dashboard inventory.

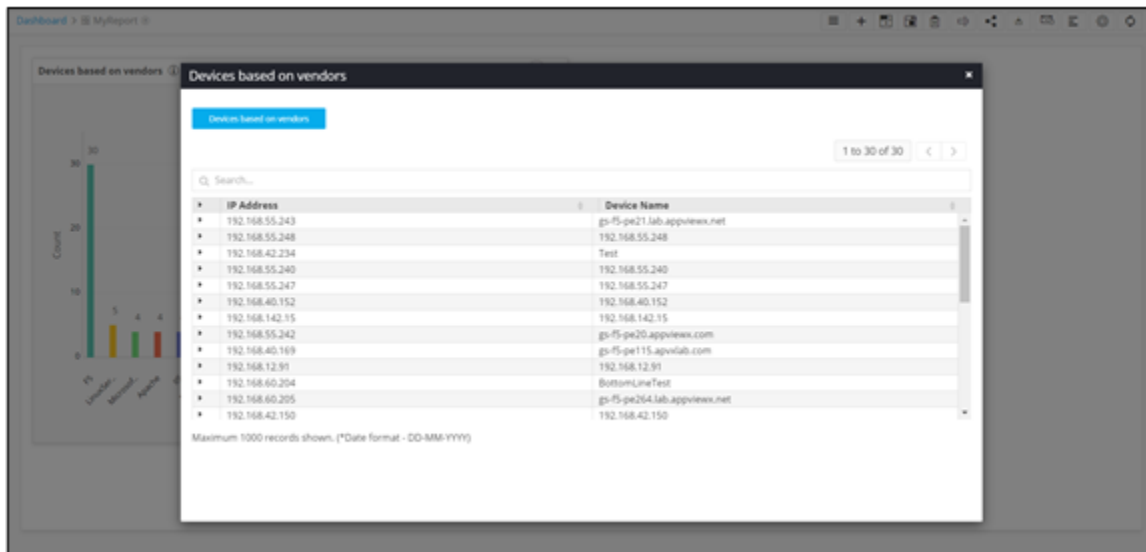


Note: For more information on how to search for a dashboard, click [here](#).

The **Devices based on vendors** report can be seen on the selected dashboard.



20. To display specific data on each of the vendors, click on any of the bars for the chart drilldown.



Example 2

To create a report for getting the **Certificate Discovery Trend** for all certificate types using a preexisting hook:

1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, enter or select the required field information.

The screenshot shows the "Create new report" form in the "BUILD" section. The form has three tabs: "BUILD", "CHART CONFIGURATION", and "CHART DRILLDOWN". The "BUILD" tab is active. The form includes the following fields:

- Report name:** Certificate Discovery Trend
- Description:** This report shows the trend of the count of certificates discovered into Appviewx
- Select category:** certificate

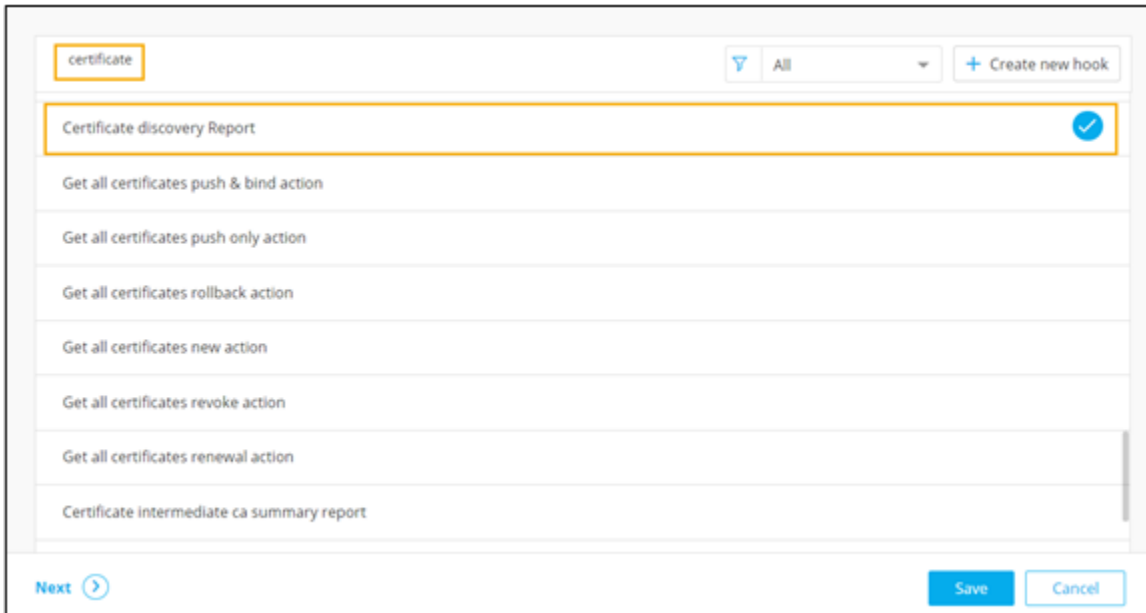
The following table describes the various fields in this section:

Field	Description
*Report name	Enter a valid report name.

Field	Description
	For example: Certificate Discovery Trend .
Description	Enter a valid description. For example: This report shows the trend of the count of certificates discovered into Appviewx.
*Select category	Select the category as certificate from the dropdown list.
The asterisk (*) symbol indicates mandatory fields.	

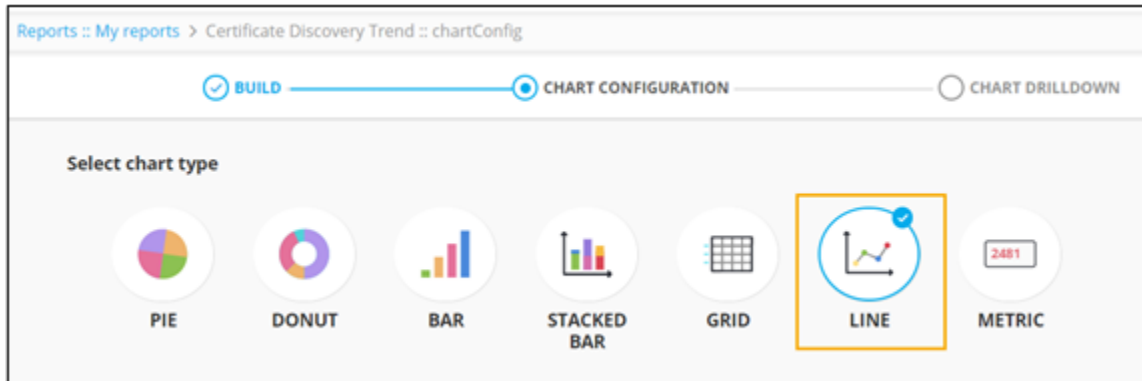
3. To search and select the appropriate hook from the preexisting inventory, type the keyword in the search bar.

4. To select the hook, click .



5. To save your selections, click **Next**.

6. Under the **CHART CONFIGURATION** section, select the **LINE** chart.



7. Enter or select the field information.

X-axis label	* Group by	* Date format
Date	Date	Daily
* Aggregation		
Sum		
Y-axis label	* Y-axis	
Count of certificates	Count	

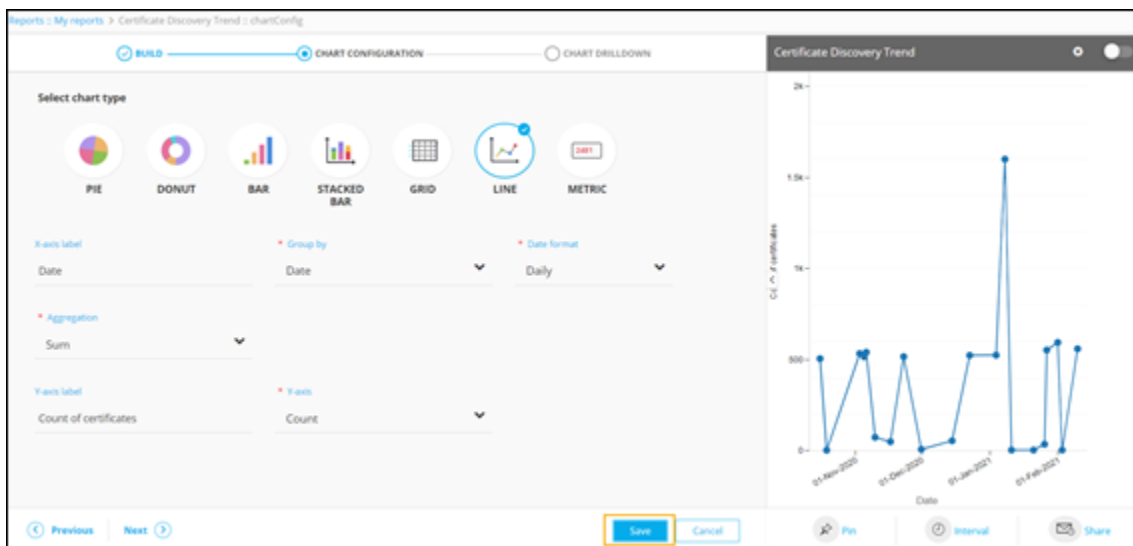
The following table describes the various fields in this section:

Field	Description
X-axis label	Enter the criteria for the X-axis label. For example: Date .
*Group by	Enter the value on which data will be grouped. For example: Date .
*Date format	Select a valid date format from the dropdown. For example: Daily .
*Aggregation	Select the calculation to be done on the report data for the dropdown. For example, count to get the number of devices by name. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data.

Field	Description
	• Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
Y-axis label	Enter the criteria for the Y-axis label. For example: Count of certificates .
*Y-axis	Select value from the dropdown. For example: Count .
The asterisk (*) symbol indicates mandatory fields.	

8. To save chart configuration details, click **Save**.

A preview of the line chart is displayed on the right side of the screen.



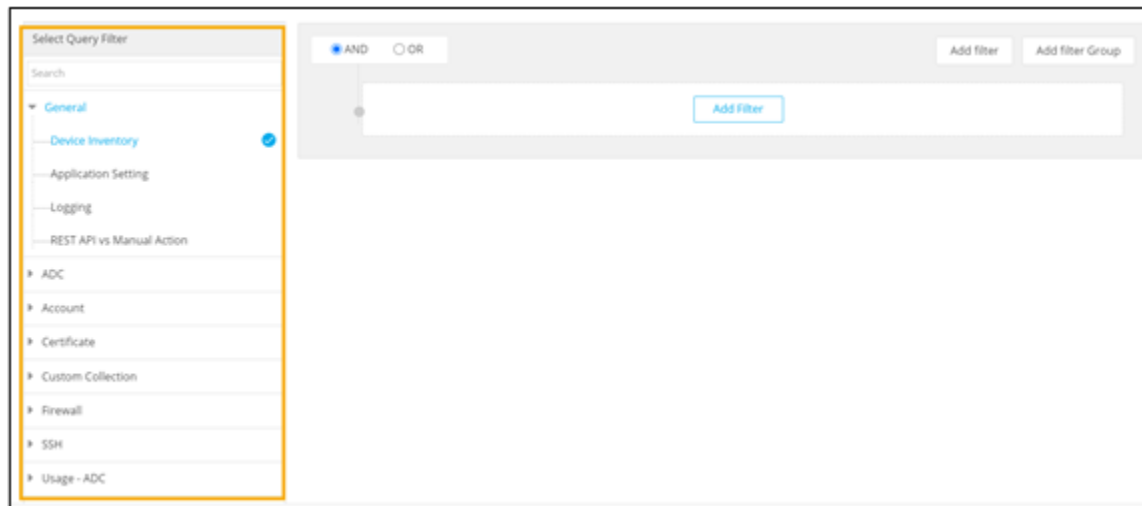
Using Query Explorer to build Reports

- [Overview](#)
- [Conditional Operators](#)
- [Create a CERT Expiry Report using Query Explorer](#)

- [Create an ADC Usage Report using Query Explorer](#)
- [Importing Custom Data in Query Explorer](#)

Overview

AppViewX's Report builder has an enhanced, intuitive **Query Explorer**. The GUI-based query explorer maps all major database collections in AppViewX and helps you build your own customized reports. Over 40 out of the box (OOB) queries are pre-shipped to the end-user. It also comes with advanced conditional operators to build complex queries.



Each query filter has a set of predefined fields associated with it. Query actions will differ according to the data in the query fields. The query builder also comes equipped with an auto-suggestion feature that aids you in selecting appropriate values from the suggested entries.

Query explorer also exhibits improved performance with query optimization by supporting four million to 50 million records. Its performance optimized search inventory enables higher volumes of data to be balanced and reduces load time.

Conditional Operators

Query Explorer has ten conditional operators that allow users to build complex queries. All of these operators support dynamic values. The dynamic values can be passed at runtime by using payload to perform queries.

The conditional operators are categorized based on field types: String, Integer, Date, and Boolean Variable.

- Field Type: String
- Field Type: Integer
- Field Type: Date
- Field Type: Boolean Variable

Field Type: String

When you choose the field type as **String**, the values for the conditional operators are auto-populated from the database. The following conditional operators are available when you choose the field type as **String**:

- **Is** - This operator is used if the query is for a particular value.

For example, Status is Managed.

The screenshot shows a query builder interface with a title bar that reads "(Status is Managed)". Below the title bar, there are two radio buttons for "AND" (selected) and "OR". To the right of these are two buttons: "Add filter" and "Add filter Group". The main area contains a filter rule: a grey circle followed by a text input field containing "Status", a dropdown menu showing "is" (highlighted with a yellow box), another text input field containing "Managed", and a clear button with an "X" icon.

The report will display data specific to this query and show the list of devices only with **Managed** status.

- **Is not** - This operator generates results where the condition is not matched.

For example, Vendor is not Citrix.

The screenshot shows a query builder interface with a title bar that reads "(Vendor is not Citrix)". Below the title bar, there are two radio buttons for "AND" (selected) and "OR". To the right of these are two buttons: "Add filter" and "Add filter Group". The main area contains a filter rule: a grey circle followed by a text input field containing "Vendor", a dropdown menu showing "is not" (highlighted with a yellow box), another text input field containing "Citrix", and a clear button with an "X" icon.

The report will display data that matches all criteria except the one that is selected and show the list of devices of all vendors except Citrix.

- **Is one of** - This operator allows multiple values to be selected and matches all conditions. For example, Category is one of Server, Firewall, WAF.

The screenshot shows a filter configuration window with the title "(Category is one of Server,Firewall,WAF)". At the top, there are radio buttons for "AND" (selected) and "OR". To the right are buttons for "Add filter" and "Add filter Group". The main configuration area shows a field labeled "Category" followed by the operator "is one of" (highlighted with a yellow box). To the right of the operator are three selected filter items: "Server", "Firewall", and "WAF", each with a close button (X) and a dropdown arrow.

The report will display data where all the three conditions are matched and show a list of devices that belong to the three selected categories.

- **Is not one of** - This operator allows multiple values to be selected and gives results where the conditions are not matched.

For example, Category is not one of ADC, Firewall.

The screenshot shows a filter configuration window with the title "(Category is not one of)". At the top, there are radio buttons for "AND" (selected) and "OR". To the right are buttons for "Add filter" and "Add filter Group". The main configuration area shows a field labeled "Category" followed by the operator "is not one of" (highlighted with a yellow box). To the right of the operator are two selected filter items: "ADC" and "Firewall", each with a close button (X) and a dropdown arrow.

The report will display data that matches all criteria except the ones that are selected and show a list of all devices except ADC and Firewall.

- **Exists** - A boolean operator is provided for narrowing down the search parameters so that the result is either True or False.

The screenshot shows a filter configuration window with the title "(Category exists True)". At the top, there are radio buttons for "AND" (selected) and "OR". To the right are buttons for "Add filter" and "Add filter Group". The main configuration area shows a field labeled "Category" followed by the operator "exists" (highlighted with a yellow box). To the right of the operator is the value "True" and a dropdown arrow.

The report will display data after confirming if the selected field is available in the database (True) or not (False).

- **Regex** - Regular expression (Regex) is a sequence of characters defining a search pattern specifying a set of strings for a particular purpose.

For example, Device name regex .*

The screenshot shows a search filter configuration for 'Device Name'. The title is '(Device Name regex .*')'. Below the title, there are two radio buttons: 'AND' (selected) and 'OR'. To the right are two buttons: 'Add filter' and 'Add filter Group'. The main configuration area shows a dropdown menu with 'Device Name' selected, followed by a highlighted 'regex' operator, and a text input field containing '.*'.

The period (.) means match any character and the asterisk (*) means any number of times. So .* means match anything and the report will display all the device names.

- **Starts with** - This operator allows users to enter the first three letters/numbers of the search criteria.

The screenshot shows a search filter configuration for 'Hash Algorithm'. The title is '(Hash Algorithm starts with SHA)'. Below the title, there are two radio buttons: 'AND' (selected) and 'OR'. To the right are two buttons: 'Add filter' and 'Add filter Group'. The main configuration area shows a dropdown menu with 'Hash Algorithm' selected, followed by a highlighted 'starts with' operator, and a text input field containing 'SHA'.

The report will display results matching hash algorithms that start with 'SHA'.

- **Ends with** - This operator allows users to enter the last three letters/numbers of the search criteria.

The screenshot shows a search filter configuration for 'Hash Algorithm'. The title is '(Hash Algorithm ends with 256)'. Below the title, there are two radio buttons: 'AND' (selected) and 'OR'. To the right are two buttons: 'Add filter' and 'Add filter Group'. The main configuration area shows a dropdown menu with 'Hash Algorithm' selected, followed by a highlighted 'ends with' operator, and a text input field containing '256'.

The report will display results matching hash algorithms that end with '256'.

- **Contains** - This operator allows users to enter some values for the search criteria and generates results that contain those values.

The screenshot shows a search filter configuration for 'Hash Algorithm'. The title is '(Hash Algorithm contains 256)'. Below the title, there are two radio buttons: 'AND' (selected) and 'OR'. To the right are two buttons: 'Add filter' and 'Add filter Group'. The main configuration area shows a dropdown menu with 'Hash Algorithm' selected, followed by a highlighted 'contains' operator, and a text input field containing '256'.

The report will display results with hash algorithms that contain the value '256'.

- **Does not contain** - This operator allows users to enter some values for the search criteria and generates results that do not contain those values.

The report will display results with hash algorithms that do not contain the value '256'.

Field Type: Integer

When you choose the field type as Integer, the values for the conditional operator are auto-populated from the database. The following conditional operators are available when you choose the field type as Integer:

- **Is:** This operator is used if the query is for a particular value. For example, version is 1.

The report generated will display data specific to this query and show the certificates with Version equal to 1.

- **Is not:** This operator generates results if the condition is not matched. For example, version is not 1.

The report generated will display data that matches all criteria except the one that is selected and show certificates with Version not equal to 1.

- **Exists:** A boolean operator is provided for narrowing down the search parameters so that the result is either True or False.

The screenshot shows a filter configuration window titled "(Version exists False)". At the top, there are radio buttons for "AND" (selected) and "OR". To the right are buttons for "Add filter" and "Add filter Group". The main configuration area shows a field labeled "Version" followed by a dropdown menu currently set to "exists". A second dropdown menu to the right is open, showing "False" as the selected option, with "True" as an alternative. There are "X" and "▲" icons next to the dropdowns.

The report will display data after confirming if the selected field is available in the database or not. If the field is available, the result is True. If the field is not available, the result is False.

- **Greater than:** This operator is used to display records that match values greater than the selected value. For example, Version greater than 1.

The screenshot shows a filter configuration window titled "(Version greater than)". It has the same layout as the first screenshot, with "AND" selected. The dropdown menu after "Version" is set to "greater than". The second dropdown menu is open, showing "1" as the selected option, with "3" as an alternative. The placeholder text "Select..." is visible above the dropdown options.

The report generated will display certificates with version greater than 1.

- **Less than:** This operator is used to display records that match values less than the selected value. For example, Version less than 1.

The screenshot shows a filter configuration window titled "(Version less than)". It has the same layout as the previous screenshots, with "AND" selected. The dropdown menu after "Version" is set to "less than". The second dropdown menu is open, showing "1" as the selected option, with "3" as an alternative. The placeholder text "Select..." is visible above the dropdown options.

The report generated will display certificates with version less than 1.

- **Greater than or is:** This operator is used to display records that match values greater than or equal to the selected value. For example, Version greater than or is 1.

(Version greater than or is)

AND OR

Add filter Add filter Group

Version greater than or is Select...

1 3

The report generated will display certificates with version greater than or equal to 1.

- **Less than or is:** This operator is used to display records that match values less than or equal to the selected value. For example, Version less than or is 1.

(Version less than or is)

AND OR

Add filter Add filter Group

Version less than or is Select...

1 3

The report generated will display certificates with version less than or equal to 1.

Field Type: Date

When you choose the field type as Date, the values for the conditional operators are predefined and need to be selected from the dropdown list. The following conditional operators are available when you choose the field type as Date:

- **Between** - This operator allows users to select the duration for which reports will be generated.

(Certificate Expiry Date between)

AND OR

Add filter Add filter Group

Certificate Expiry Date between

Last Week
Last month
Last 7 days
Last 30 days
Last N days
Next Week
Next month
Next 7 days
Next 30 days
Next N days
Custom Date

The following table describes the date values supported by the **between** operator:

Date Type	Description	Example
Last Week	Returns records within the previous selected time period, starting with the beginning of that time frame.	For example, a filter run on July 27, 2021 will return any records with a date range of July 18 to July 24, 2021.
Last Month		For example, a filter run on July 27, 2021 will return any records with a date range of 1 June to 30 June 2021.
Last 7 days		For example, a filter run on July 27, 2021 will return any records with a date range of July 21 to July 27, 2021.
Last 30 days		For example, a filter run on July 27, 2021 will return any records with a date range of 27 June to 26 July, 2021.
Last N days		For example, a filter run on July 27, 2021 will return any records with a date range of Nth day to July 27, 2021.
Next Week	Returns records within the next selected time period, including records with values up to the end of that time frame.	For example, a filter run on July 27, 2021 will return any records with a date range of August 1 to August 7, 2021.
Next Month		For example, a filter run on July 27, 2021 will return any records with a date range of August 1 to August 31, 2021.
Next 7 days		For example, a filter run on July 27, 2021 will return any records with a date range of July 27 to August 2, 2021.
Next 30 days		For example, on July 27, 2021 will return any records with a date range of July 27 to August 30, 2021.

Date Type	Description	Example
Next N days		For example, a filter run on July 27, 2021 will return any records with a date range of July 27, 2021 to the Nth day.
Custom Date	Returns records within the defined custom date.	

- **On** - This operator allows users to select a specific day for which the records will be generated.

The screenshot shows a filter configuration window titled "(Certificate Expiry Date on)". At the top, there are radio buttons for "AND" (selected) and "OR". To the right are buttons for "Add filter" and "Add filter Group". Below this, a filter rule is shown: "Certificate Expiry Date" followed by the operator "on" (highlighted with a yellow box). A dropdown menu is open next to the operator, showing three options: "Today" (highlighted in blue), "Yesterday", and "Custom Date".

The following table describes the date values supported by the **On** operator:

Date Type	Description	Example
Today	Returns records for the selected time period, including records with values up to the end of that time frame.	For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring on July 27, 2021.
Yesterday		For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring on July 26, 2021.
Custom Date	Returns records within the defined custom date.	For example, a Certificate Expiry Date filter run on a custom date, say August 1, will return records for certificates expiring on August 1, 2021.

- **Not on** - This operator allows users to select the time period for which the records should not be generated.

The following table describes the date values supported by the **not on** operator:

Date Type	Description	Example
Today	Returns records for the time period other than the selected time period, including records with values up to the end of that time frame.	For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates not expiring on July 27, 2021.
Yesterday		For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates not expiring on July 26, 2021.
Custom Date	Returns records for the time period other than the defined custom date.	For example, a Certificate Expiry Date filter run on a custom date, say August 1, will return records for certificates not expiring on August 1, 2021.

- **After** - This operator allows users to generate records of dates after the selected time period.

The following table describes the date values supported by the **after** operator:

Date Type	Description	Example
Today	Returns records for the selected time period, including records with values up to the end of that time frame.	For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring after July 27, 2021.

Date Type	Description	Example
Yesterday		For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring after July 26, 2021.
Custom Date	Returns records within the defined custom date.	For example, a Certificate Expiry Date filter run on a custom date, say August 1, will return records for certificates expiring after August 1, 2021.

- **Before** - This operator allows users to generate records before the selected time period.

The following table describes the date values supported by the **before** operator:

Date Type	Description	Example
Today	Returns records for the selected time period, including records with values up to the end of that time frame.	For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring before July 27, 2021.
Yesterday		For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring before July 26, 2021.
Custom Date	Returns records within the defined custom date.	For example, a Certificate Expiry Date filter run on a custom date, say August 1, will return records for certificates expiring before August 1, 2021.

- **At or after** - This operator allows users to generate records at or after the selected time period.

(Certificate Expiry Date at or after)

☒ AND
 ☐ OR
 Add filter Add filter Group

Certificate Expiry Date at or after

Today
 Yesterday
 Custom Date

The following table describes the date values supported by the on operator:

Date Type	Description	Example
Today	Returns records for the selected time period, including records with values up to the end of that time frame.	For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring at or after July 27, 2021.
Yesterday		For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring at or after July 26, 2021.
Custom Date	Returns records within the defined custom date.	For example, a Certificate Expiry Date filter run on a custom date, say August 1, will return records for certificates expiring at or after August 1, 2021.

- **At or before** - This operator allows users to generate records at or before the selected time period.

(Certificate Expiry Date at or before)

☒ AND
 ☐ OR
 Add filter Add filter Group

Certificate Expiry Date at or before

Today
 Yesterday
 Custom Date

The following table describes the date values supported by the on operator:

Date Type	Description	Example
Today	Returns records for the selected time period, including records with values up to the end of that time frame.	For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring at or before July 27, 2021.

Date Type	Description	Example
Yesterday		For example, a Certificate Expiry Date filter run on July 27, 2021 will return records for certificates expiring at or before July 26, 2021.
Custom Date	Returns records within the defined custom date.	For example, a Certificate Expiry Date filter run on a custom date, say August 1, will return records for certificates expiring at or before August 1, 2021.

Field Type: Boolean Variable

When you choose the field type as **Boolean**, the values for the conditional operator are either **true** or **false**. The conditional operator available when choosing the field type as Boolean is:

- **Is** - The report will display data after confirming if the selected field is available in the database (**True**) or not (**False**).

The screenshot shows a filter configuration interface. At the top, it says "(Private Key Available is)". Below this, there are two radio buttons for "AND" (selected) and "OR". To the right are buttons for "Add filter" and "Add filter Group". The main filter rule is displayed as "Private Key Available" followed by a yellow box containing the word "is". To the right of this is a dropdown menu labeled "Select..." which is open, showing two options: "False" (highlighted in blue) and "True".

Create a CERT Expiry Report using Query Explorer

1. On the [My Reports](#) page, click **Create new Report**.
2. Under the **BUILD** section, enter or select the basic information on the report.

Reports :: My reports > Cert Expiry Report :: basicinfo

● BUILD ——— ✓ CHART CONFIGURATION ——— ✓ CHART DRILLDOWN

* Report name

Cert Expiry Report

Description

E.g: Generate Top 20 Unused FS VIP

* Select category

general + ▾

3. To modify a hook, select a hook from the pre-populated list and click .

expired ⌵ All + Create new hook

Certificates - Fetch list of expired certificates

Expired Certificate		
Get list of Certificates to be expired on 30 days		
Get list of Certificates to be expired on 60 days		
Get list of Certificates to be expired on 90 days		

4. In the **Hooks Inventory::Modify** pop-up window, under **Hooks Type**, enter or select the field information.

Hooks Inventory :: Modify

Hooks Type

Select type ☒ Query Explorer ☐ Script ☐ REST

Description

Retrive All Expired Certificates

This table describes the field information in this section:

Field	Description
Select type	Select hook type as Query Explorer .
Description	Enter a description of the hook.

5. In the **Query Explorer Details** section, enter or select the field information.

The following table describes the various fields in this section:

Field	Description
*Query name	Enter a valid Query name. For example: Get list of certificates expiring in 10 days .
Select Query Filter	Select an appropriate query filter. For example: Certificate Inventory under Certificate , since this report is to get data on certificates.
Add filter	Add a filter and select appropriate fields from the predefined values. For example: Expiry status is Expiry in 10 days .
AND/OR	Select the appropriate conditional parameters depending on the type of output required in the report. AND : Report will reflect data satisfying all the filter conditions. OR : Report will reflect data satisfying either of the filter conditions.

Field	Description
The asterisk (*) symbol indicates mandatory fields.	

**Note:**

- Users can add more filters and apply conditional operators to generate different kinds of data in their reports. For example, add another filter to get data on **Compliance Status** of the certificates that are expiring in 10 days.
- Set the conditional parameter to **AND** to generate a report that satisfies both the defined conditions and display certificates that are both compliant and are expiring in 10 days. Setting the conditional parameter to **OR** will generate a report that reflects data satisfying either of the two defined conditions.

6. To create this new hook, click **Save**.

7. To save the basic information, click **Next**.

The new hook is displayed in the list of hooks.

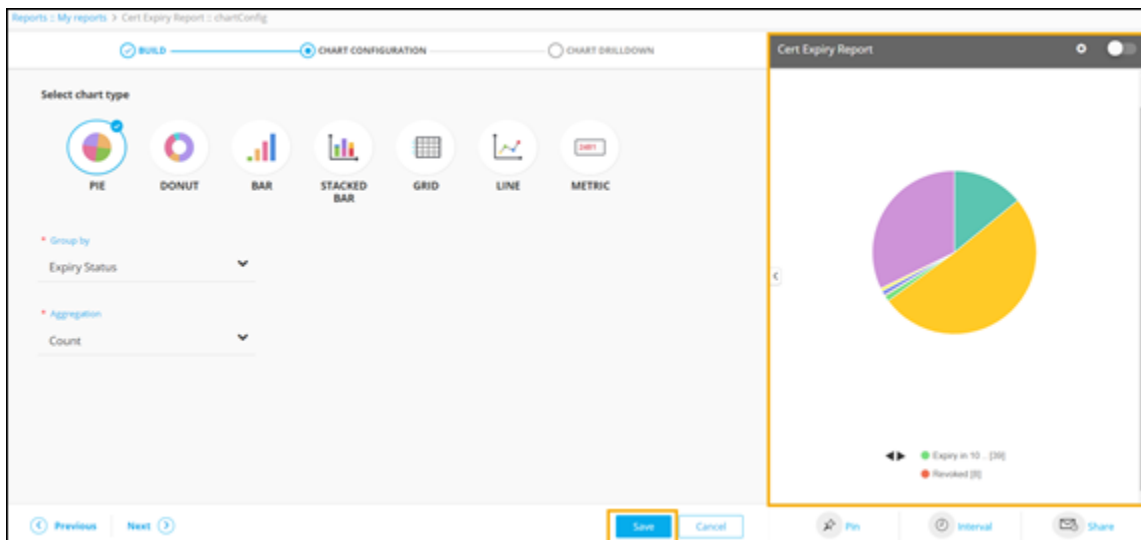
8. Under the **CHART CONFIGURATION** section, select the **PIE** chart.

9. Select the appropriate values for the various fields.

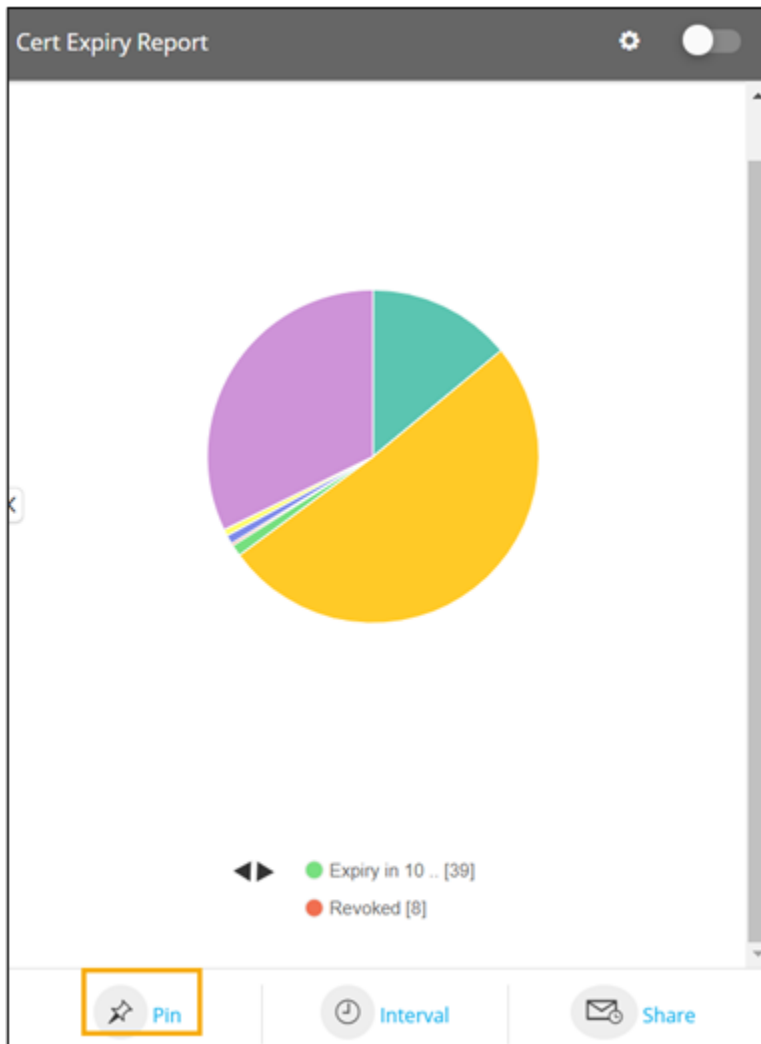
A screenshot of a configuration panel with two sections. The first section is titled 'Group by' with a red asterisk and a blue link. Below it is a dropdown menu showing 'Expiry Status' with a downward arrow. The second section is titled 'Aggregation' with a red asterisk and a blue link. Below it is a dropdown menu showing 'Count' with a downward arrow.

10. Click **Save**.

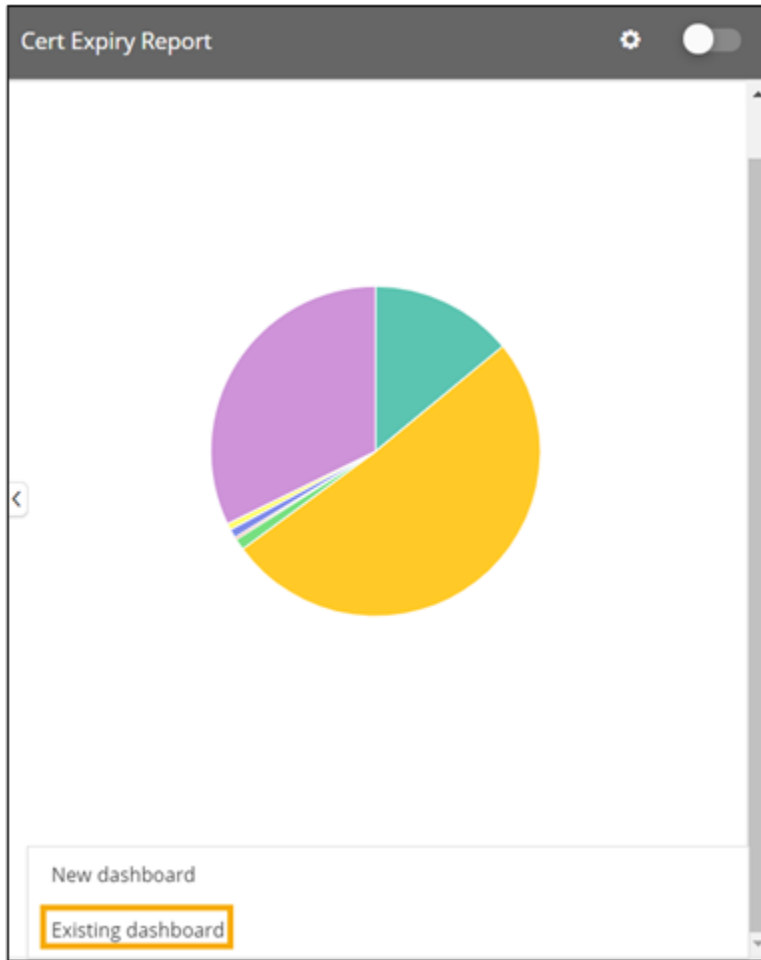
A preview of the pie chart is displayed on the right side of the screen.



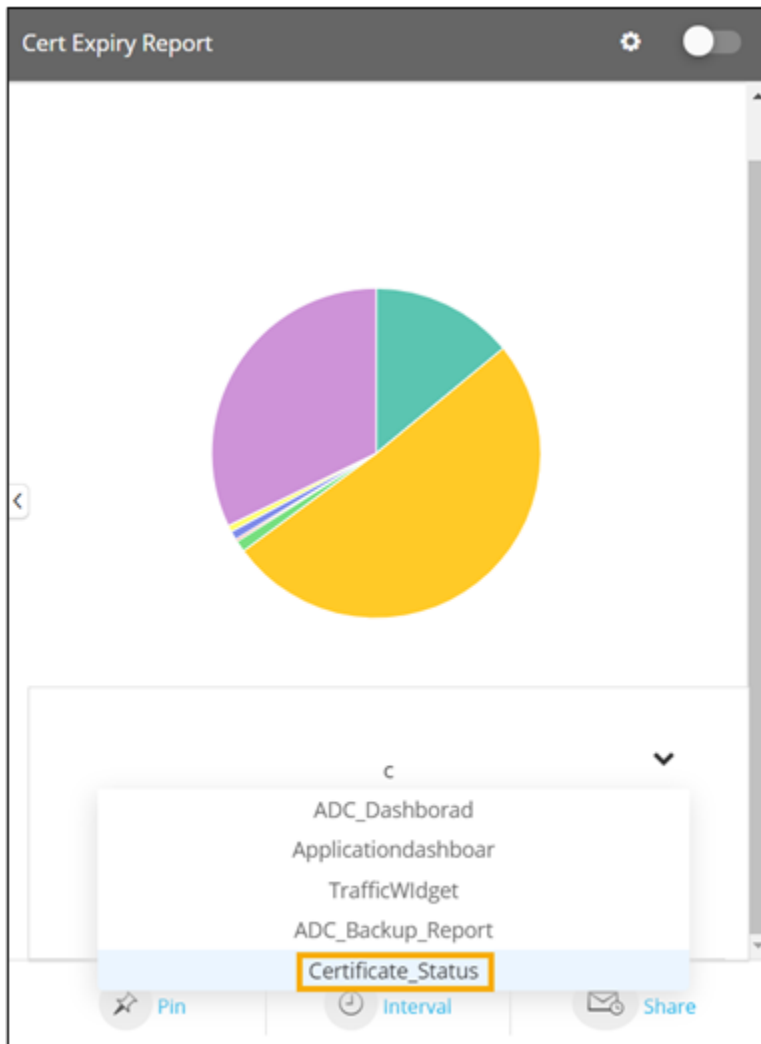
11. To pin the report to the dashboard, click **Pin**.



12. From the options displayed, select **Existing dashboard**.

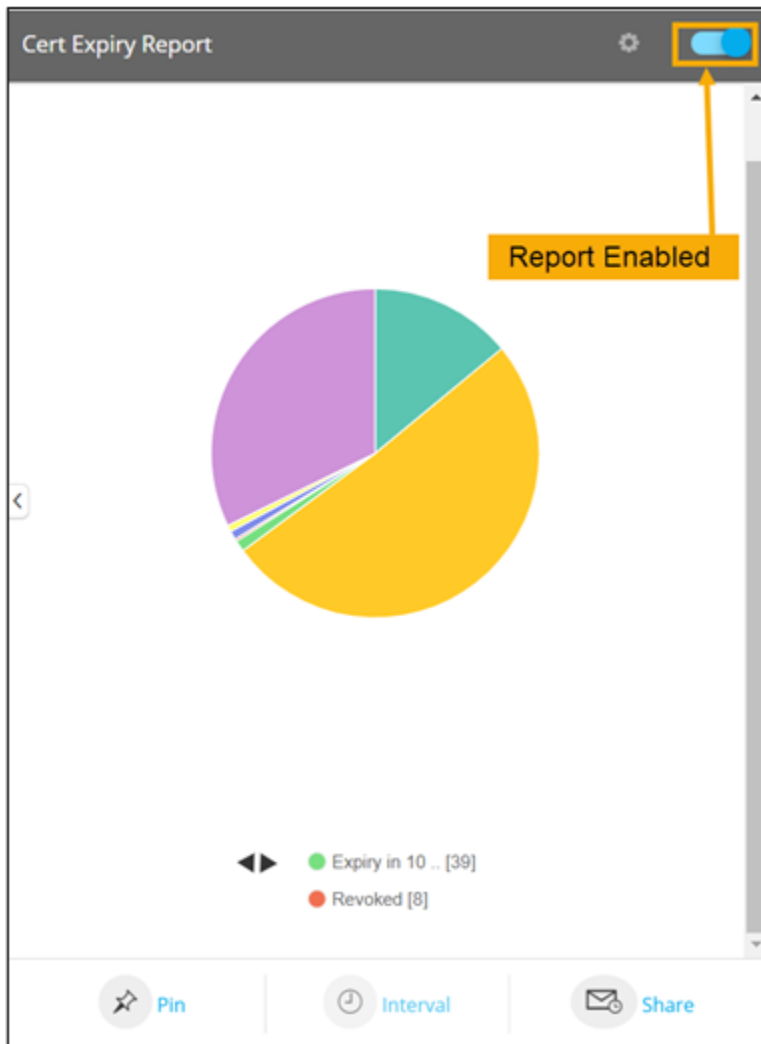


13. From the list of available dashboards, select the required dashboard.



14. To pin this report to the new dashboard, click **Save**.

15. To enable the report, turn on the toggle.

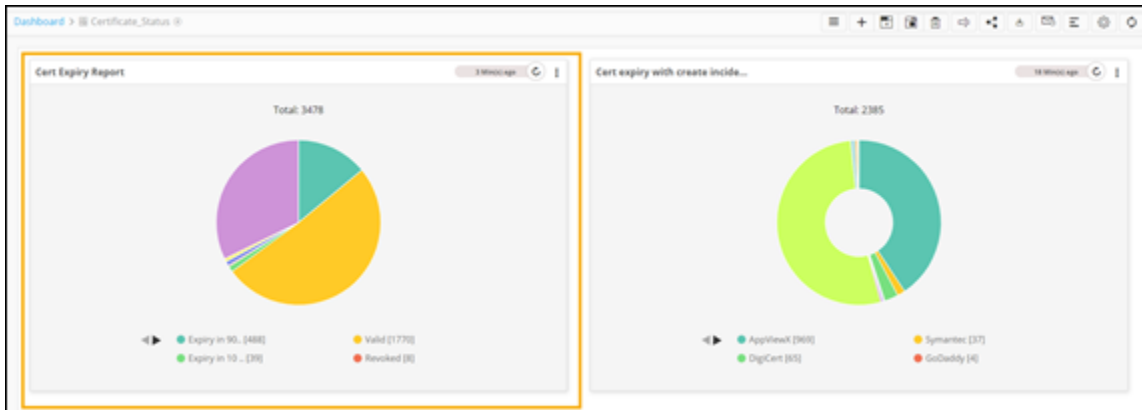


16. To view this report on the dashboard, search for the dashboard in the dashboard inventory.



Note: For more information on how to search for a dashboard, click [here](#).

The **Cert Expiry Report** can be seen on the dashboard.



Create an ADC Usage Report using Query Explorer

1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, enter or select the basic information on the report.

The screenshot shows the 'Create :: basicinfo' form in the 'Reports :: My reports' section. The form has three tabs: 'BUILD' (selected), 'CHART CONFIGURATION', and 'CHART DRILLDOWN'. The 'BUILD' tab contains the following fields:

- Report name:** 'Usage report - Managed ADC devices'
- Description:** 'Chart to display all the managed ADC devices'
- Select category:** 'general' (with a dropdown arrow)

3. To modify the hook, select a hook from the pre-populated list and click .

4. In the **Hooks Inventory::Modify** window, under **Hooks Type**, enter or select the field information.

This table describes the field information in this section:

Field	Description
Select type	Select hook type as Query Explorer .
Description	Enter a description of the hook.

5. In the **Query Explorer Details** section, enter or select the field information.

Query Explorer Details

* Query name: Managed ADC device

Select Query Filter

Search

General

Device Inventory

Application Setting

Logging

REST API vs Manual Action

ADC

Account

Certificate

Custom Collection

(Status is Managed)

AND OR

Add filter Add filter Group

Status is Managed

Save Cancel

The following table describes the various fields in this section:

Field	Description
Query name	Enter a valid Query name. For example: Managed ADC devices .
Select Query Filter	Select an appropriate query filter. For example: Device Inventory under General , since this report is to get data on devices.
Add filter	Select appropriate fields from the pre-defined values. For example: Status is Managed .
AND/OR	Select the appropriate conditional parameters depending on the type of output required in the report. AND : Report will reflect data satisfying all the filter conditions. OR : Report will reflect data satisfying either of the filter conditions.



Note:



- Users can add more filters and apply conditional operators to generate different kinds of data in their reports. For example, adding another filter to get data on credential type of the ADC devices that are managed.
- Set the conditional parameter to **AND** to generate a report that satisfies both the conditions and display devices that are both managed and required manual credentials entry. Setting it to **OR** will generate a report that reflects data satisfying either of these two defined conditions.

Hooks Inventory :: Modify

Query Explorer Details

Query name: Managed ADC device

Select Query Filter

Search:

General

Device Inventory

Application Setting

Logging

REST API vs Manual Action

ADC

Account

Certificate

Custom Collection

Firewall

(Status is Managed OR Credential type is Manual Entry)

AND OR

Add filter Add filter Group

Status is Managed

Credential type is Manual Entry

Save Cancel

6. To create this new hook, click **Save**.

7. To save the basic information, click **Next**.

The new hook can be seen in the list of hooks.

Reports :: My reports > Usage report - Managed ADC devices :: basicinfo

BUILD — **CHART CONFIGURATION** — CHART DRILLDOWN

☐ ACL Restricted ⓘ

Search ▼ All + Create new hook

Managed ADC device	✓
Certificate Server CAA Grid	
Certificate Client CAA Grid	
Certificate Server Transparency Grid	
Certificate Client Transparency Grid	
Certificate Server Endpoint Vulnerability Grid	
Certificate Client Endpoint Vulnerability Grid	
Certificate Server Monitor Failure Grid	

Next > Save Cancel

- Under the **CHART CONFIGURATION** section, select the chart type as **METRIC**.
- Enter or select the appropriate values for the various fields.

Chart title
Managed ADC devices

* Aggregation
Count

Chart formatting

* Select chart size
☒ Small ☐ Medium ☐ Large

* Select font colour

* Select alignment
☒ Left ☐ Center

Select icon

10. To save the basic information on the chart, click **Save**.

A preview of the metric is displayed on the right side of the screen.

Reports : My reports > Usage report - Managed ADC devices : chartConfig

BUILD CHART CONFIGURATION CHART DRILLDOWN

PIE DONUT BAR STACKED BAR GRID LINE METRIC

Chart title
Managed ADC devices

* Aggregation
Count

Chart formatting

* Select chart size
☒ Small ☐ Medium ☐ Large

* Select font colour

* Select alignment
☒ Left ☐ Center

Select icon

Usage report - Managed ADC de...

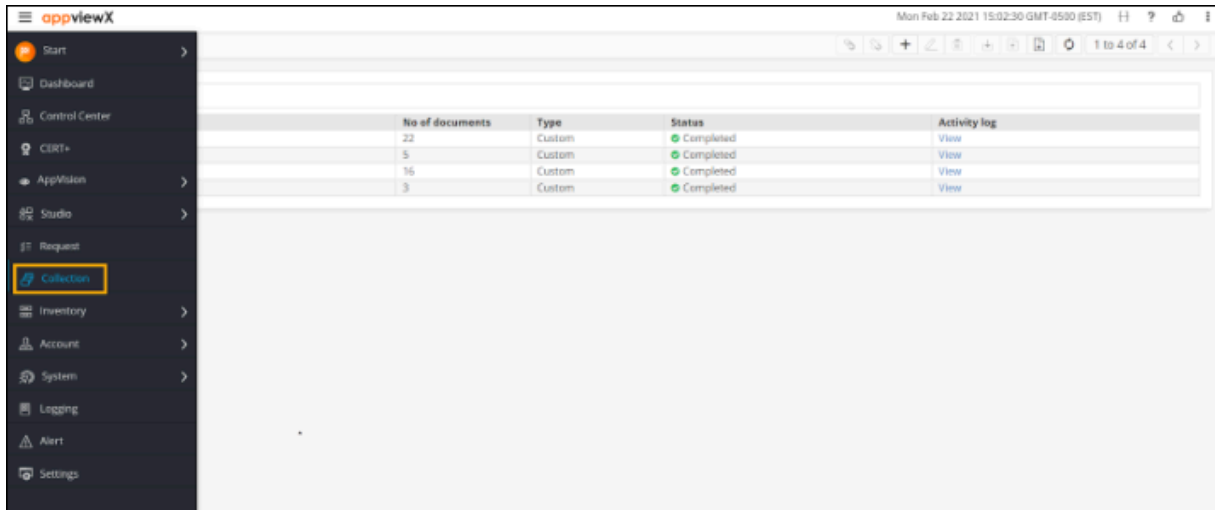
Managed ADC devices
104

Importing Custom Data in Query Explorer

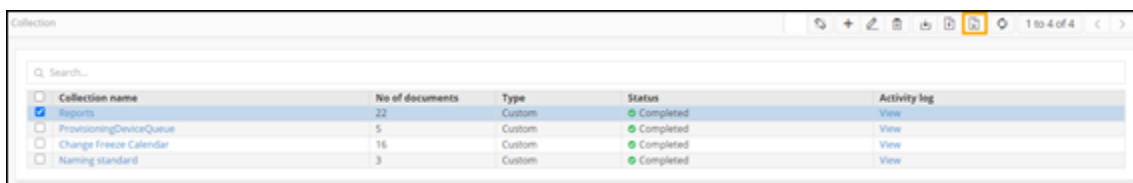
You can import data and upload it into the **Collection** module of the AppViewX platform and enable it to build custom queries to create reports.

To import a collection into the Query Explorer:

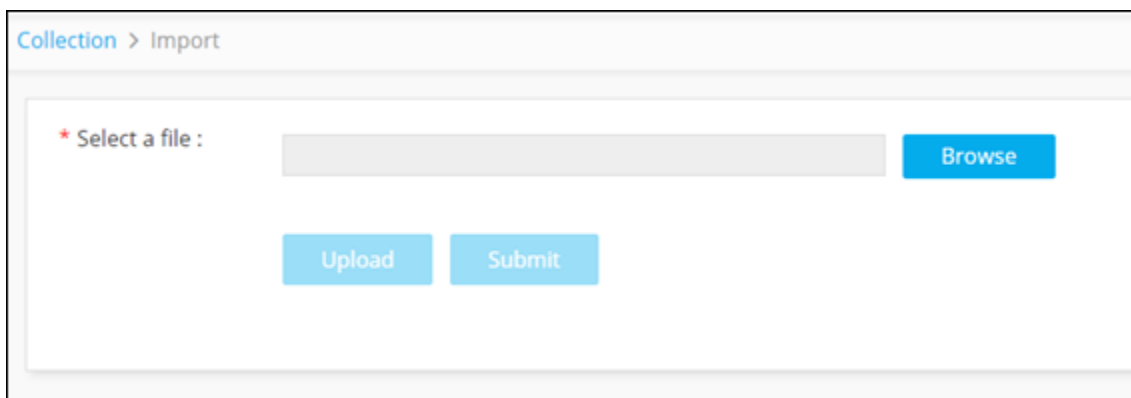
1. From the top left corner of the screen, click .
2. From the menu displayed, click **Collection**.



3. To import a collection, from the top right corner of the page, click .

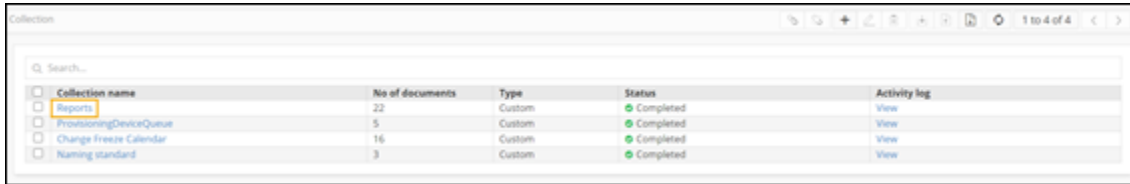


4. To select a file to be uploaded to the **Collection** module, click **Browse**.



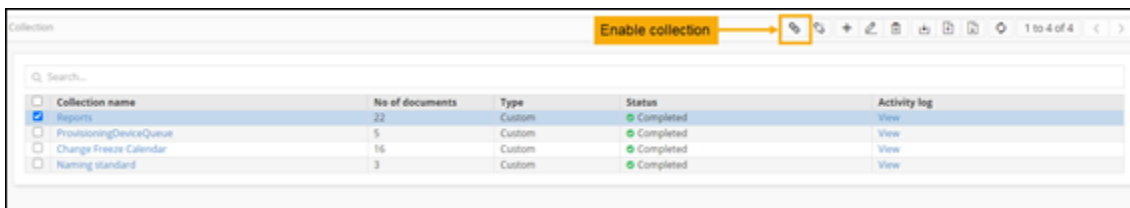
5. Click **Upload** once the file is selected.
6. Select the collection and click **Submit**.

The newly created collection can be seen on the **Collection** page under **Collection Name**.



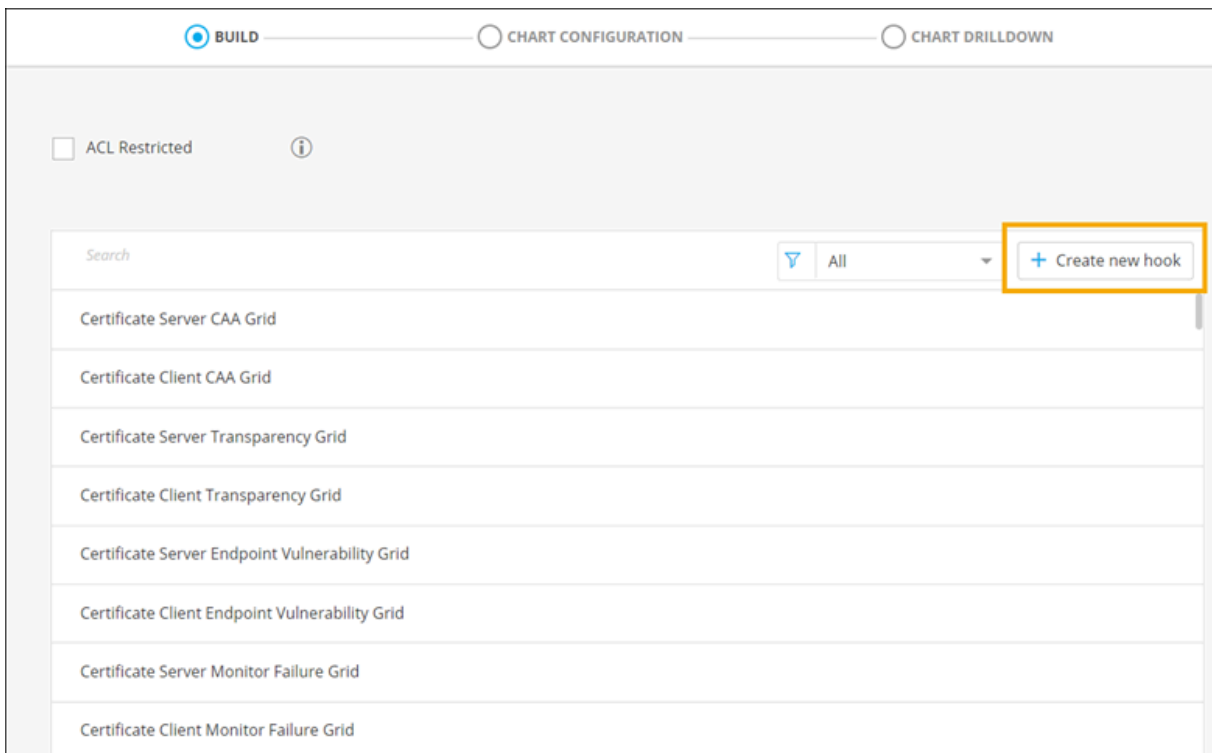
Collection name	No of documents	Type	Status	Activity log
Reports	22	Custom	Completed	View
ProvisioningDeviceQueue	5	Custom	Completed	View
Change Freeze Calendar	16	Custom	Completed	View
Naming standard	3	Custom	Completed	View

7. To enable the collection to build a custom query, select the collection and click .



Collection name	No of documents	Type	Status	Activity log
☒ Reports	22	Custom	Completed	View
☐ ProvisioningDeviceQueue	5	Custom	Completed	View
☐ Change Freeze Calendar	16	Custom	Completed	View
☐ Naming standard	3	Custom	Completed	View

8. On the [My Reports](#) page, click **Create new report**.
9. Under the **BUILD** section, click **Create new hook**.



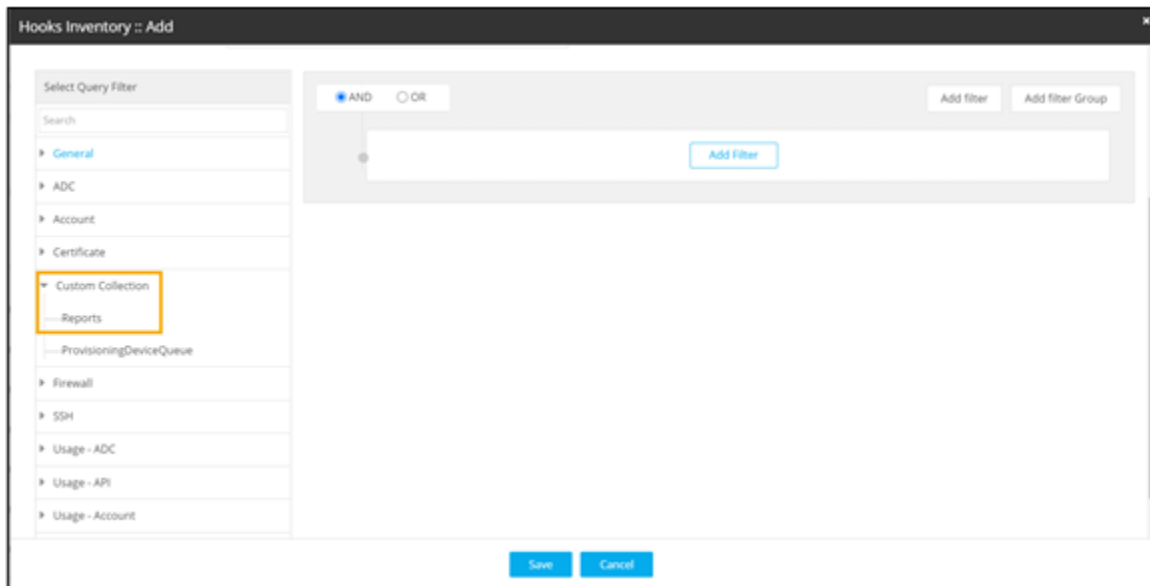
BUILD | CHART CONFIGURATION | CHART DRILLDOWN

☐ ACL Restricted ⓘ

Search ▼ All + Create new hook

- Certificate Server CAA Grid
- Certificate Client CAA Grid
- Certificate Server Transparency Grid
- Certificate Client Transparency Grid
- Certificate Server Endpoint Vulnerability Grid
- Certificate Client Endpoint Vulnerability Grid
- Certificate Server Monitor Failure Grid
- Certificate Client Monitor Failure Grid

The newly created collection is displayed on the **Hooks Inventory** page under **Custom Collection**.



Using Scripts to build Reports

The report builder allows you to create reports using preexisting and custom scripts. You can add your own custom code to generate reports that meet your requirements.

- [Example 1](#)
- [Example 2](#)

Example 1

1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, enter or select the field information.

Reports :: My reports > Create :: basicinfo

☒ BUILD ☐ CHART CONFIGURATION ☐ CHART DRILLDOWN

* Report name

Hash Algorithm-Server

Description

This report shows the count of certificates with respect to the hash algorithm available in the server inventory.

* Select category

certificate + v

This table describes the field information under this section:

Field	Description
*Report name	Enter a valid report name. For example, Hash Algorithm-Server .
Description	Enter a description of the report. For example: This report shows the count of certificates with respect to the hash algorithm available in the server inventory.
*Select category	Select category as certificate .
The asterisk (*) symbol indicates mandatory fields.	

3. Select the **ACL restricted** check box.

*** Report name**

Hash Algorithm-Server

Description

This report shows the count of certificates with respect to the hash algorithm available in the server inventory.

*** Select category**

certificate + ▾

☒ ACL Restricted ⓘ

4. Select a sample script from the list of available hooks.

sample ▼ All + Create new hook

sample_report_grid
Test
test
new
TestNewPentest
Test1234
Pent Test new
SampleHashAlgorithmScript ✓

Next ➤ Save Cancel

5. To save your selections, click **Next**.

6. Under the **CHART CONFIGURATION** section, select the **BAR** chart.

7. Enter or select all the field information on this page.

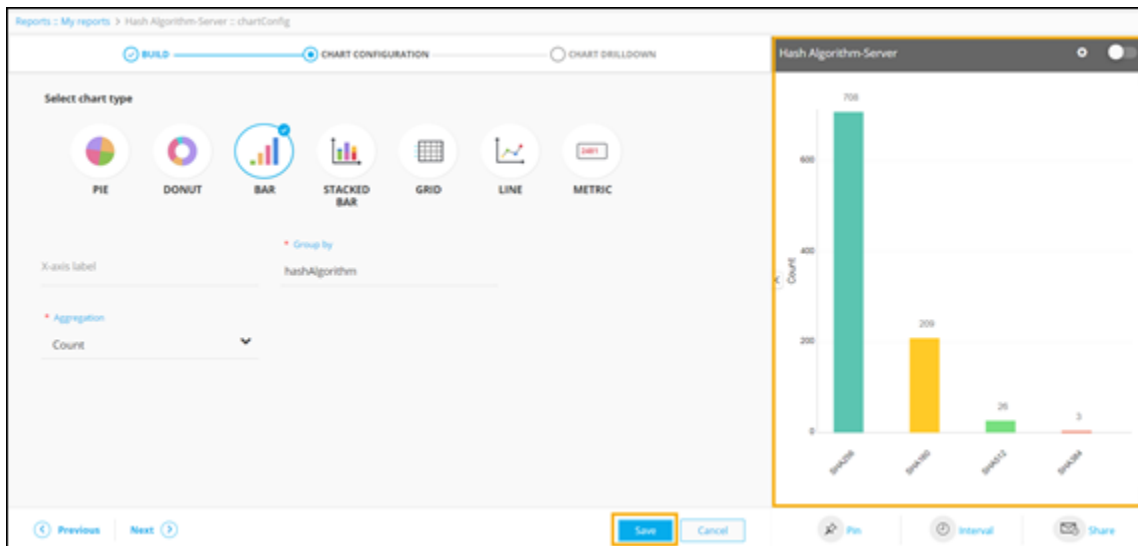
X-axis label	* Group by
Hash Algorithm	hashAlgorithm
* Aggregation	
Count	▼

This table describes the field information under this section:

Field	Description
X-axis label	Enter the criteria for the X-axis label. For example, Hash algorithm.
*Group by	Select a value from the dropdown menu on the basis of which report data will be grouped. For example, hashAlgorithm.
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
The asterisk (*) symbol indicates mandatory fields.	

8. Click **Save**.

A preview of the bar chart is displayed on the right side of the screen.



9. To add drill down to the report, click **Next**.

10. Under the **CHART DRILLDOWN** section, enter or select the field information.

Reports :: My reports > Hash Algorithm-Server :: chartDrilldown

☒ BUILD ☒ CHART CONFIGURATION ☒ CHART DRILLDOWN

☒ Do you want to add drill down to the chart?

* Select drill down type ☒ Set redirect URL ⓘ ☐ Grid ⓘ

* Page URL

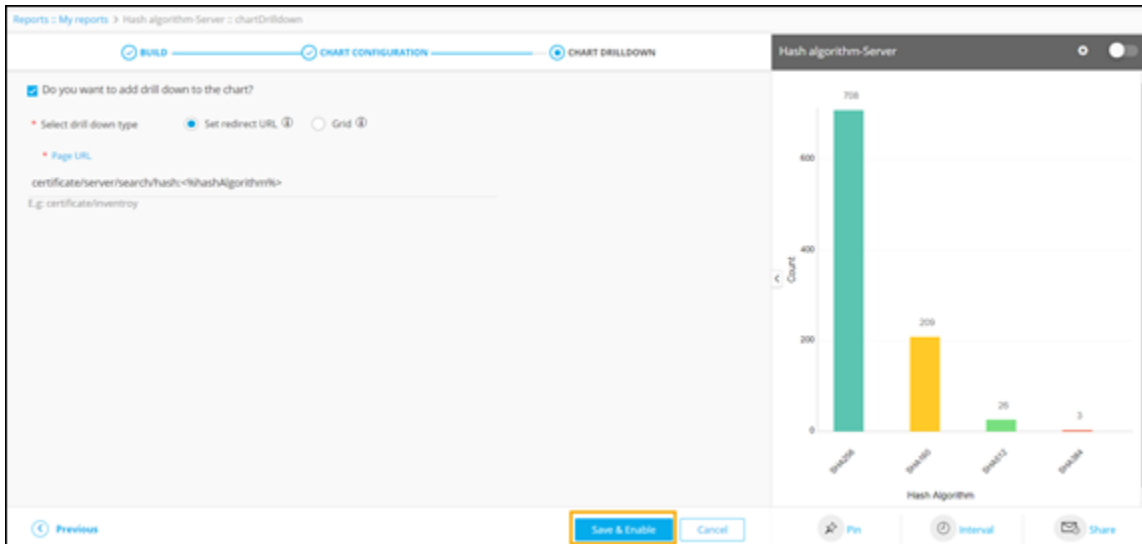
certificate/server/search/hash:<hashAlgorithm%>

E.g: certificate/inventory

The following table describes the field information on this page:

Field	Description
*Select drill down type	Select drill down type as redirect URL.
*Page URL	Enter a valid URL.
The asterisk (*) symbol indicates mandatory fields.	

11. To enable drill down, click **Save & Enable**.



12. To be redirected to the drill down URL, click on any of the bars on the bar chart.

Example 2

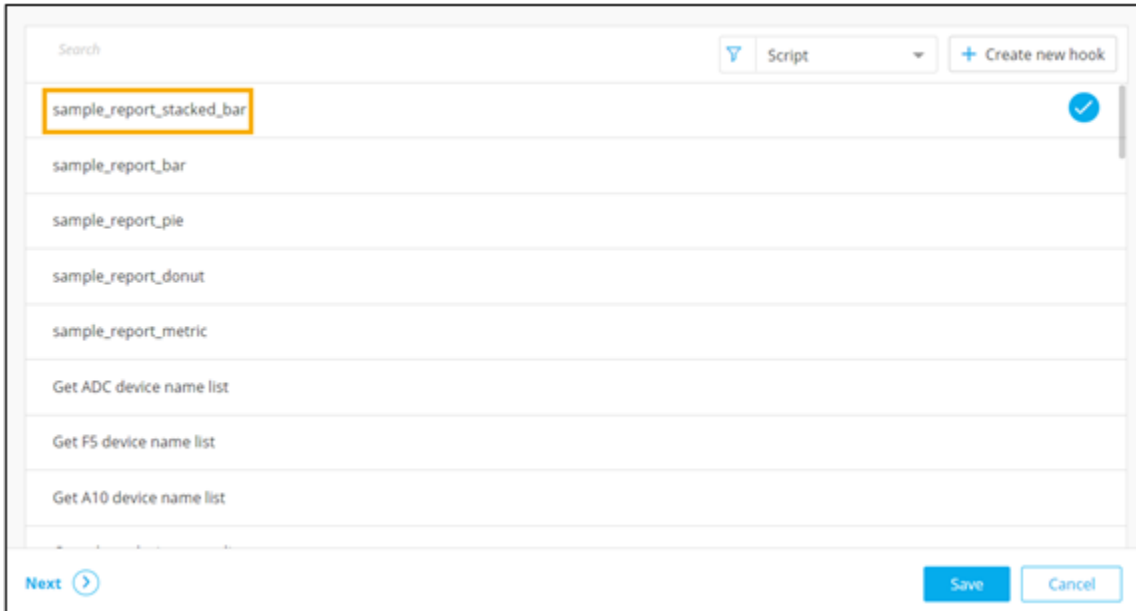
1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, enter or select the field information.

This table describes the field information under this section:

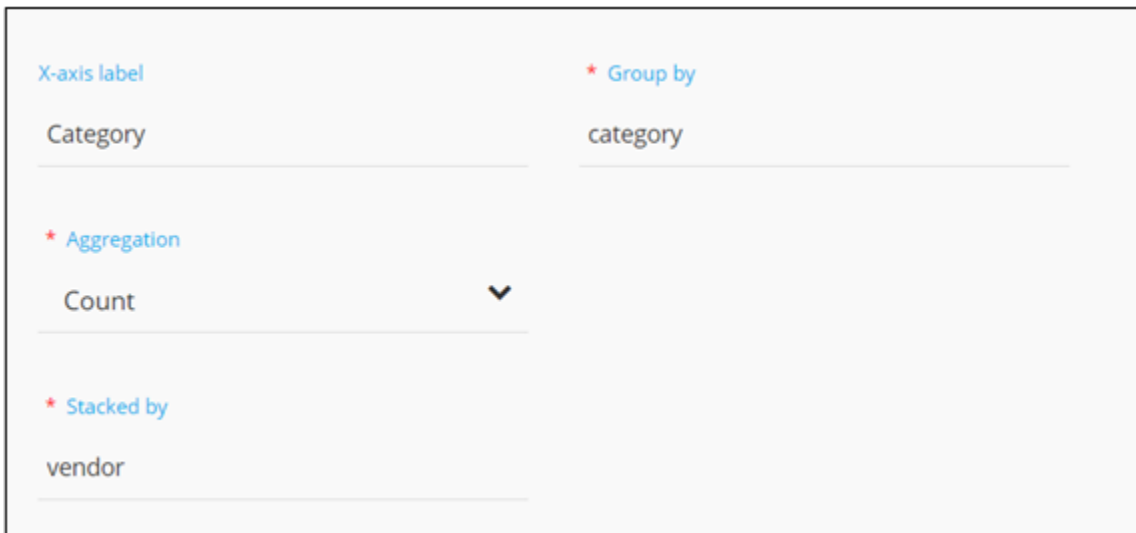
Field	Description
*Report name	Enter a valid report name.

Field	Description
Description	Enter a valid description of the report.
*Select category	Select category as general.
The asterisk (*) symbol indicates mandatory fields.	

3. Select an appropriate hook from the list and click .



4. To save your selections, click **Next**.
5. Under the **CHART CONFIGURATION** section, select the **STACKED BAR** chart.
6. Enter or select the field information on this page.

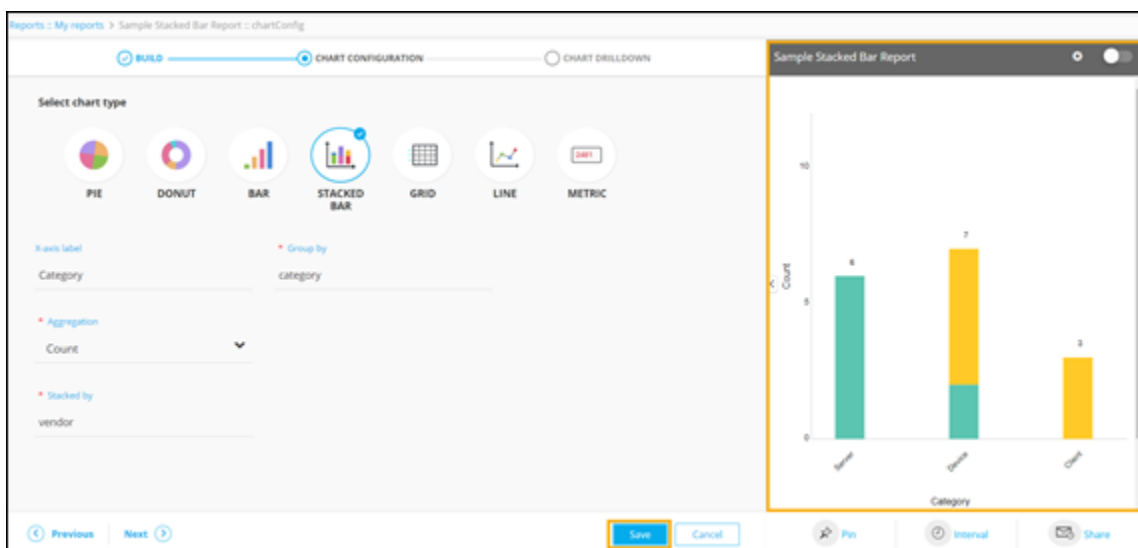


This table describes the field information under this section:

Field	Description
X-axis label	Enter the criteria for the X-axis label.
*Group by	Enter the criteria on the basis of which report data will be grouped. For example, category .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
*Stacked by	Enter the criteria on the basis of which report data will be stacked. For example, vendor .
The asterisk (*) symbol indicates mandatory fields.	

7. Click **Save**.

A preview of the stacked bar chart is displayed on the right side of the screen.



Using REST API to build Reports

You can also use the report builder to create reports using preexisting or custom APIs. You can integrate your internal APIs into this platform to generate customized reports.

- [How to Create a Report using Sample REST API](#)

How to Create a Report using Sample REST API

1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, enter or select the field information.

Reports :: My reports > Create :: basicinfo

BUILD CHART CONFIGURATION CHART DRILLDOWN

* Report name
Cert Auto Push - Server

Description
This report shows the count of certificates with respect to enabled / disabled push automatically.

* Select category
certificate

☒ ACL Restricted

This table describes the field information under this section:

Field	Description
*Report name	Enter a valid report name. For example, Cert Auto Push server .
Description	Enter a valid description for the report. For example: This report shows the count of certificates with respect to enabled / disabled push automatically.
*Select category	Select category as certificate.

Field	Description
ACL restricted	Select this checkbox to query certificates based on role permission.
The asterisk (*) symbol indicates mandatory fields.	

3. Select a sample API hook from the list of preexisting hooks.

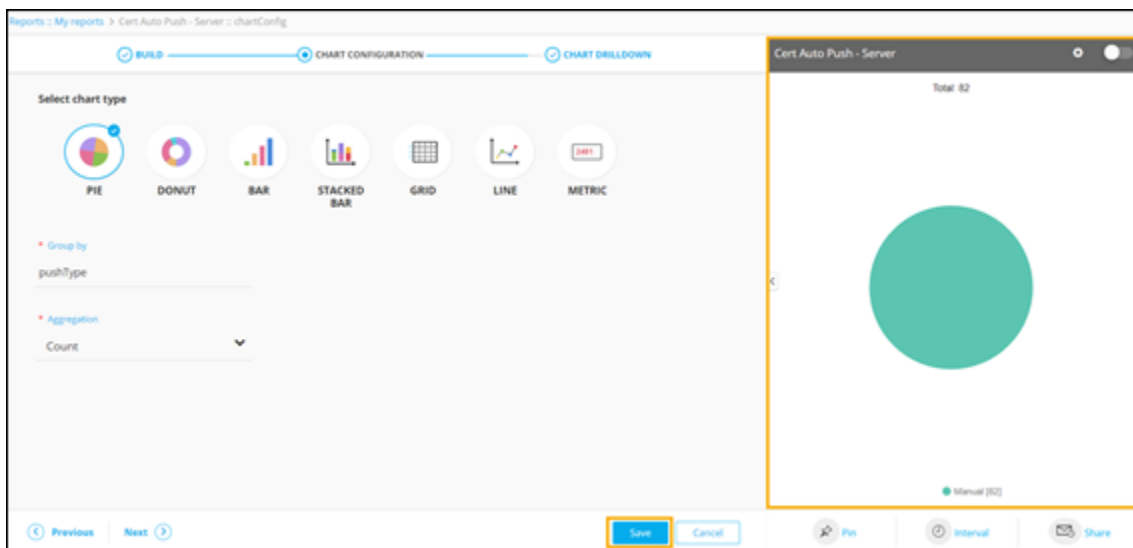
4. To save your selections, click **Next**.
5. Under the **CHART CONFIGURATION** section, select the **PIE** chart.
6. Enter or select the field information.

The following table describes the field information in this section:

Field	Description
*Group by	Enter the criteria on the basis of which report data will be grouped. For example: pushType .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
The asterisk (*) symbol indicates mandatory fields.	

7. To save your selections, click **Save**.

A preview of the pie chart is generated on the right side of the screen.



How to Create a New Hook

To create a new hook for generating reports based on a specific category:

1. On the [My Reports](#) page, click **Create new report**.
2. Under the **BUILD** section, click **Create new hook**.

Reports :: My reports > Create :: basicInfo

BUILD | CHART CONFIGURATION | CHART DRILLDOWN

* Report name
E.g: Unused VIP report

Description
E.g: Generate Top 20 Unused FS VIP

* Select category
general + v

☐ ACL Restricted ⓘ

Search [v] All [v] **+ Create new hook**

The **Hooks Inventory** page pops up, where users can add/create a new hook according to their specific requirements.

- [Creating a Query Explorer Hook](#)
- [Creating a Script Hook](#)
- [Creating a REST API Hook](#)

Creating a Query Explorer Hook

1. In the **Hooks Inventory :: Add** window, under **Hooks Type**, select the **Query Explorer** option.
2. Add a description for the selected hook.

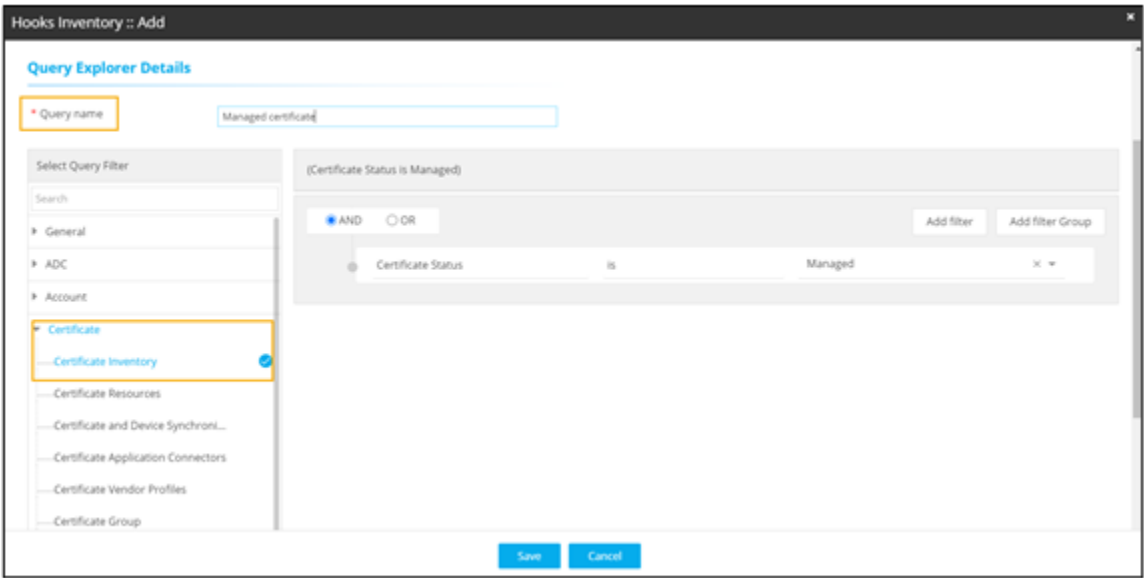
Hooks Inventory :: Add

Hooks Type

Select type ☒ Query Explorer ☐ Script ☐ REST

Description
Retrieve all managed certificates.
221 remaining

3. Under **Query Explorer Details**, enter or select the field information.



The following table describes the various fields in the **Query Explorer Details** section:

Description
Query name valid query name. For example, Managed certificates .
Select Query Filter Appropriate query filter from the pre-populated

Function	Description
	list of filters.
	For example, Certificate Inventory under Certificate section.
Add Filter	filter and select appropriate fields from the predefined values.
	For example, Certificate Status is Managed .
AND/OR	appropriate conditional parameters depending on the

Field	Description
	type of output required in the report.
	AND: Report will reflect data satisfying all the filter conditions.
	OR: Report will reflect data satisfying either of the filter conditions.
	All asterisk (*) marked fields

Description

are mandatory.

4. To add this new hook to the list of existing hooks, click **Save**.

Creating a Script Hook

1. In the **Hooks Inventory :: Add** window, under **Hooks Type**, select the **Script** option.
2. Add a description for the selected hook.

Hooks Type

Select type: ☐ Query Explorer ☒ Script ☐ REST

Description: Sample report hook for creating bar chart (Note : GroupBy = category)

3. Under **Script Details**, enter a valid script name and define the script logic .

Script Details

* Script name: sample_report_bar

Script:

```

1 |
2 | data = [
3 |   {
4 |     "category": "Client",
5 |     "count": 5
6 |   },
7 |   {
8 |     "category": "Others",
9 |     "count": 3
10 |   },
11 |   {
12 |     "category": "Device",
13 |     "count": 2
14 |   }
15 | ]

```

Save Cancel Validate

4. To add this new hook to the list of existing hooks, click **Save**.

Creating a REST API Hook

1. In the **Hooks Inventory :: Add** window, under **Hooks Type**, select the **REST** option.
2. Enter a description for the selected hook.

Hooks Type

Select type ☐ Query Explorer ☐ Script ☒ REST

Description

Fetches the list of domain names for which there are more than one certificates available and only one or a few(out of all) are available in the server inventory.

3. Under **API Details**, enter or select the field information.

• Using REST API

API Details

* API name ServiceNow - Get change ticket details

Select type ☒ REST API ☐ Internal

Method GET

* URL https://<servicenow url>/api/now/table/change_request/sysp

• Using Internal API

API Details

* API name

Select type ☐ REST API ☒ Internal

* URI appvision-troubleshoot-commands-save

[View Details](#)

The following table describes field description in this section:

Description	Field name
API name	API name

Description	Definition
	valid name for the API.
	Select type select between REST API and Internal.
	• REST API: Use this to select external API and enter the URL.
	• Internal: Use this to select an internal API and select a

Field	Description
URI	URI
(Uniform	(Uniform
Resources	Resources
Identifier)	Identifier)
from	from
the	the
dropdown	dropdown
menu.	menu.
Path	Path
parameters	parameters
params	params
are	are
used	used
to	to
identify	identify
a	a
specific	specific
resource(s).	resource(s).
Query	Query
parameters	parameters
params	params
are	are
used	used
to	to
filter	filter
resources.	resources.
All	All
asterisk	asterisk
(*)	(*)
marked	marked
fields	fields
are	are
mandatory.	mandatory.

- Under **Request Body**, enter the payload and response mapping details.



The following table describes field description in this section:

Field	Description
Payload	is the actual data that needs to be passed for the API.
Response mapping	integration response from the backend.

5. To add this new REST API hook to the hook inventory, click **Save**.

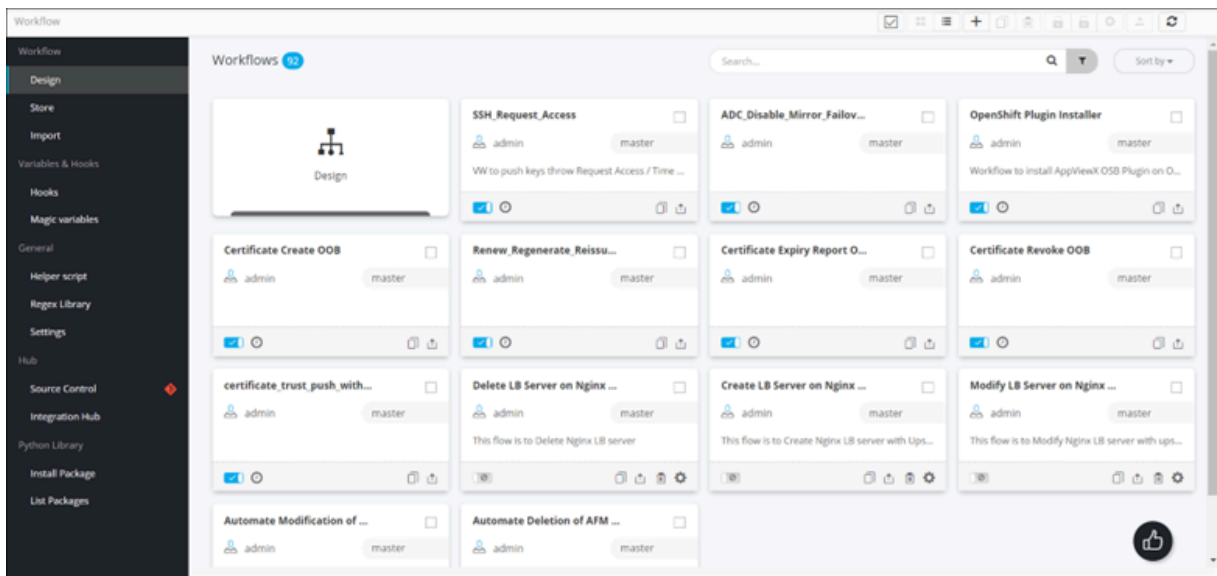
How to Reuse Hooks

The **Hooks Inventory** lists all the hooks that are available to you for building reports. Any new hook created will be added to the **Hooks Inventory** and can be reused for creating reports.

To create and reuse hooks:

1. From the top left corner of the screen, click .
2. From the menu displayed, select **Studio > Workflow**.

The **Workflow** inventory is displayed.



3. From the navigation pane on the left, click **Hooks**.

The **Hooks Inventory** is displayed.

Hooks	Description	Hook Type
CMDB_Get_Certificates	Fetch all the certificate details from inventory	Query Explorer
CMDB_Get_Devices	Fetch all device details from inventory	Query Explorer
Cert cost report - Unit based cost	Fetches count of CA actions performed based on the certificate groups.	REST
Certificate Client Autorenewal Ready Report	Fetches count of client certificates ready for the auto-renewal process.	REST
Certificate Client CAA Grid	Fetches list of certificates in appviewx inventory (client) which have and do not have C...	REST
Certificate Client CAA Record	Fetches the count of certificates in appviewx inventory (client) which have and do not ...	REST
Certificate Client Cipher suite	Fetches Client Cipher suite	REST
Certificate Client Cipher suite Grid	count of device endpoints with respect to the cipher suite details along with the priori...	REST
Certificate Client Endpoint Vulnerability	Fetches only for the objects associated with the certificates, which are available in the ...	REST
Certificate Client Endpoint Vulnerability Grid	Fetches list of objects associated with the certificates, which are available in the client...	REST
Certificate Client Monitor Failure Grid	report list certificates in the appviewx which are disassociated from the endpoints, wh...	REST
Certificate Client Monitor Failure Report	Fetches the count of client certificates in the appviewx which are disassociated from t...	REST
Certificate Client Push Report Grid	Fetches list of device connectors configured and non configured with push automati...	REST
Certificate Client Shared Client Report	Fetches the count of client certificates shared with multiple end points.	REST
Certificate Client TLS version	Fetches count of objects along with the TLS versions of the same	REST
Certificate Client TLS version Grid	Shows the count of objects along with the TLS versions of the same	REST
Certificate Client Transparency Grid	Fetches the list of domain names for which there are more than one certificates avail...	REST
Certificate Client Transparency Report	Fetches the total count of domain names for which there are more than one certificat...	REST
Certificate Client push Report	Fetches Client push Report	REST
Certificate Server Autorenewal Ready Report	Fetches count of server certificates ready for the auto-renewal process.	REST
Certificate Server CAA Grid	Fetches list of certificates in appviewx inventory (server) which have and do not have ...	REST
Certificate Server CAA Record	Fetches the count of certificates in appviewx inventory (server) which have and do not...	REST
Certificate Server Cipher suite	Fetches Server Cipher suite	REST
Certificate Server Cipher suite Grid	count of device endpoints with respect to the cipher suite details along with the priori...	REST
Certificate Server Endpoint Vulnerability	Fetches only for the objects associated with the certificates, which are available in the ...	REST
Certificate Server Endpoint Vulnerability Grid	Fetches list of objects associated with the certificates, which are available in the same...	REST

4. To add a new hook, click  from the top right corner of the screen.

The **Workflow > Hooks Inventory > Add** page is displayed.

Workflow > Hooks Inventory > Add

Hooks Type

Select type: ☒ Query Explorer ☐ Script ☐ REST

Description:

Query Explorer Details

* Query name:

Select category: ☒ Device Inventory ☐ Alert ☐ Application Setting ☐ Logging

Filter logic: ☒ AND ☐ OR

Add filter: Add Filter

Add filter Group:

Response mapping

Available fields: Select all >>

Selected fields:

Buttons: Save, Cancel, Validate

5. Under **Hooks Type**, enter or select the field information.

This table describes the field information in this section:

Field	Description
Select Type	Select hook type as Query Explorer .
Description	Enter a valid description. For example: Retrieve all certificates that have been managed or monitored.

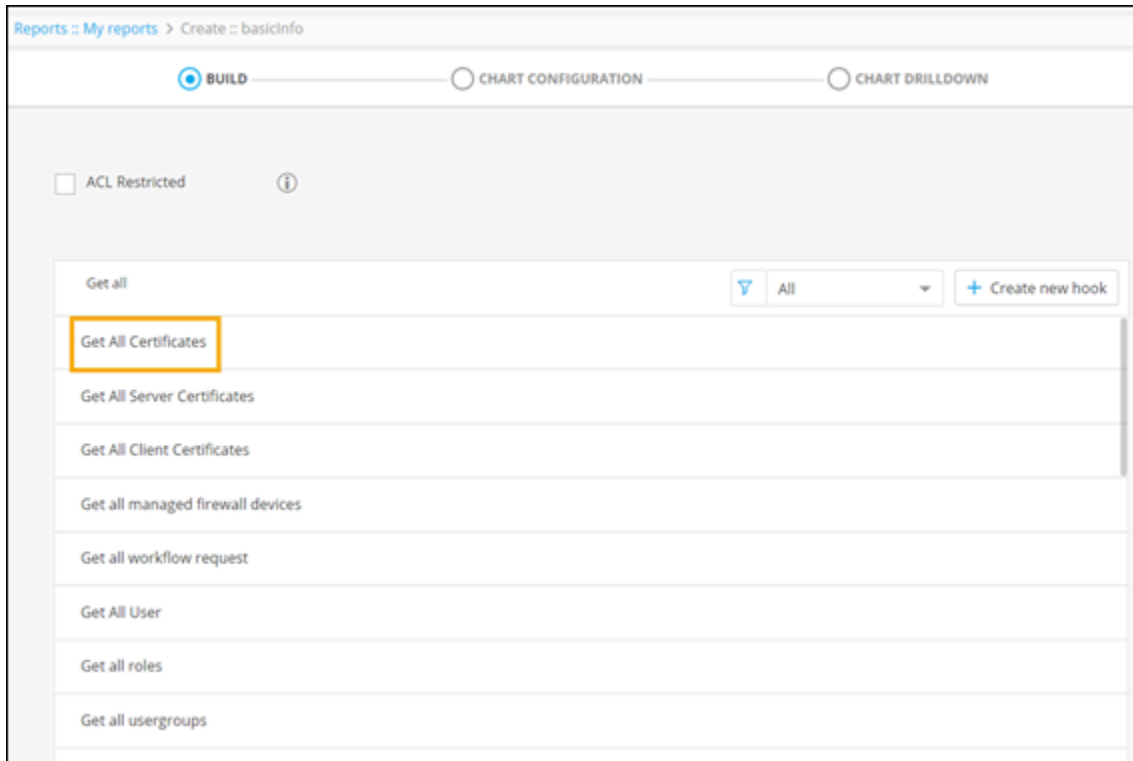
6. Under **Query Explorer Details**, enter or select the field information.

This table describes the various fields in this section:

Field	Description
Query name	Enter a valid query name. For example: Get all certificates.

Field	Description
Select Query Filter	Select an appropriate query filter from the collection of hooks. For example: Certificate Inventory under the Certificate section.
Add filter	Add a filter(s) and select appropriate fields from the predefined values. For example: Expiry Status is Expired and Issuer CA is AppViewX.
AND/OR	Select the appropriate conditional parameters depending on the type of output required in the report. AND: Report will reflect data satisfying all the filter conditions. OR: Report will reflect data satisfying either of the filter conditions.
Response Mapping	Select the fields from the available list to map the integration response. For example: Select Issuer CA, Expiry Status, Certificate Status, Certificate UUID. Selected fields appear on the right side.
The asterisk (*) symbol indicates mandatory fields.	

7. To add this hook to the **Hooks Inventory**, click **Save**.
8. On the [My Reports](#) page, click **Create new report**.
9. To search for the new hook, under the **BUILD** section, type the keyword in the search bar.
The new hook is added to the list of hooks.



Chapter 11: Report Widgets

- [Overview](#)
- [How to Create a Widget](#)
- [How to Download Report Widgets](#)
- [How to Pin a Widget to a Dashboard](#)

Overview

You can create customized widgets, pin them to a dashboard, and also download report widgets to your device using the Report builder platform.

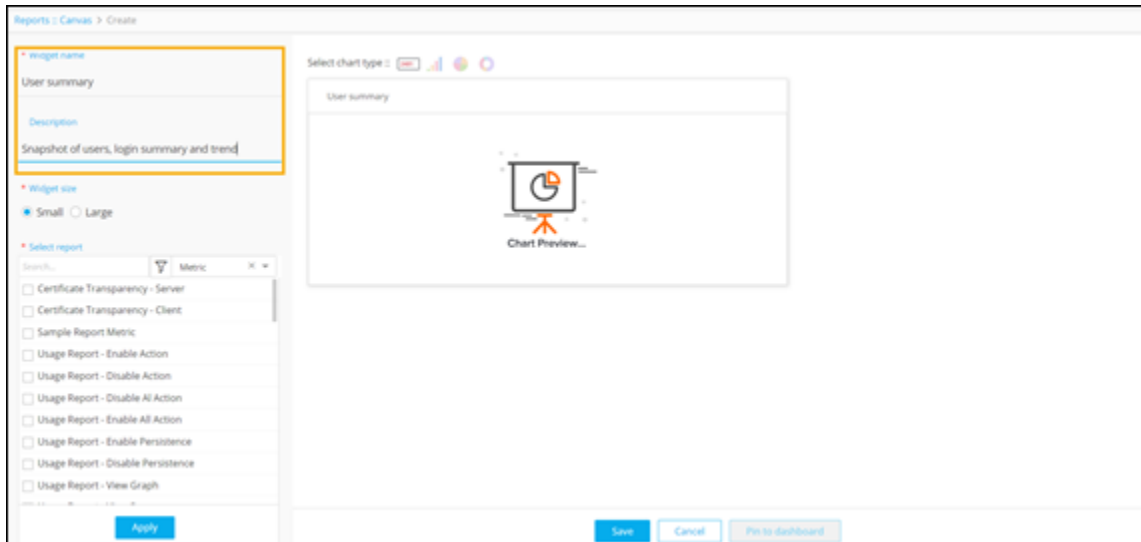
How to Create a Widget

- [Creating a User Summary Widget](#)
- [Creating a Certificate Lifecycle Management Widget](#)

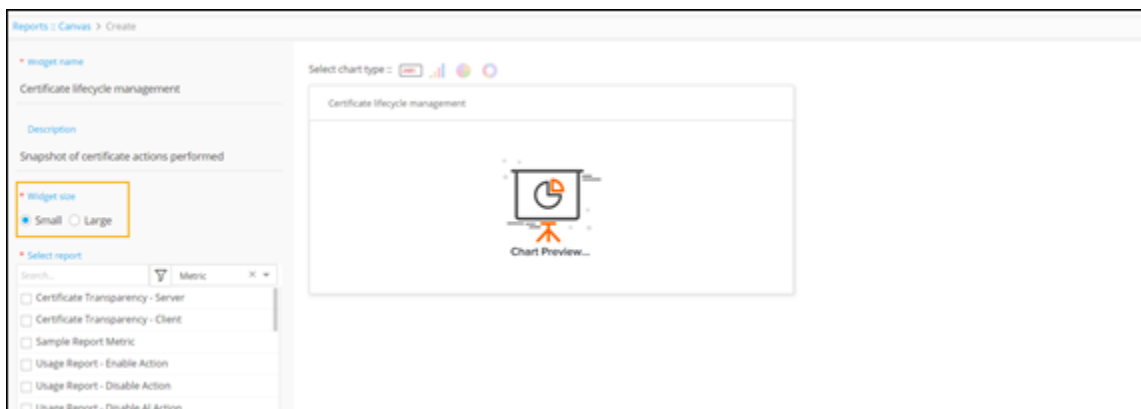
Creating a User Summary Widget

To create a **User Summary** widget that displays the information on user groups, roles, and login summary:

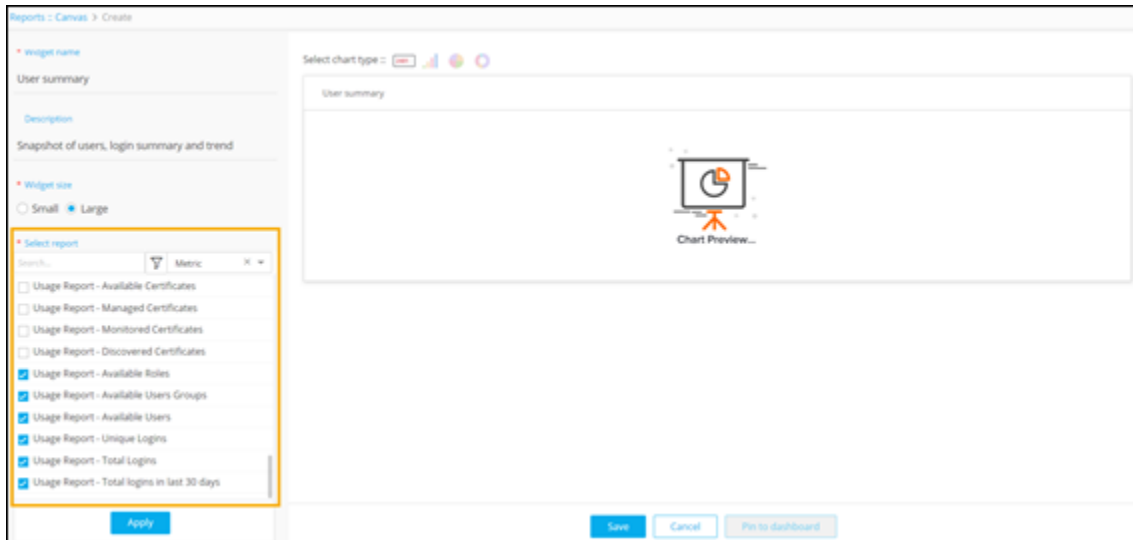
1. On the [Widget](#) page, click **Create new widget**.
2. On the **Reports::Canvas > Create** page, enter a suitable **Widget name** and **Description**.



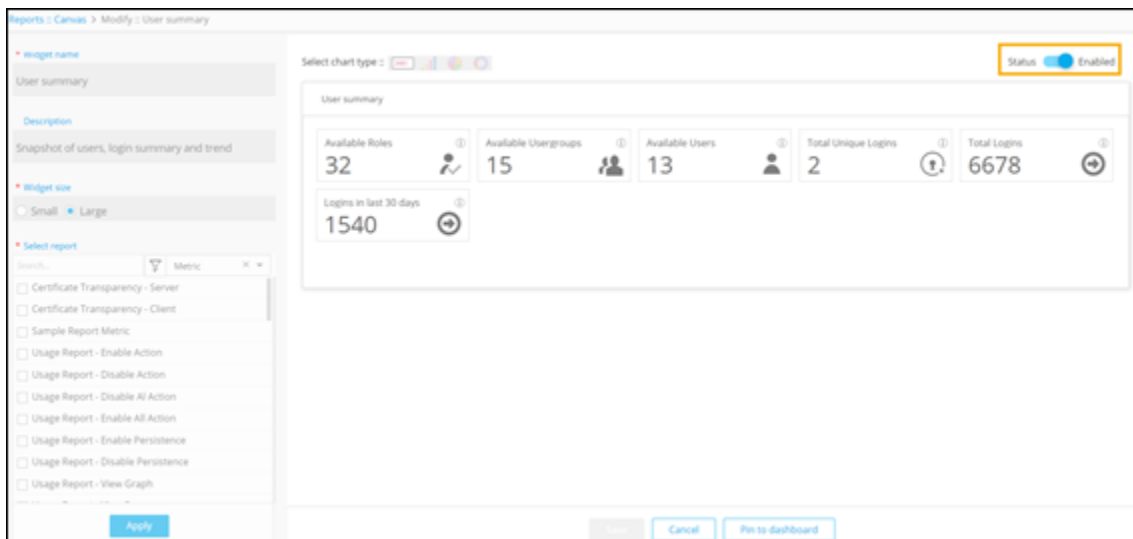
3. Select the **Widget size**.



4. From the list of reports available as metrics, select the report(s) to be displayed on the widget.



5. To get a preview of the widget, click **Apply**.
6. Click **Save**.
7. To change the status of the widget to **Enabled**, turn on the toggle.



The **User Summary** widget is displayed on the **Reports :: Canvas** page under **Widget**.

Reports :: Canvas

My reports Store Scheduled jobs **Widget**

Search...

[+ Create new widget](#) Actions Refresh 1 to 8 of 8

☐	Widget name	Description	Location	Status
☐	Widget_Testing		TestReportingDashboard.My_Reports	☒
☐	Automation Request Summary	Snapshot of Automation Request status and trend	Usage_And_Adoption_Metrics	☒
☐	Certificate Lifecycle Management	Snapshot of Certificate actions performed	Usage_And_Adoption_Metrics	☒
☐	Asset Inventory	Snapshot of all the device assets in the Inventory	Usage_And_Adoption_Metrics	☒
☐	Certificate - Environment Snapshot	Snapshot of Certificates management, monitored	Usage_And_Adoption_Metrics	☒
☐	Application Service Actions	Snapshot of application service actions performed	Usage_And_Adoption_Metrics	☒
☐	Application Delivery - Environment Snapshot	Snapshot of application delivery	Usage_And_Adoption_Metrics	☒
☒	User Summary	Snapshot of the user, login summary and trend	Usage_And_Adoption_Metrics	☒

Creating a Certificate Lifecycle Management Widget

To create a **Certificate Lifecycle Management** widget that displays a snapshot of certificate actions performed:

1. On the [Widget](#) page, click **Create new widget**.
2. On the **Reports::Canvas > Create** page, enter a suitable **Widget name** and **Description**.

Reports :: Canvas > Create

Widget name

Certificate Lifecycle Management

Description

Snapshot of certificate actions performed

Widget size

☒ Small ☐ Large

Select report

Search...

☐ Certificate Transparency - Server

☐ Certificate Transparency - Client

☐ Sample Report Metric

☐ Usage Report - Enable Action

☐ Usage Report - Disable Action

☐ Usage Report - Disable All Action

☐ Usage Report - Enable All Action

☐ Usage Report - Enable Persistence

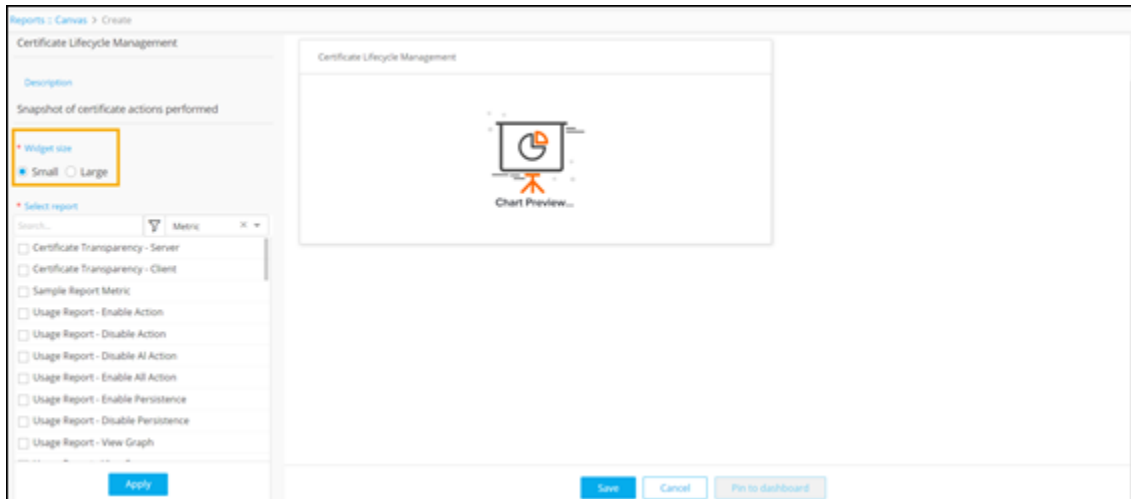
☐ Usage Report - Disable Persistence

Select chart type

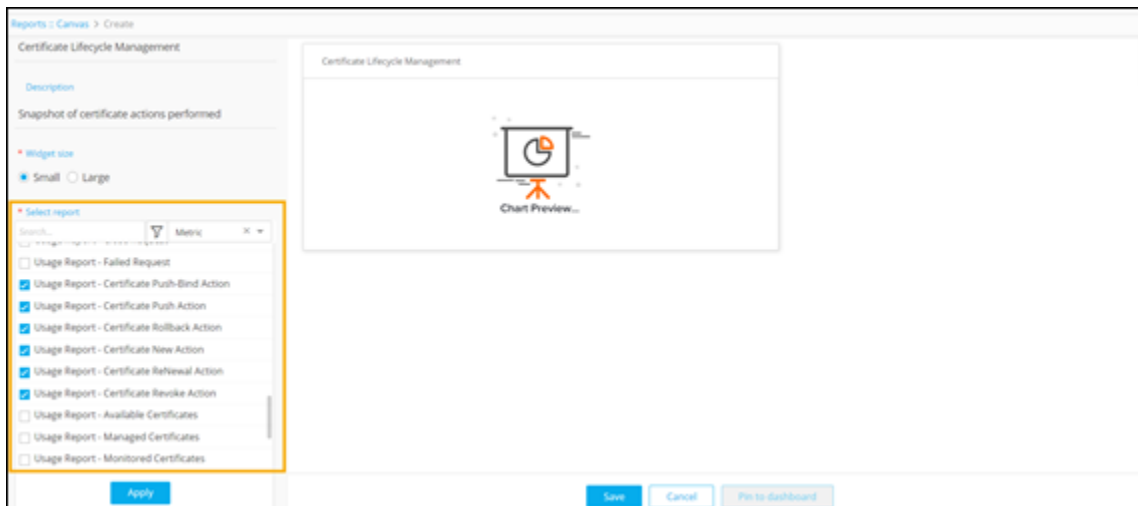
Certificate Lifecycle Management

Chart Preview...

3. Select the **Widget size**.

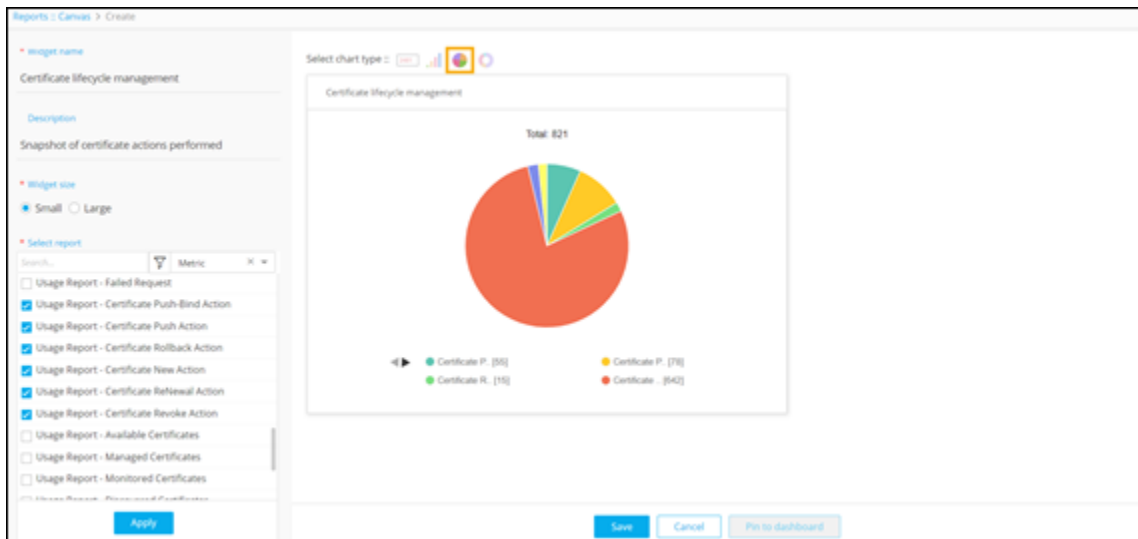


4. From the list of reports available as metrics, select the report(s) to be displayed on the widget.



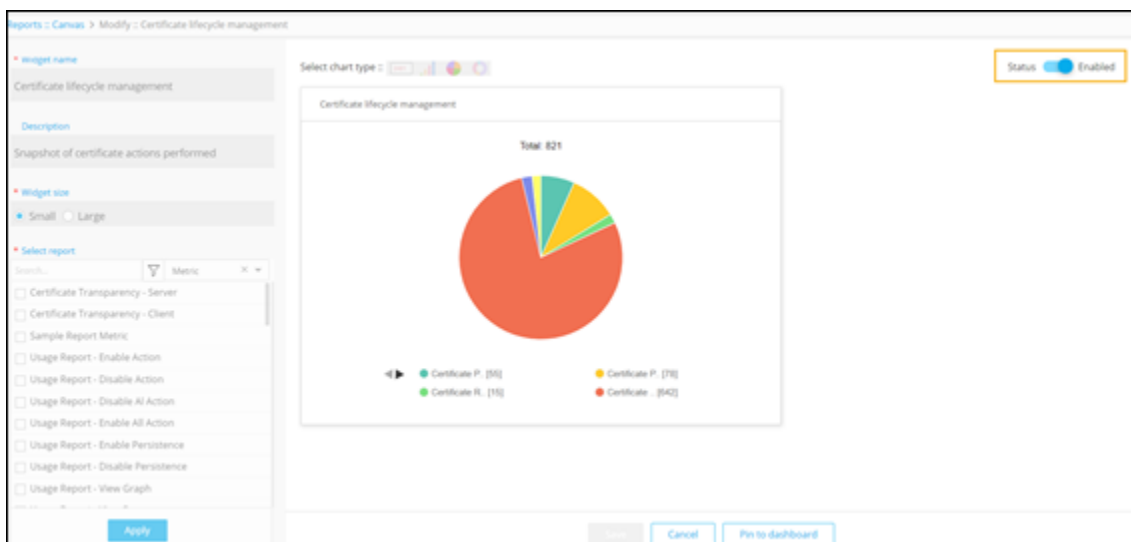
5. To get a preview of the widget, click **Apply**.

6. To view this widget as a pie chart, click .



Note: You can choose between four chart types: metric, bar, pie, and donut.

- To save this widget, click **Save**.
- To change the status of the widget to **Enabled**, turn on the toggle.



The **Certificate Lifecycle Management** widget is displayed on the **Reports :: Canvas** page under **Widget**.

Reports :: Canvas

My reports Store Scheduled jobs **Widgets**

Q Search... [+ Create new widget](#) Actions Refresh 1 to 8 of 8

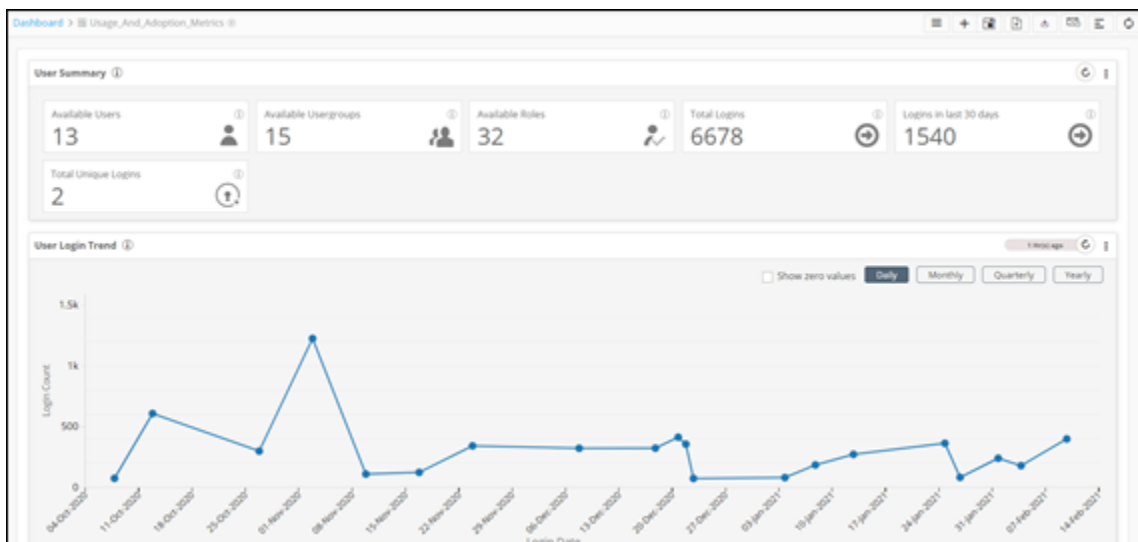
☐ Widget name	Description	Location	Status
☐ Widget_Testing		TestReportingDashboard.My_Reports	☒
☐ User Summary	Snapshot of the user, login summary and trend	Usage_And_Adoption_Metrics	☒
☐ Certificate Lifecycle Management	Snapshot of Certificate actions performed	Usage_And_Adoption_Metrics	☒
☐ Certificate - Environment Snapshot	Snapshot of Certificates management, monitored	Usage_And_Adoption_Metrics	☒
☐ Automation Request Summary	Snapshot of Automation Request status and trend	Usage_And_Adoption_Metrics	☒
☐ Asset Inventory	Snapshot of all the device assets in the inventory	Usage_And_Adoption_Metrics	☒
☐ Application Service Actions	Snapshot of application service actions performed	Usage_And_Adoption_Metrics	☒
☐ Application Delivery - Environment Snapshot	Snapshot of application delivery	Usage_And_Adoption_Metrics	☒

How to Download Report Widgets

Report widgets can also be downloaded to your device as a PDF or CSV file.

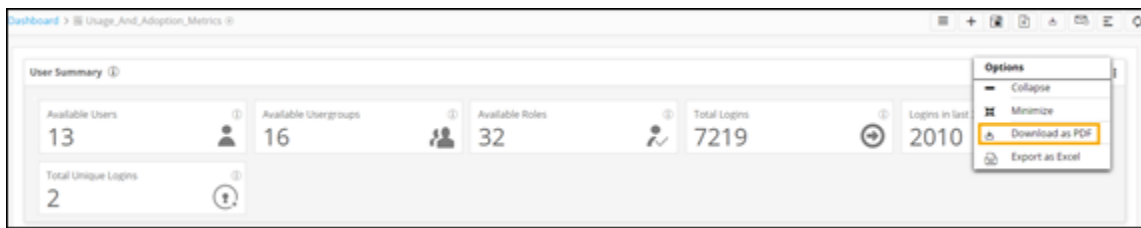
To download the widget as PDF:

1. From the **Dashboard** inventory, select the **Usage_And_Adoption_Metrics** dashboard.
This dashboard displays all the widgets pinned to this dashboard.



Note: For more information on how to search a dashboard, click [here](#).

2. To see all available options, from the top right corner of the widget, click .
3. To download the widget as a PDF file to your device, select **Download as PDF**.



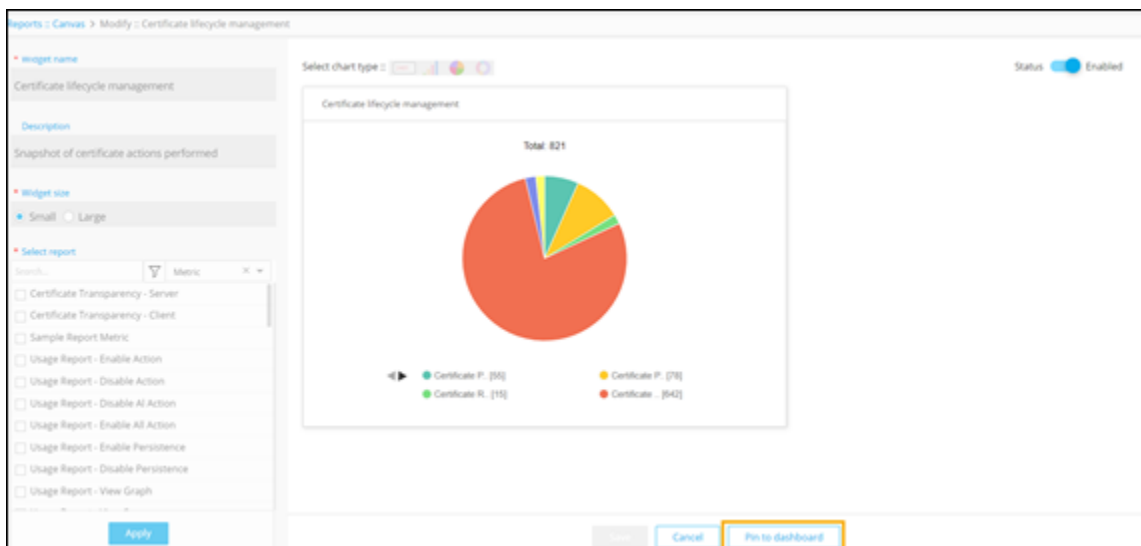
The widget is downloaded to your machine as a PDF file.

How to Pin a Widget to a Dashboard

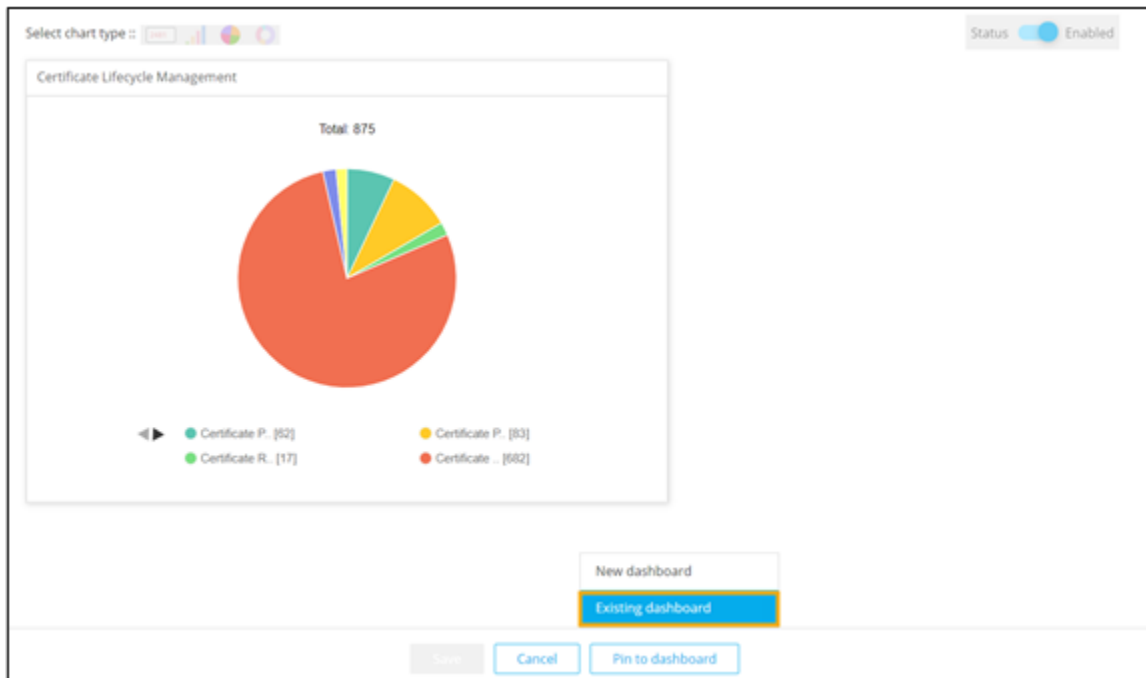
Once a widget has been created and saved, it can be pinned to a dashboard.

To pin a widget to a dashboard:

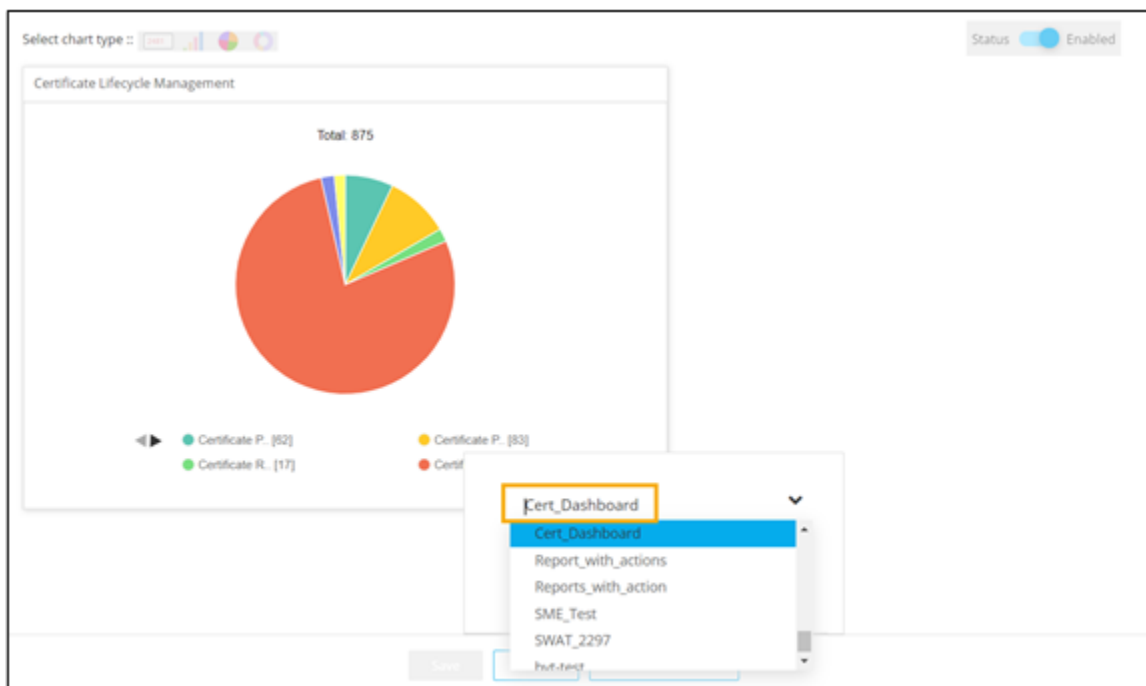
1. On the [Report :: Canvas](#) page, click on the widget to be pinned.
2. Click **Pin to dashboard**.



3. To pin the widget to an existing dashboard, click **Existing dashboard**.



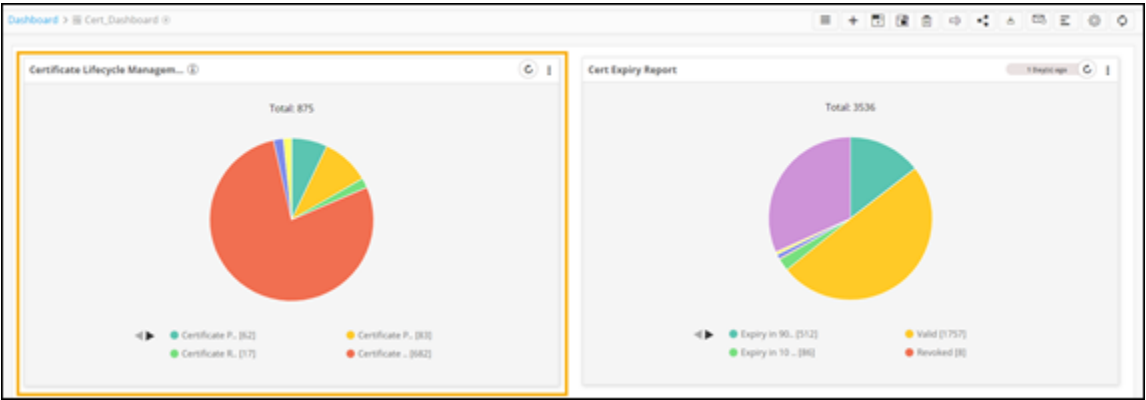
4. From the list of dashboards in the dropdown menu, select a dashboard.



5. To pin this widget to the selected dashboard, click **Save**.

6. On the **Dashboard Inventory** page, click on the required dashboard name.

The widget is displayed on the dashboard.



Chapter 12: Downloading Reports

- [Overview](#)
- [How to Download a Report in the PDF Format](#)
- [How to Download a Report in the CSV Format](#)
- [How to Download a Report as an Excel sheet](#)

Overview

Once a report has been generated and pinned to a dashboard it can be downloaded in multiple formats (.pdf, .csv, .xls).

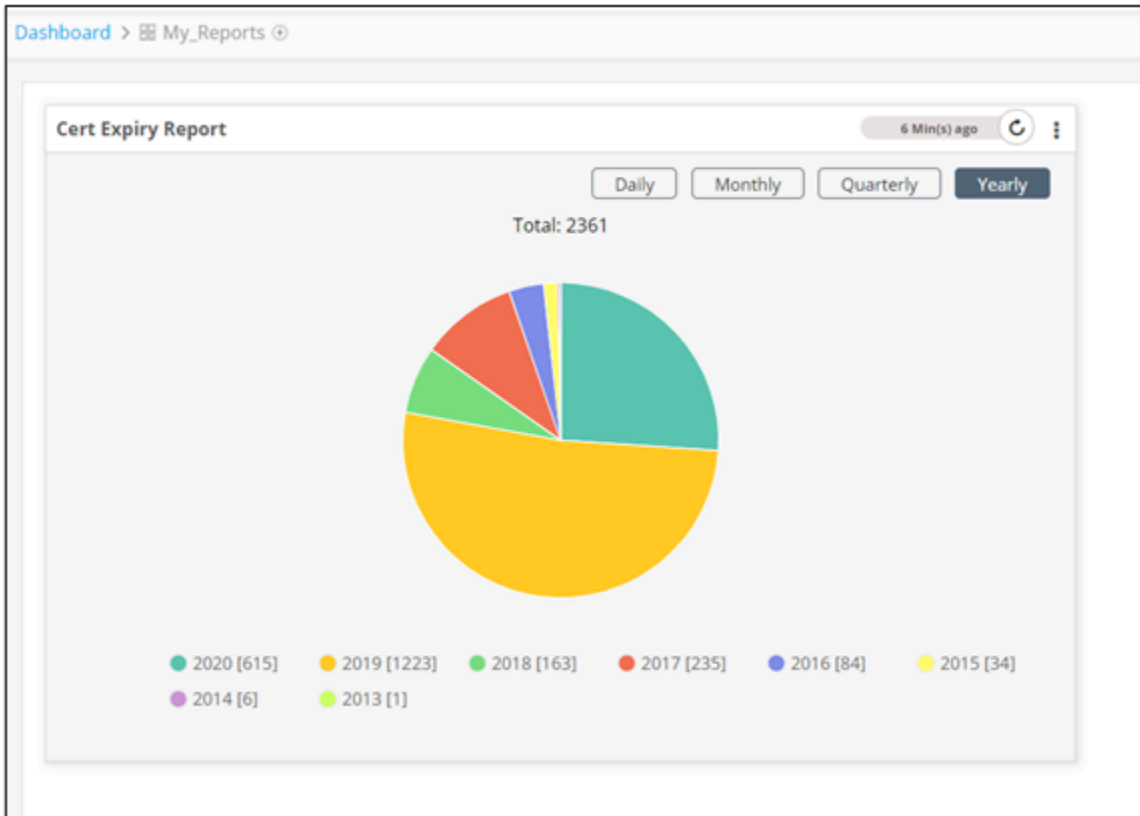
How to Download a Report in the PDF Format

1. From the **Dashboard** inventory page, select the dashboard on which the report that you wish to download has been pinned.

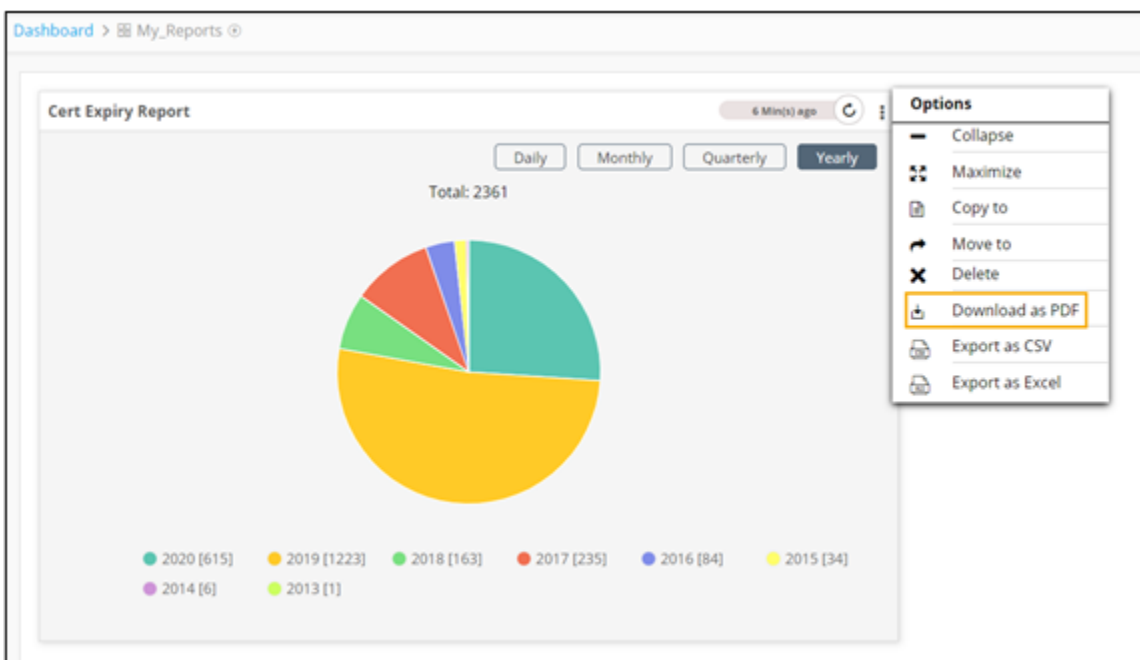


Note: For more information on how to search for a dashboard in the inventory, click [here](#).

The pinned report can be seen on the dashboard.



2. To download the report to your device as a PDF file, from the top right corner of the report, click .
3. From the **Options** dropdown menu, select **Download as PDF**.



The report will be downloaded to your machine as a PDF file.



Note: In the case of **Grid** reports, the PDF download only supports up to 1000 rows.

How to Download a Report in the CSV Format

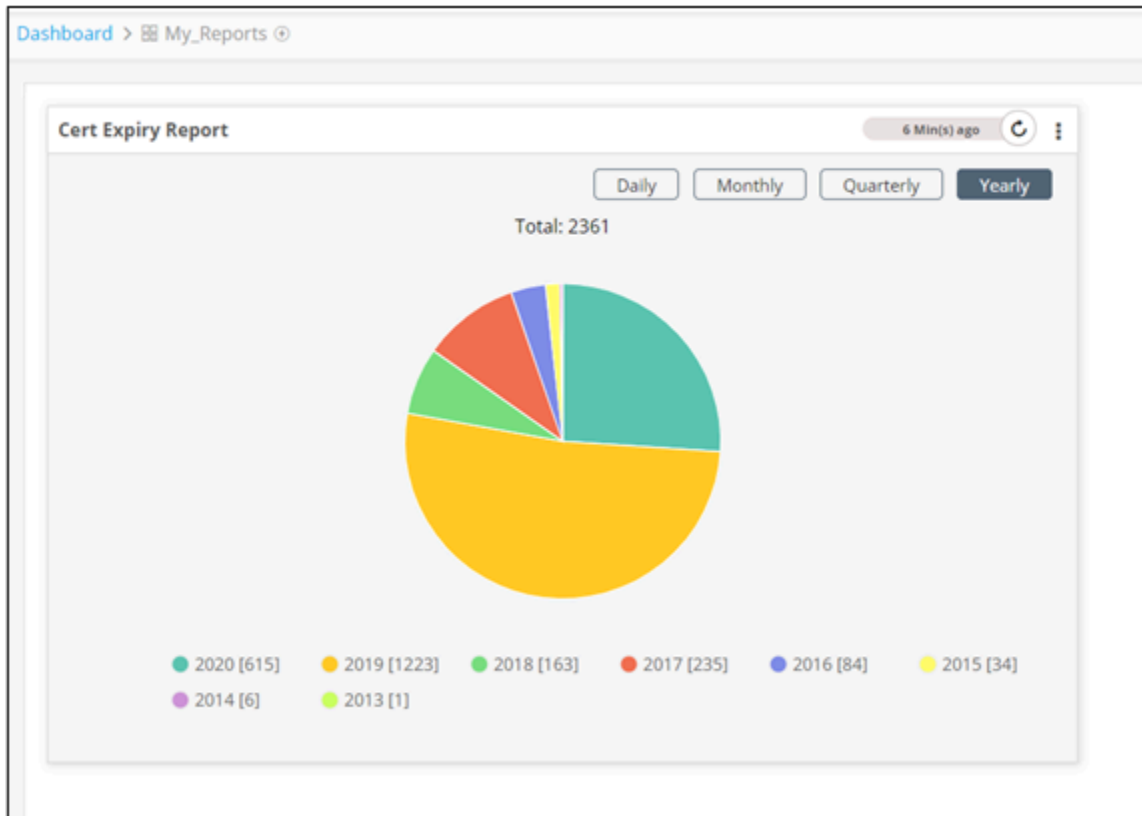
1. From the **Dashboard** inventory page, select the dashboard on which the report that you wish to download has been pinned.

Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
mydashboard	RW	Application view, Class management		
My Reports	RW	Reports		

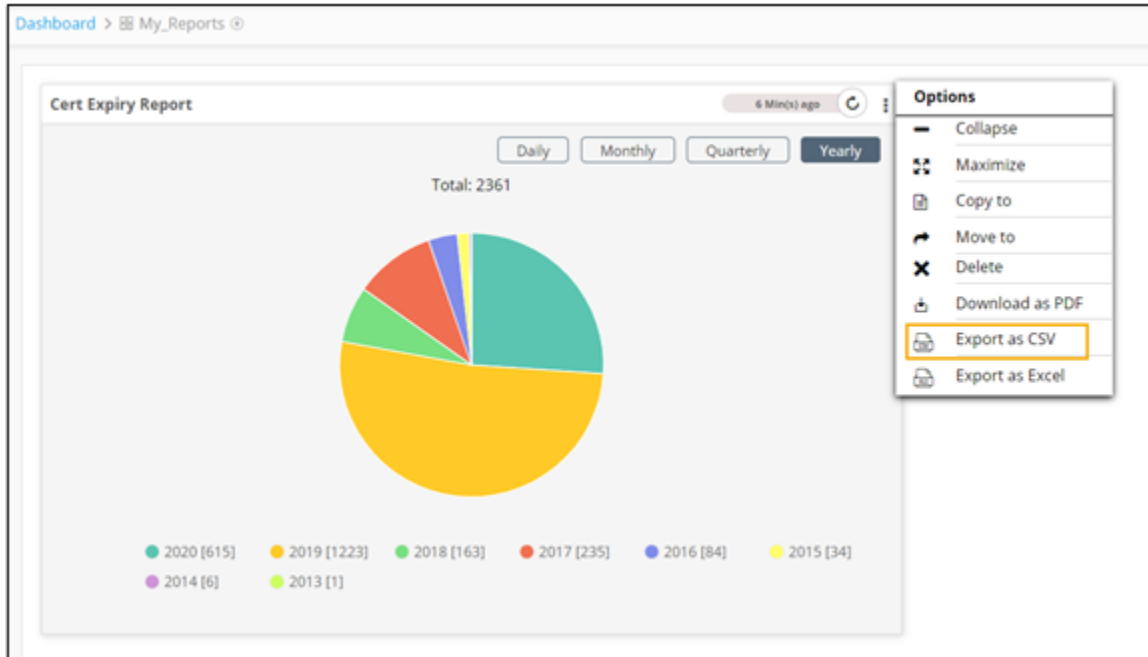


Note: For more information on how to search for a dashboard in the inventory, click [here](#).

The pinned report can be seen on the dashboard.



2. To download the report to your device as a PDF file, from the top right corner of the report, click .
3. From the **Options** dropdown menu, select **Export as CSV**.



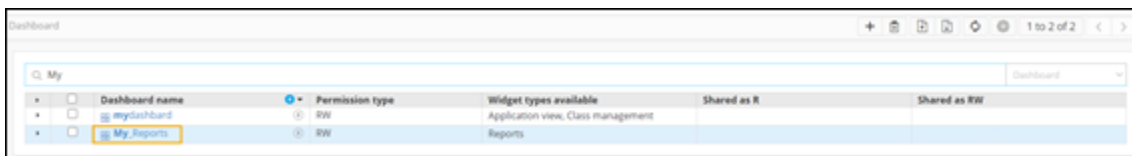
The report will be downloaded to your machine as a .csv file.



Note: In the case of **Grid** reports, the .csv file only supports up to 1,00,000 rows.

How to Download a Report as an Excel sheet

1. From the **Dashboard** inventory page, select the dashboard on which the report that you wish to download has been pinned.

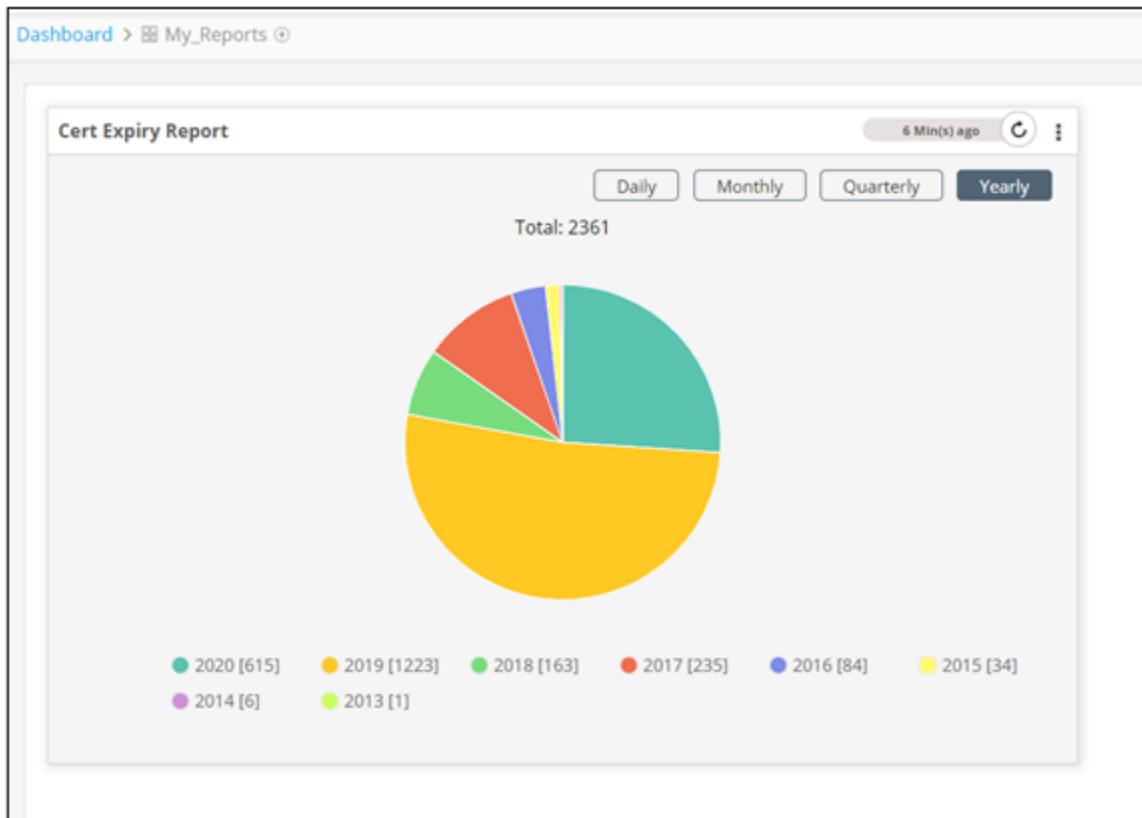


Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
mydashboard	RW	Application view, Class management		
My Reports	RW	Reports		

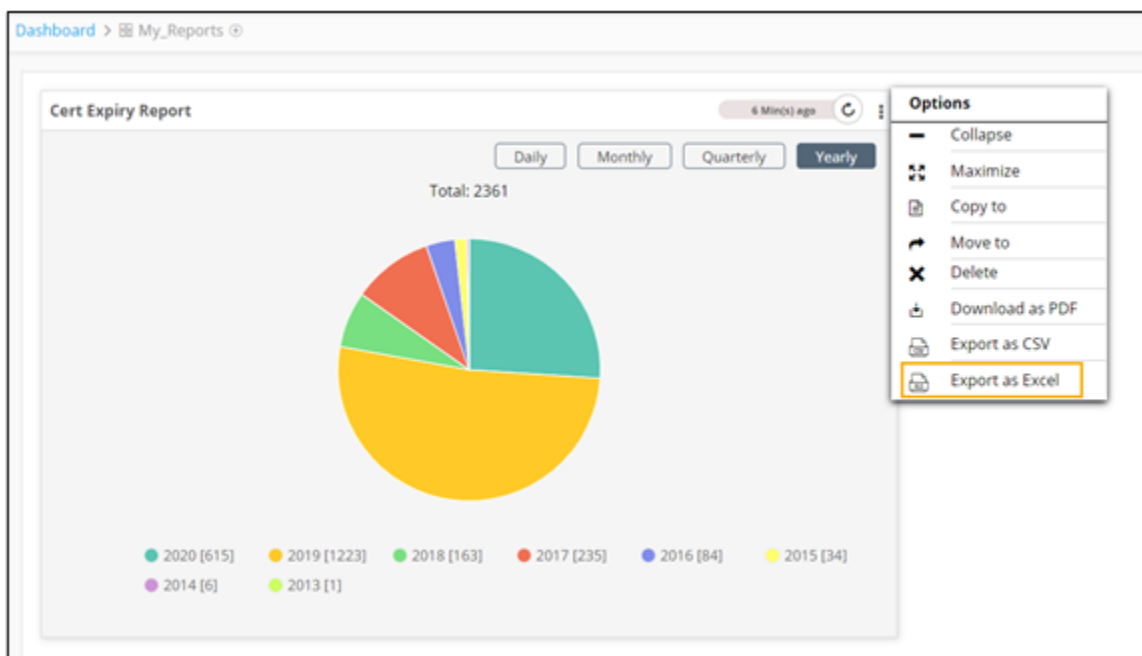


Note: For more information on how to search for a dashboard in the inventory, click [here](#).

The pinned report can be seen on the dashboard.



- To download the report to your device as a PDF file, from the top right corner of the report, click .
- From the **Options** dropdown menu, select **Export as Excel**.



The report will be downloaded to your machine as a .xls file.



Note: In the case of **Grid** reports, the .xls file only supports up to 1,00,000 rows.

Chapter 13: Performing Actions on Reports

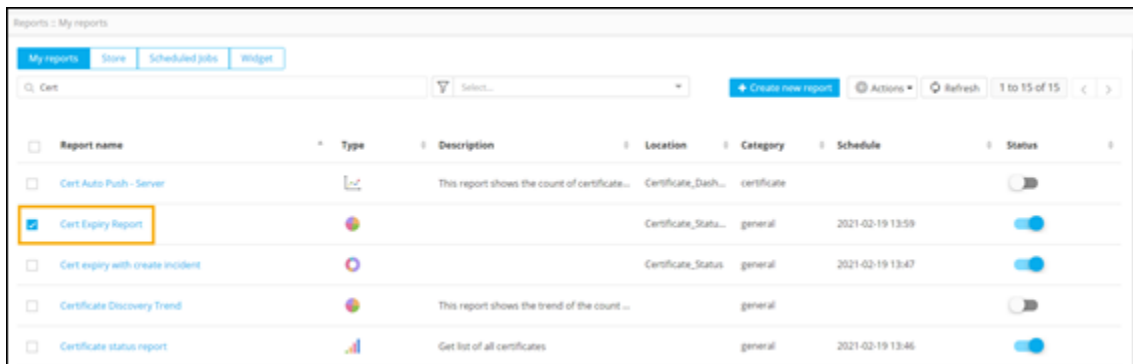
- [How to Pin Reports](#)
- [How to Clone Reports](#)
- [How to Share Reports](#)
- [How to Delete Reports](#)

How to Pin Reports

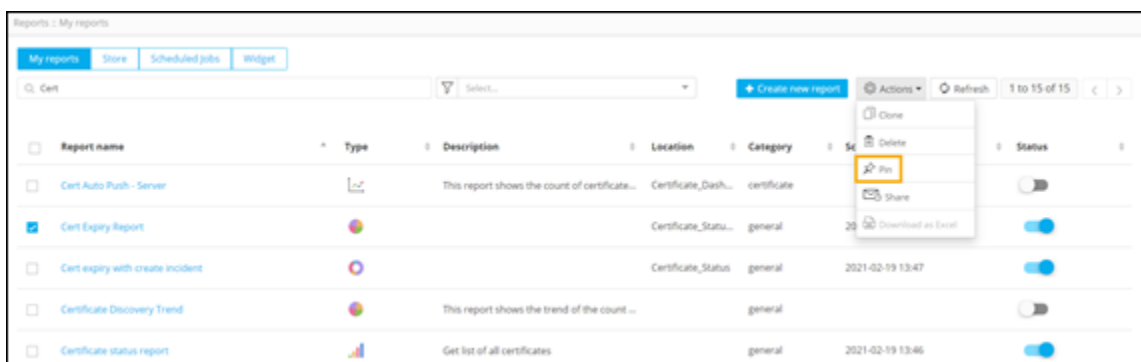
You can pin reports to a dashboard from the **My Reports** page. A maximum of 20 reports can be pinned to a dashboard. Pinning a report to the dashboard allows you to visualize different reports in the same place.

To pin a report to dashboard:

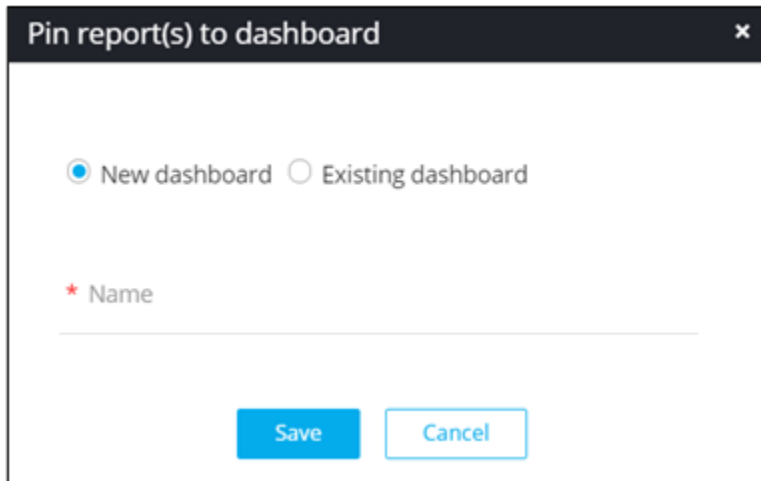
1. On the **Reports: My reports** page, under **My reports**, select the report to be pinned.



2. To see the list of available actions, click **Actions**.
3. From the list of available actions, select **Pin**.



4. In the **Pin report(s) to dashboard** window, select if the report is to be pinned to a new or existing dashboard.

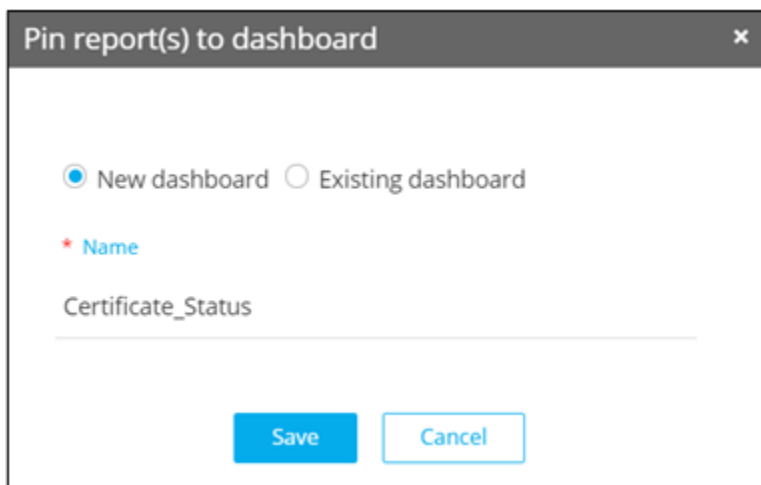


The dialog box titled "Pin report(s) to dashboard" has a close button (X) in the top right corner. It contains two radio buttons: "New dashboard" (selected) and "Existing dashboard". Below these is a text input field labeled with a red asterisk and the word "Name". At the bottom are two buttons: "Save" and "Cancel".

- [How to Pin a Report to a New Dashboard](#)
- [How to Pin a report to an Existing dashboard](#)

How to Pin a Report to a New Dashboard

1. In the **Pin report(s) to dashboard** window, select the **New dashboard** option.
2. Enter a name for the dashboard.



The dialog box titled "Pin report(s) to dashboard" has a close button (X) in the top right corner. It contains two radio buttons: "New dashboard" (selected) and "Existing dashboard". Below these is a text input field labeled with a red asterisk and the word "Name". The text "Certificate_Status" is entered in the field. At the bottom are two buttons: "Save" and "Cancel".

3. To pin the report to the new dashboard, click **Save**.
The new dashboard is listed on the **Dashboard Inventory** page.

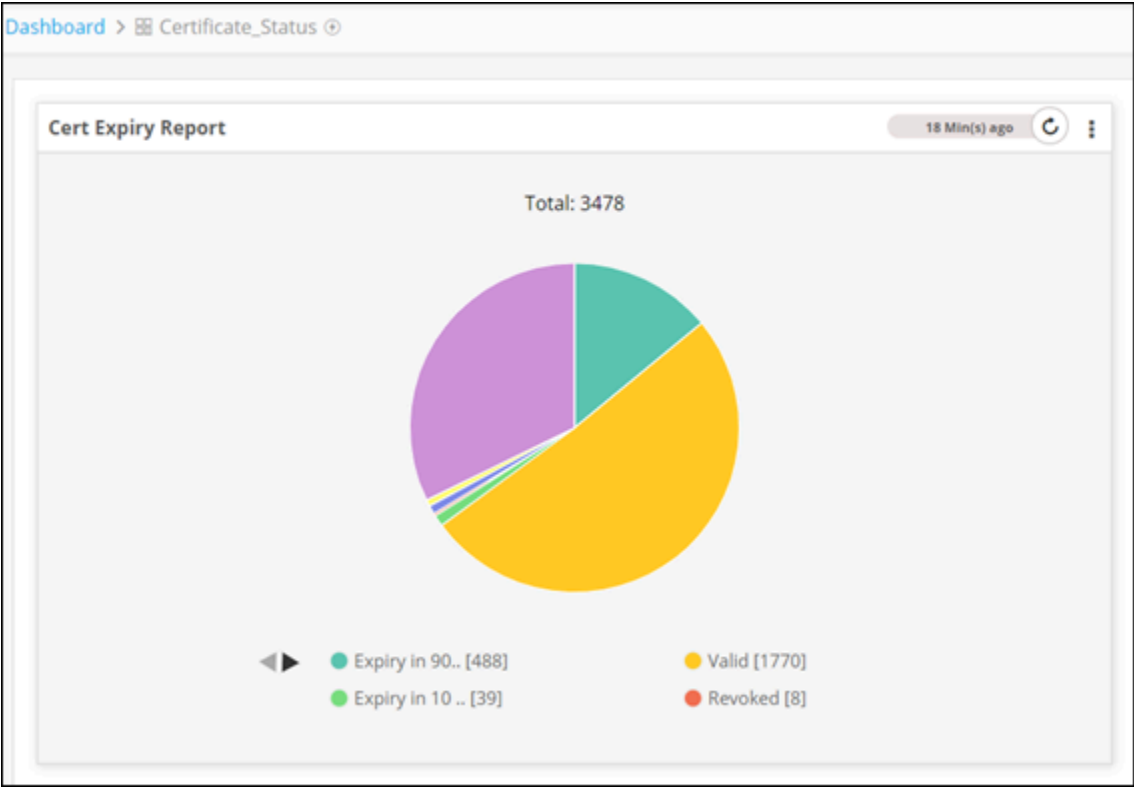
Dashboard

cert

Dashboard

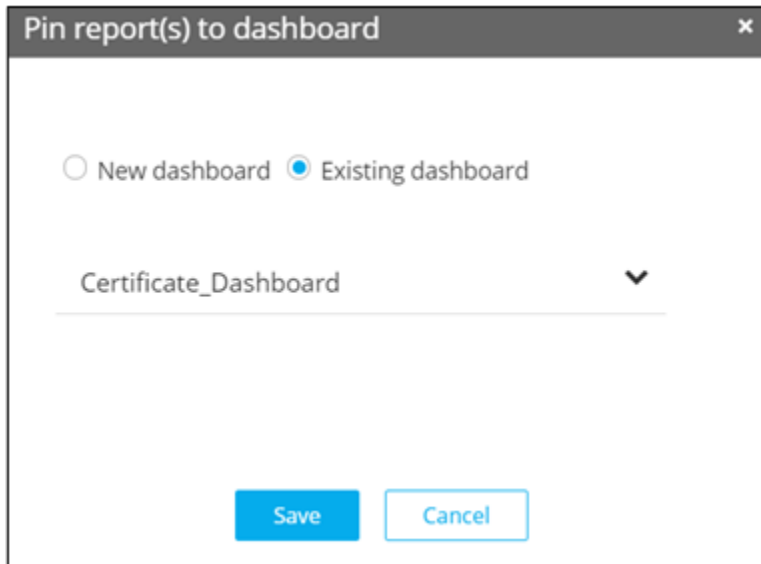
	Dashboard name	Permission type	Widget types available	Shared as R	Shared as RW
	ServerCertificate	RW	Report by Certificate Authority - Server,		admin usergroup, UG1, null, Externaluser, ...
	ClientCertificate	RW	Report by Certificate Authority - Client,		admin usergroup, UG1, null, Externaluser, ...
	CodeSigningCertificate	RW	Report By Certificate Authority - CodeSigning		admin usergroup, UG1, null, Externaluser, ...
	Certificate_Status	RW	Reports		
	Client_Certificate_Security	RW	Reports		admin usergroup, UG1, null, Externaluser, ...
	Server_Certificate_Security	RW	Reports		admin usergroup, UG1, null, Externaluser, ...
	Trust_Store_Certificates	RW	Reports		admin usergroup, UG1, null, Externaluser, ...

4. To view the pinned report, click on the dashboard name.



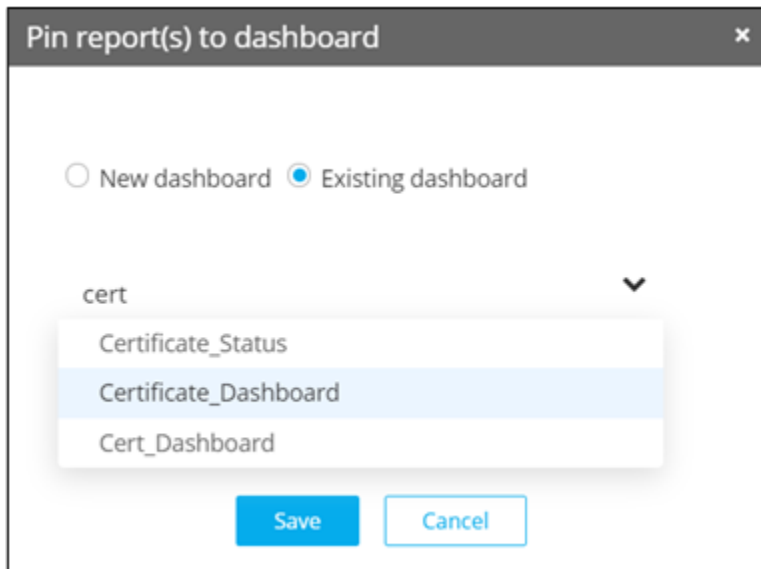
How to Pin a report to an Existing dashboard

1. In the **Pin report(s) to dashboard** window, select the **Existing Dashboard** option.



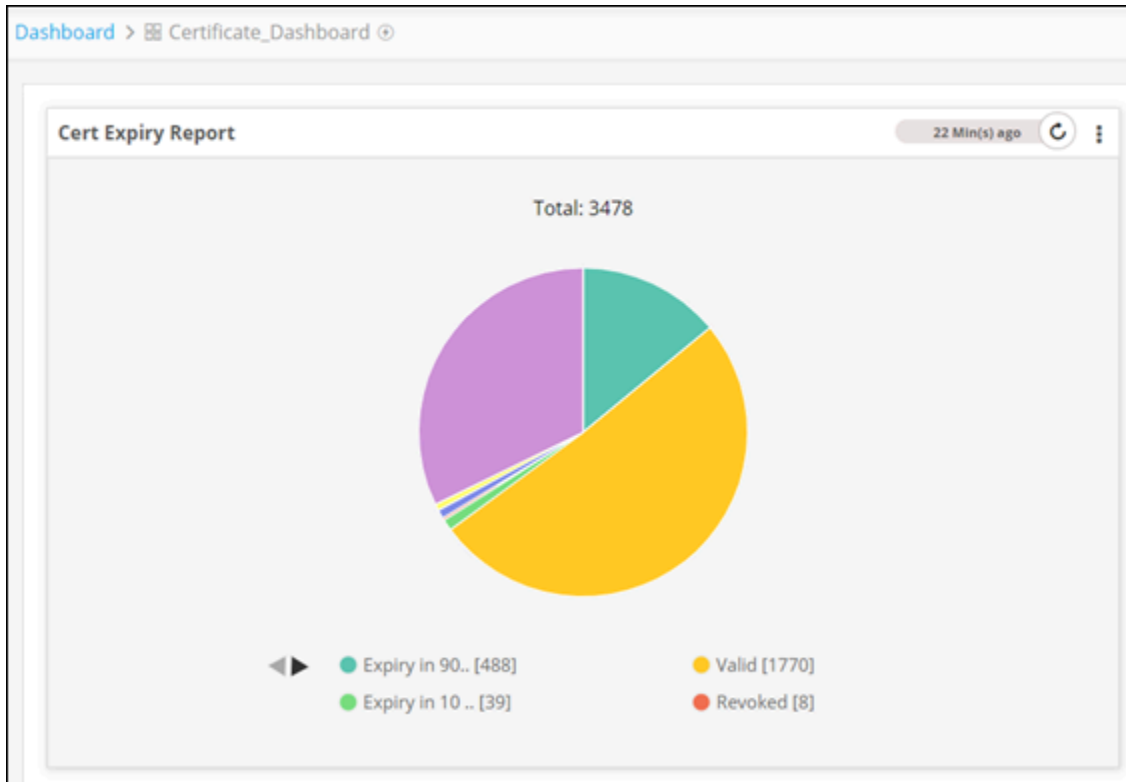
The screenshot shows a window titled "Pin report(s) to dashboard" with a close button (x) in the top right corner. Inside the window, there are two radio buttons: "New dashboard" (unselected) and "Existing dashboard" (selected). Below the radio buttons is a dropdown menu with the text "Certificate_Dashboard" and a downward arrow. At the bottom of the window are two buttons: "Save" (blue) and "Cancel" (white with blue border).

2. Select the dashboard from the dropdown menu.



The screenshot shows the same "Pin report(s) to dashboard" window. The "Existing dashboard" radio button is still selected. The dropdown menu is now open, showing a list of options: "Certificate_Status", "Certificate_Dashboard" (highlighted in blue), and "Cert_Dashboard". The text "cert" is visible above the dropdown list. The "Save" and "Cancel" buttons are still at the bottom.

3. To pin the report to the selected dashboard, click **Save**.
The report is displayed on the selected dashboard.

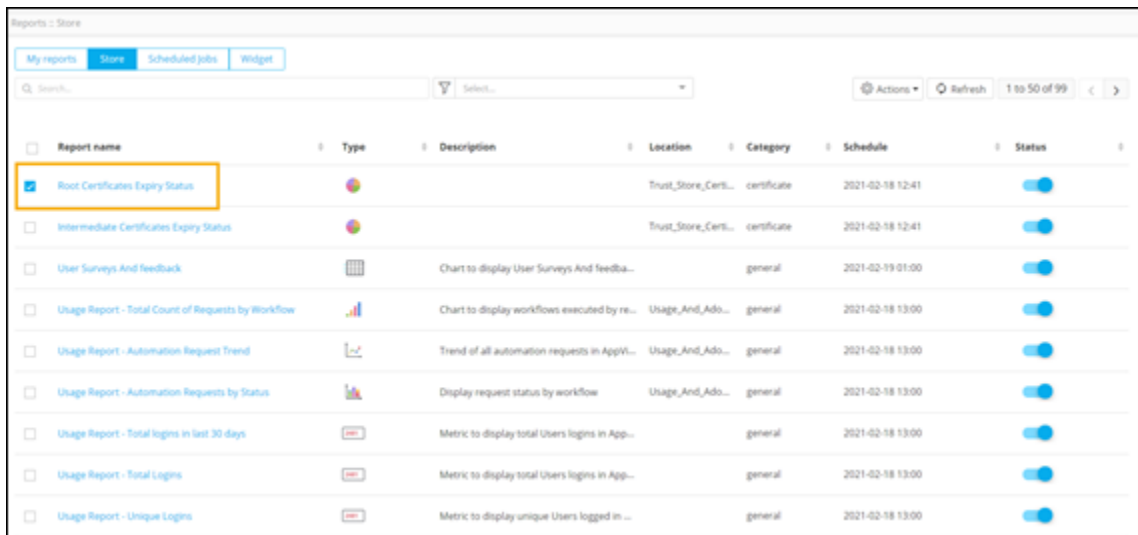


How to Clone Reports

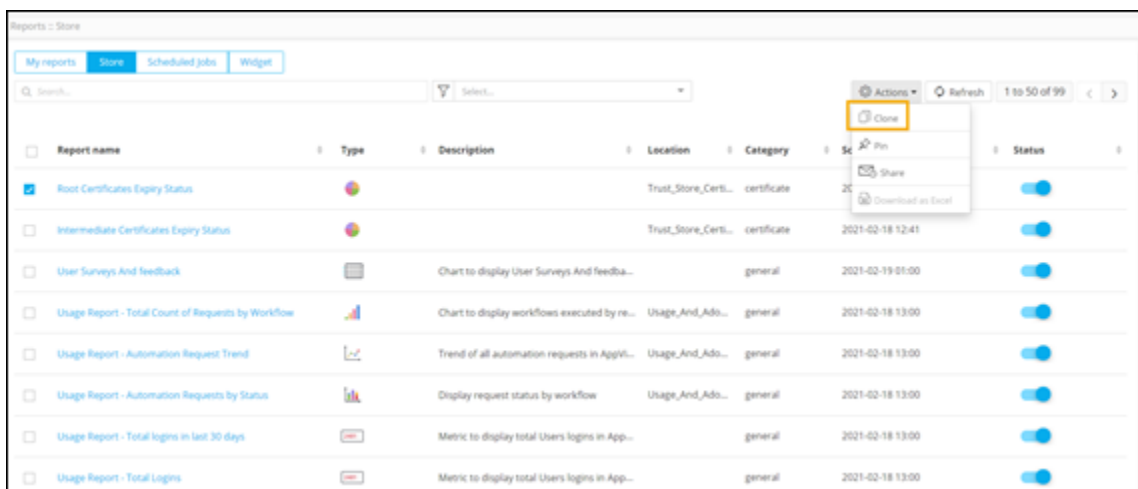
AppViewX's report builder allows you to clone a report. You can clone a report to make modifications, display additional data, and create additional levels of drilldown if not available in the previous report. Instead of creating a second report from scratch, you can clone an existing report and make the necessary changes.

To clone a report:

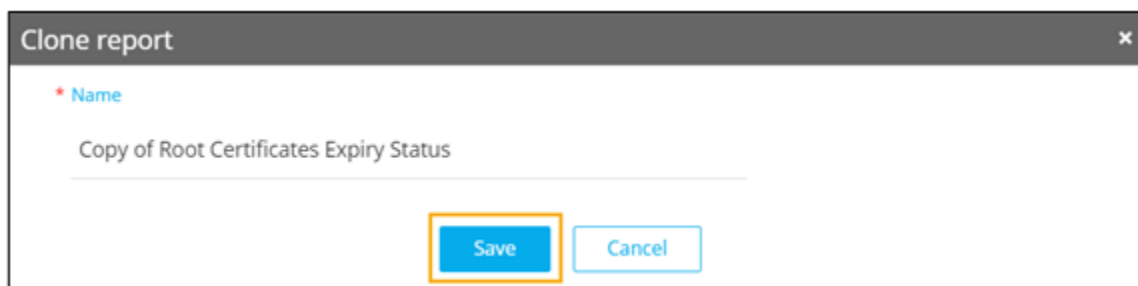
1. From the **Reports :: Store** page, select the report to be cloned.



2. To see the list of available actions, click **Actions**.
3. From the list of available actions, select **Clone**.



4. In the **Clone report** pop-up window, change the name of the report (if required) and click **Save**.



The cloned report is displayed on the **Reports :: My reports** page.

Report name	Type	Description	Location	Category	Schedule	Status
ADC Backup Status - Today			ADC_Backup_Re...	general	2021-02-18 11:18	
ADC OverAll Backup Status			ADC_Backup_Re...	general	2021-02-18 11:27	
Backup				general		
Cert Expiry Report			My_Reports	general		
Cert expiry with create incident				general		
Certificate Discovery Trend		This report shows the trend of the count ...		certificate		
Copy of Root Certificates Expiry Status				certificate		

How to Share Reports

Once a report is generated, it can be emailed either as inline content or as a PDF attachment to other users or user groups.



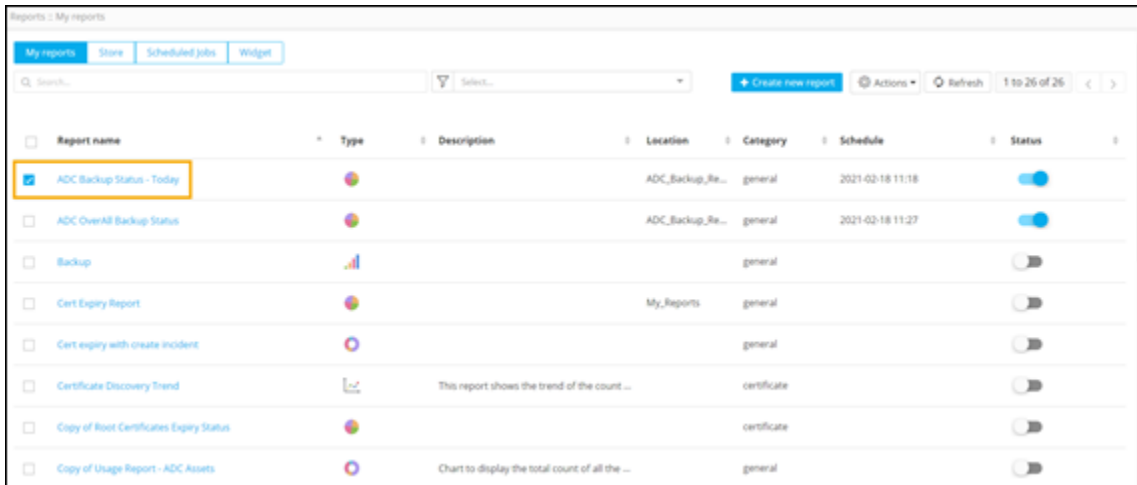
Note: For more information on sharing reports, click [here](#).

How to Delete Reports

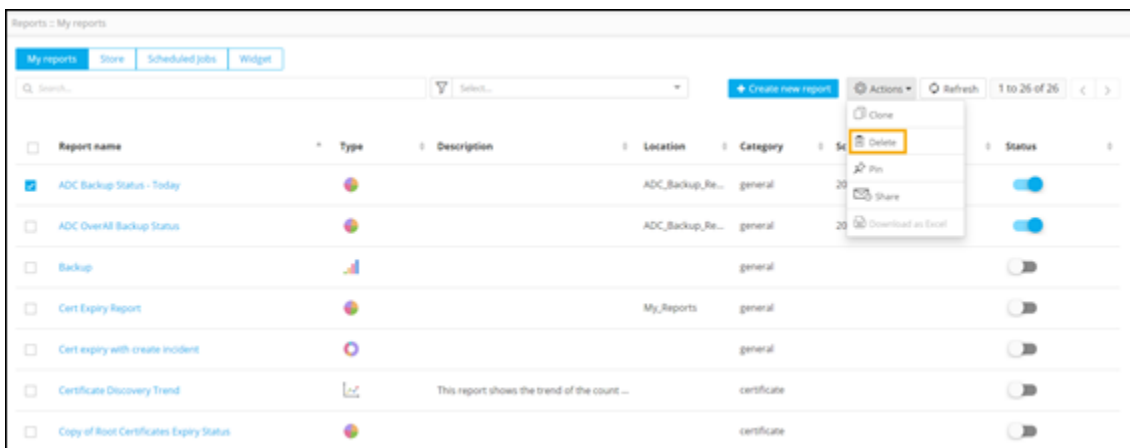
AppViewX's report builder also allows you to delete reports.

To delete a report:

1. On the **Reports :: My Reports** page, select the report to be deleted.



2. To see the list of available actions, click **Actions**.
3. From the list of available actions, select **Delete**.



4. To delete the selected report, click **Yes** in the **Confirm delete** pop-up window.

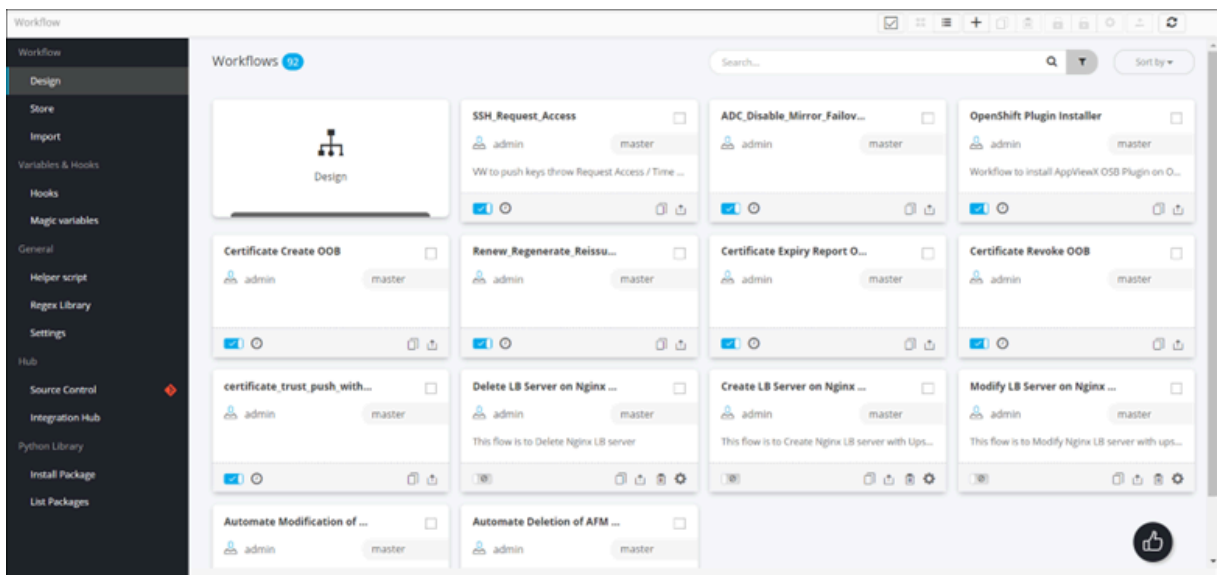
Chapter 14: BYOR with Actionable Workflow

You can build customized reports, pin them to the dashboard, and assign one or more closed loop workflows for quick actions. These workflows can be triggered at specific time intervals to gather data and integrate it into the reports. Assigning a workflow to your reports aids in elimination of redundant tasks, reduces processing time, improves efficiency, and gives greater visibility.

To assign an actionable workflow to your report:

1. From the top left corner of the screen, click .
2. From the menu displayed, select **Studio > Workflow**.

The **Workflow** inventory is displayed.



3. To create a new workflow, click **Create New**.
4. Enter or select the field information.

The screenshot shows the AppViewX Workflow configuration interface. The 'Workflow' tab is selected. A modal form is open for creating a new workflow. The form fields are:

- Name:** Generate AppViewX Certificate
- Description:** (Empty text area)
- Category:** A dropdown menu is open, showing a list of categories. 'Actionable-Reports' is selected and highlighted in blue.
- Subcategory:** (Empty text area)

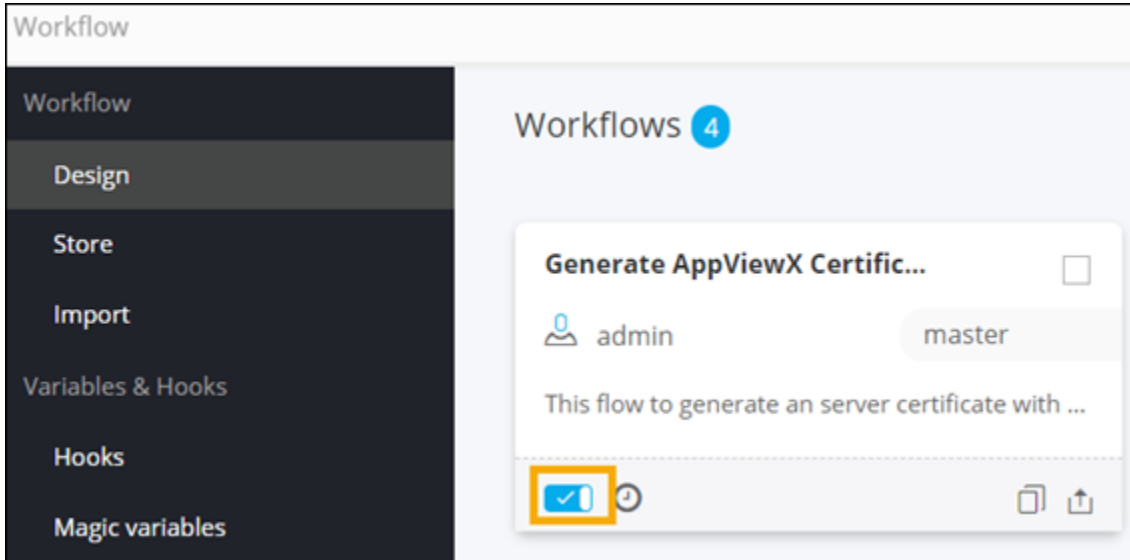
A 'Save' button is located at the bottom right of the form. The left sidebar contains various navigation items, including Sources, Groups, Channels, UI Users, Notes, Applications, IPAM, DevOps, Certificates, ITSM, GitOps, Reports, Network, Solutions, Utilities, and FAQs.

The following table describes the various fields in this section:

Field	Description
*Name	Enter a valid name for the workflow. For example: Generate AppViewX Certificate .
Description	Enter a description for the workflow.
Category	Select the category as Actionable-Reports from the dropdown list.
Subcategory	The subcategory is set to default .

Field	Description
The asterisk (*) indicates mandatory fields.	

5. To enable the workflow, on the **Workflow** Inventory page, turn on the toggle.



6. On the [Reports :: My Reports](#) page, click **Create new report**.

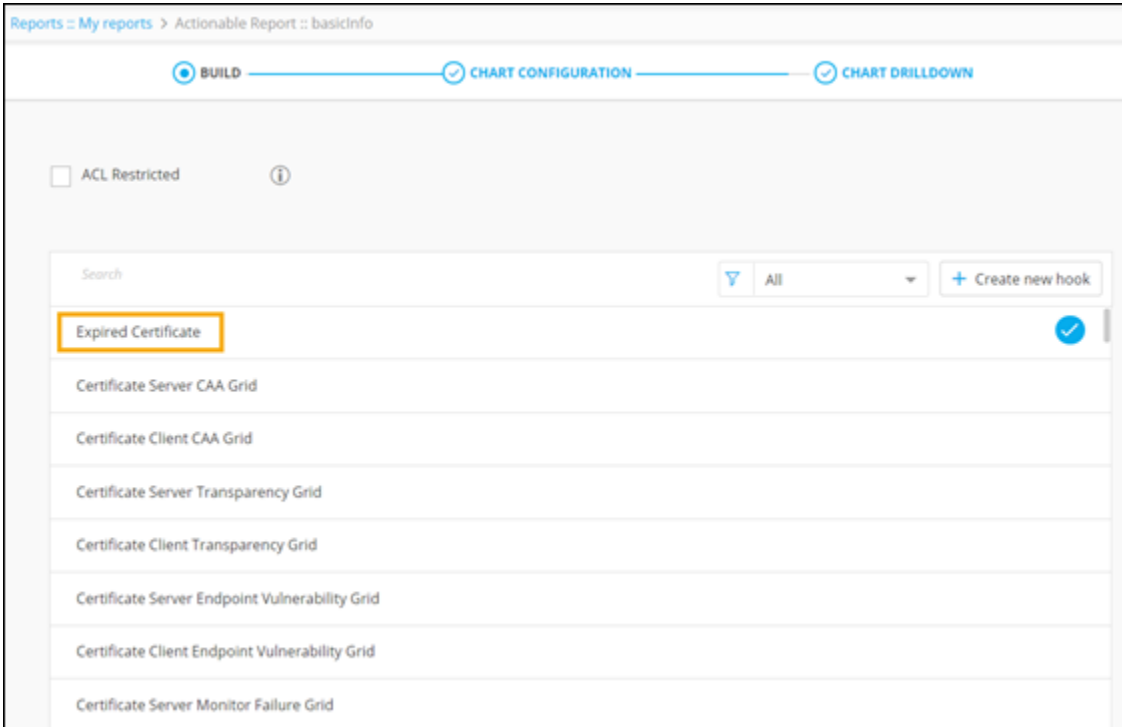
7. Under the **BUILD** section, enter or select the field information.

The following table describes the fields under this section:

Field	Description
*Report name	Enter a valid report name. For example: Actionable Report .

Field	Description
Description	Enter a description of the report.
*Select category	Select the category as certificate from the dropdown.
All asterisk (*) marked fields are mandatory.	

8. Select the hook from the list.



9. To save your selections, click **Next**.

10. Under the **CHART CONFIGURATION** section, select the chart type as **BAR**.

11. Select the field information for creating the chart.

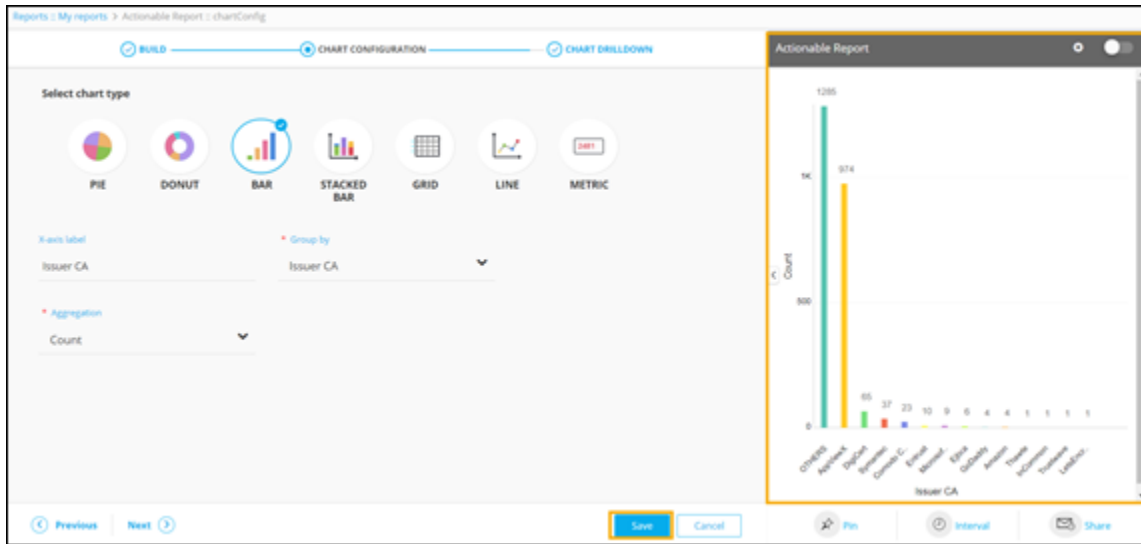
X-axis label	* Group by
Issuer CA	Issuer CA ▼
* Aggregation	
Count ▼	

This table describes the field information in this section:

Field	Description
X-axis label	Enter the criteria for the X-axis label. For example: Issuer CA .
*Group by	Select a value from the dropdown list on the basis of which report data will be grouped. For example: Issuer CA .
*Aggregation	Select the calculation to be done on the report data for the dropdown. The following options are available: • Average: Calculates the average value of a given set of data. • Sum: Calculates the sum of all values in a given set of data. • Count: Calculates the total number of items in a given numeric field. • Maximum: Displays the maximum value in a given set of data. • Minimum: Displays the minimum value in a given set of data.
All asterisk (*) marked fields are mandatory.	

12. Click **Save**.

A preview of the chart is generated on the right side of the screen.



13. To add **Chart Drilldown**, click **Next**.

14. Select drilldown type as **Chart**.

Reports :: My reports > Actionable Report :: chartDrilldown

BUILD CHART CONFIGURATION CHART DRILLDOWN

☒ Do you want to add drill down to the chart?

Select drill down type: ☐ Set redirect URL ☒ Chart

15. Select the chart type as **GRID**.

Select chart type

PIE DONUT BAR STACKED BAR GRID LINE METRIC

16. Enter the Chart **title** as **Generate Certificate**.

Select chart type









PIE DONUT BAR STACKED BAR GRID LINE METRIC

* Chart title
Generate Certificate

17. To select the column headers to be displayed within the grid, click .

Selected columns are displayed on the right.

Columns

Select all >>

Search

- Private Key Available >>
- Certificate Status >>
- Compliance Status >>
- Certificate Category >>
- Certificate UUID >>
- Hash Algorithm >>
- Key Algorithm >>
- Bit length >>
- Email Address >>
- Serial number >>
- Group >>
- Subject organization >>
- Subject organization unit >>

Selected columns

Search

- << Common Name ↑↓
- << Certificate Expiry Date ↑↓
- << Expiry Status ↑↓
- << Issuer CA ↑↓

18. Enter or select the field information to associate a workflow with the report.

Trigger

* Action name

Generate Cert

* Select a workflow

Generate AppViewX Certific... ▼



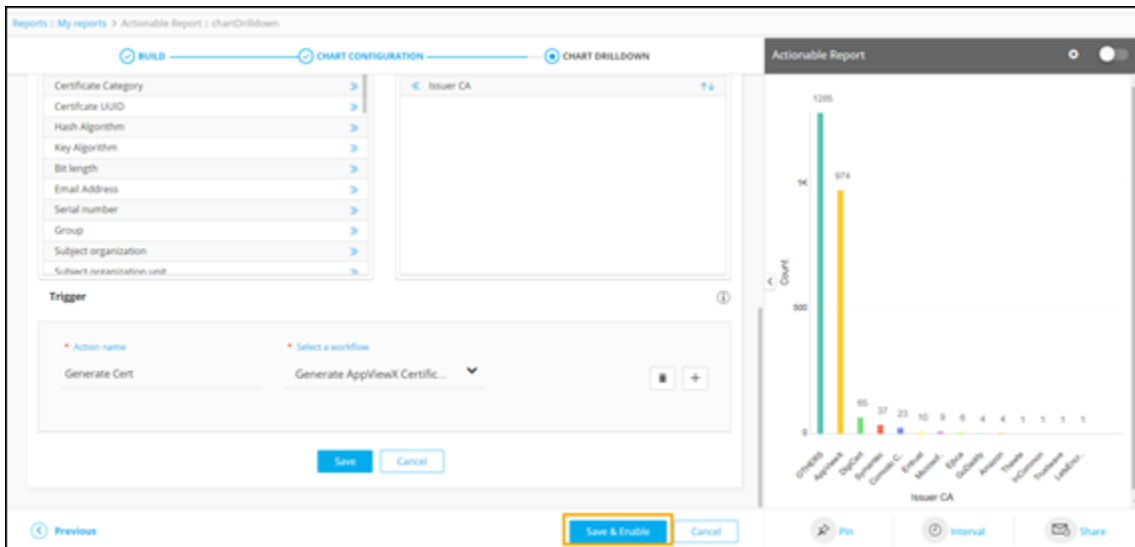

Save

Cancel

This table describes the field information in this section:

Field	Description
*Action name	Enter a valid action name. For example: Generate Cert.
*Select a workflow	Select the workflow that was created (Generate AppViewX Certificate) from the dropdown menu.
The asterisk (*) indicates mandatory fields.	

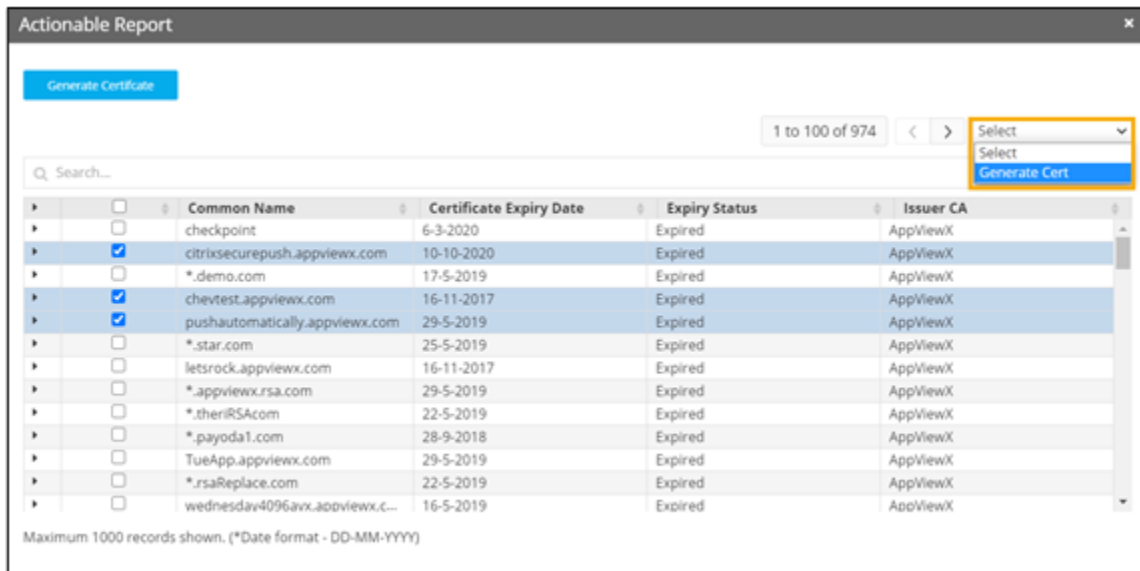
19. To enable the workflow, click **Save & Enable**.



20. To display the chart drilldown, click any of the bars in the graph.

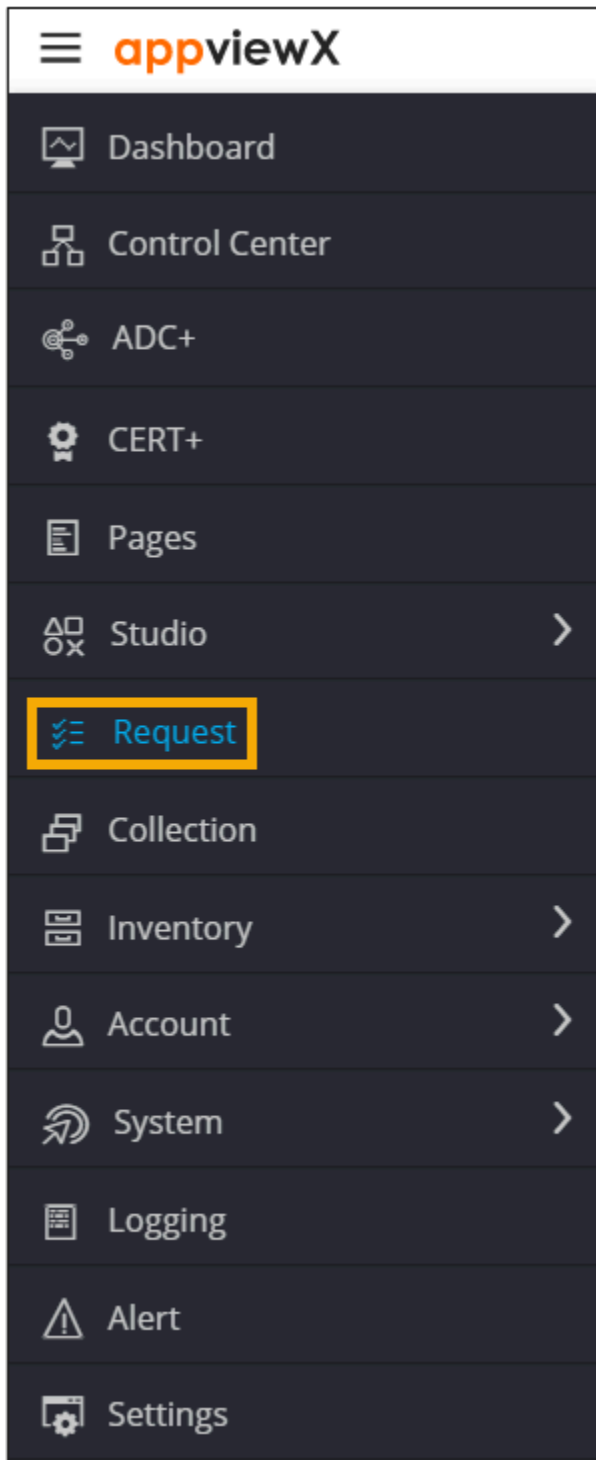
21. Select the **Common Name** for the actionable workflow.

22. To trigger the workflow, select the workflow from the dropdown menu.



23. From the top left corner of the screen, click .

24. From the menu displayed, click **Request**.



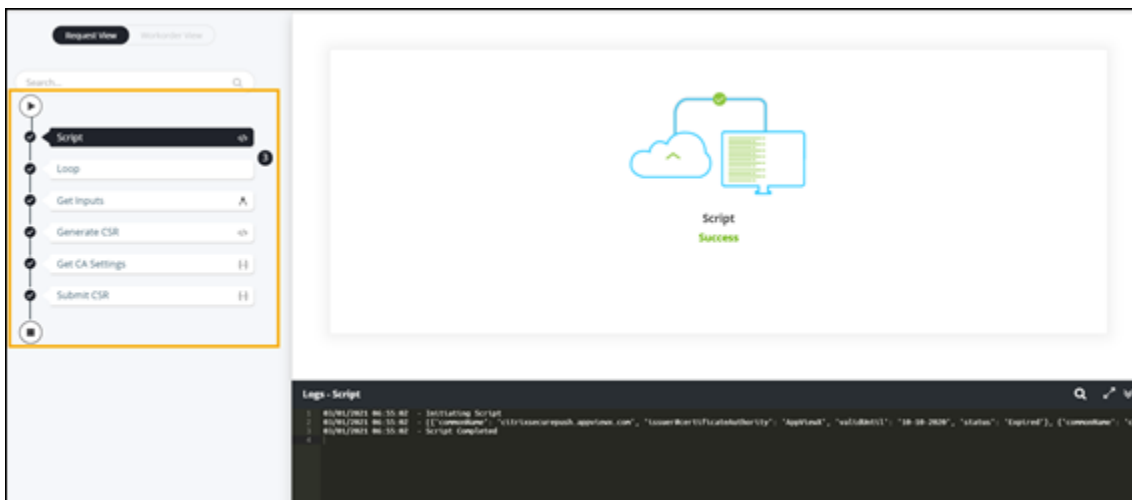
25. On the **Request** page, from the navigation pane on the left, select **All**.

26. On the **Request :: All** page, select the workflow **Request ID**.

Mon Mar 01 2021 06:30:53 GMT-0500 (EST) 1 to 100 of 1,196

Request ID	Workflow	Created by	Created time	Last updated	Status	Ref. ID	Activity log
1196	certificate_discovery_rule	system	03/01/2021 03:56:06	03/01/2021 03:56:07	Completed		View
1195	Generate AppViewX Certificate	admin	03/01/2021 01:26:11	03/01/2021 01:26:15	Completed		View
1194	Generate AppViewX Certificate	admin	03/01/2021 01:20:35	03/01/2021 01:20:40	Completed		View
1193	Generate AppViewX Certificate	admin	03/01/2021 01:18:34	03/01/2021 01:18:38	Completed		View
1192	Generate AppViewX Certificate	admin	03/01/2021 01:15:40	03/01/2021 01:15:45	Completed		View
1191	Generate AppViewX Certificate	admin	03/01/2021 01:13:08	03/01/2021 01:13:12	Completed		View
1190	Generate AppViewX Certificate	admin	03/01/2021 01:12:40	03/01/2021 01:12:43	Completed		View
1189	Generate AppViewX Certificate	admin	03/01/2021 01:12:35	03/01/2021 01:12:38	Completed		View
1188	Generate AppViewX Certificate	admin	03/01/2021 01:10:11	03/01/2021 01:10:13	In Progress		View
1187	Generate AppViewX Certificate	admin	03/01/2021 01:10:05	03/01/2021 01:10:06	In Progress		View
1186	certificate_adc_push_and_bind	admin	02/28/2021 05:59:20	02/28/2021 05:59:56	Completed		View
1185	certificate_adc_push_and_bind	admin	02/28/2021 05:50:15	02/28/2021 05:50:59	Failed		View
1184	certificate_adc_push_and_bind	admin	02/28/2021 05:50:14	02/28/2021 05:50:48	Failed		View
1183	certificate_discovery_rule	system	02/28/2021 03:58:04	02/28/2021 03:58:04	Completed		View
1182	certificate_discovery_rule	system	02/27/2021 13:02:13	02/27/2021 13:02:14	Completed		View
1181	certificate_cloud_push_withou...	system	02/27/2021 13:02:08	02/27/2021 13:02:16	Completed		View
1180	certificate_renew_request	admin	02/26/2021 11:12:16	02/26/2021 11:12:19	Completed		View
1179	certificate_renew_request	admin	02/25/2021 09:40:52	02/25/2021 09:40:54	Completed		View
1178	certificate_renew_request	admin	02/25/2021 08:40:07	02/25/2021 08:40:09	Completed		View
1177	certificate_new_request	admin	02/25/2021 08:39:29	02/25/2021 08:39:32	Completed		View
1176	certificate_renew_request	admin	02/25/2021 07:33:02	02/25/2021 07:33:05	Completed		View
1175	certificate_new_request	admin	02/25/2021 07:32:36	02/25/2021 07:32:39	Completed		View
1174	certificate_new_request	admin	02/25/2021 07:09:43	02/27/2021 13:02:11	Completed		View
1173	certificate_renew_request	admin	02/25/2021 07:08:41	02/25/2021 07:08:44	Completed		View
1172	certificate_new_request	admin	02/25/2021 07:07:49	02/25/2021 07:07:55	Completed		View
1171	certificate_new_request	admin	02/25/2021 07:06:32	02/25/2021 07:06:35	Completed		View
1170	certificate_renew_request	admin	02/25/2021 07:04:49	02/25/2021 07:04:51	Completed		View
1169	certificate_new_request	admin	02/25/2021 07:04:18	02/25/2021 07:04:20	Completed		View
1168	certificate_rollback_adc	admin	02/25/2021 05:08:18	02/25/2021 05:09:09	Completed		View
1167	certificate_adc_push_and bind	admin	02/25/2021 05:04:58	02/25/2021 05:06:43	Completed		View

A stage-wise view of the workflow is displayed.



27. To view the payload that was passed for the actionable workflow, click **Script**.
28. To see successful completion of the workflow, click **Submit CSR**.

Chapter 15: User Feedback and Survey Reports

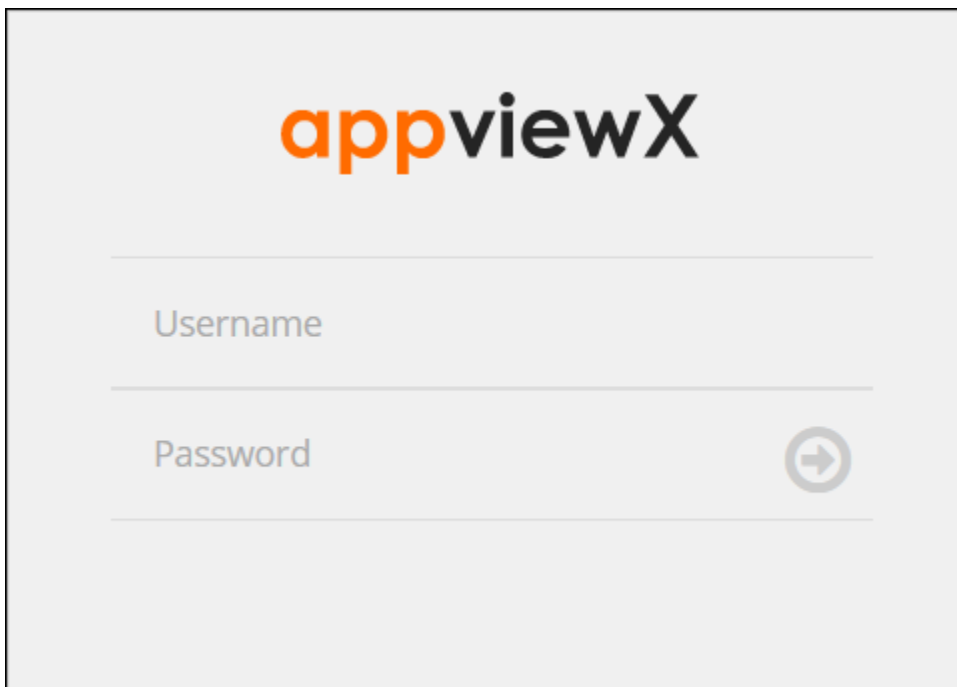
- [Overview](#)
- [Submitting a Feedback](#)
- [Enabling/Disabling the Feedback Option](#)

Overview

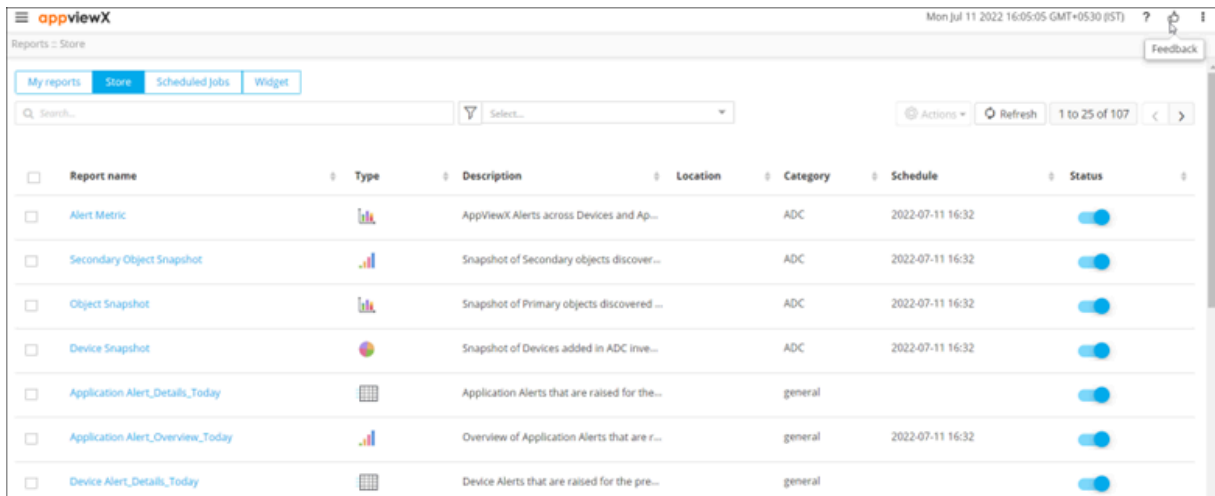
AppViewX hosts a user feedback feature on its report building platform, where users can rate their experience with the report builder and also submit a descriptive comment on the tool. This feedback can then be used to create reports to track customer experience.

Submitting a Feedback

1. Log into AppViewX.

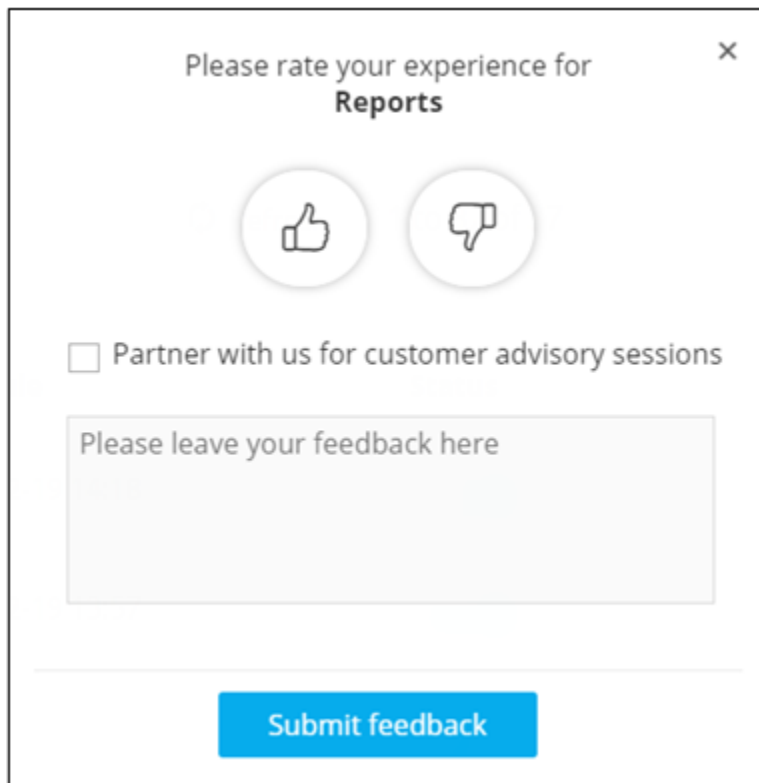


2. From the top right corner of the screen, click  .



Report name	Type	Description	Location	Category	Schedule	Status
☐ Alert Metric		AppViewX Alerts across Devices and Ap...		ADC	2022-07-11 16:32	☒
☐ Secondary Object Snapshot		Snapshot of Secondary objects discover...		ADC	2022-07-11 16:32	☒
☐ Object Snapshot		Snapshot of Primary objects discovered ...		ADC	2022-07-11 16:32	☒
☐ Device Snapshot		Snapshot of Devices added in ADC inve...		ADC	2022-07-11 16:32	☒
☐ Application Alert_Details_Today		Application Alerts that are raised for the...		general		☒
☐ Application Alert_Overview_Today		Overview of Application Alerts that are r...		general	2022-07-11 16:32	☒
☐ Device Alert_Details_Today		Device Alerts that are raised for the pre...		general		☒

3. Enter feedback comments in the popup window.



Please rate your experience for
Reports

☐ ☐

☐ Partner with us for customer advisory sessions

Please leave your feedback here

Submit feedback

4. Click **Submit feedback**.

The **User Surveys and feedback** report on the **Store** page gives detailed information on user feedback.

Reports : Store

My reports **Store** Scheduled jobs Widget

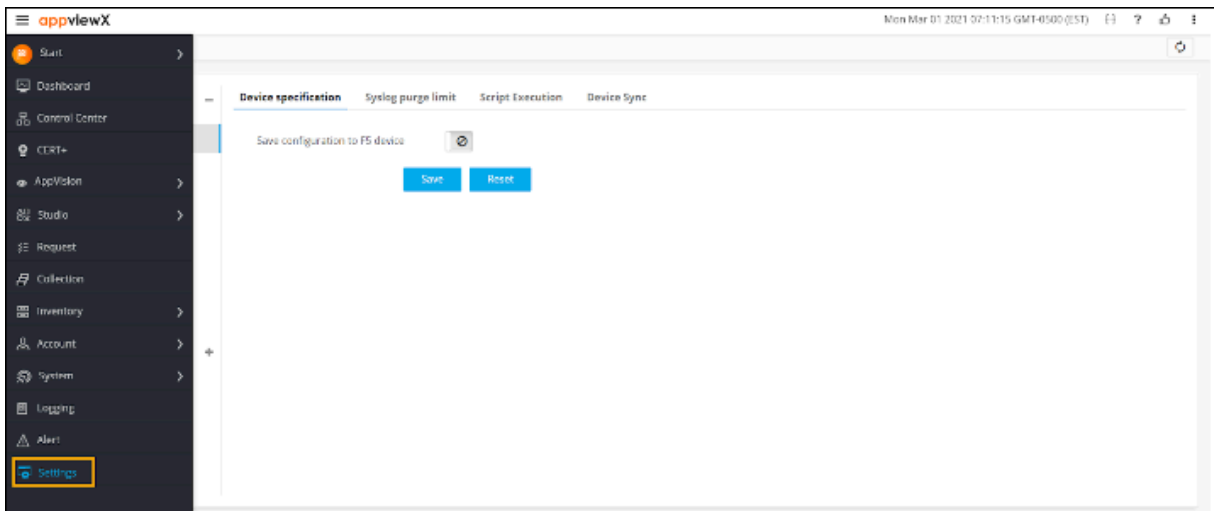
Search: Select...

Actions Refresh 1 to 97 of 97

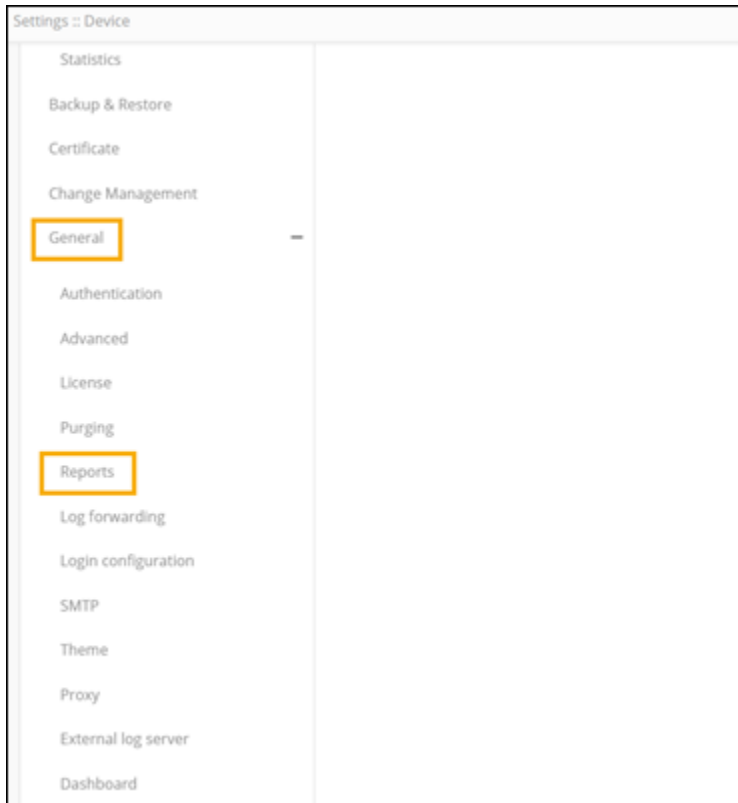
☐	Report name	Type	Description	Location	Category	Schedule	Status
☐	User Surveys And Feedback		Chart to display User Surveys And feedba...		general	2021-02-24 19:30	☒
☐	Usage Report - Total Count of Requests by Workflow		Chart to display workflows executed by re...	Usage_And_Ad...	general	2021-02-24 19:30	☒
☐	Usage Report - Automation Request Trend		Trend of all automation requests in Appli...	Usage_And_Ad...	general	2021-02-24 19:30	☒
☐	Usage Report - Automation Requests by Status		Display request status by workflow	Usage_And_Ad...	general	2021-02-24 19:30	☒
☐	Usage Report - Total logins in last 30 days		Metric to display total Users logins in App...		general	2021-02-24 19:30	☒
☐	Usage Report - Total Logins		Metric to display total Users logins in App...		general	2021-02-24 19:30	☒
☐	Usage Report - Unique Logins		Metric to display unique Users logged in ...		general	2021-02-24 19:30	☒
☐	Usage Report - Available Users		Metric to display available Users in AppV...		general	2021-02-24 19:30	☒
☐	Usage Report - Available Users Groups		Metric to display available User Groups in...		general	2021-02-24 19:30	☒

Enabling/Disabling the Feedback Option

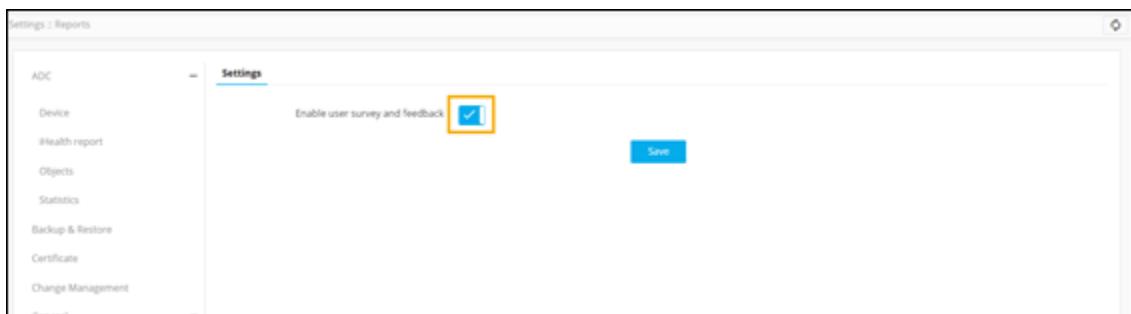
1. From the top left corner of the screen, click .
2. From the menu displayed, click **Settings**.



3. On the **Settings** page, under **General**, select **Reports**.



4. To enable feedback, turn on the toggle. To disable feedback, turn off the toggle.



5. Click **Save**.

Chapter 16: Best Practices

Listed here are some best practices that will help you build visually engaging, insightful and effective reports:

- **Identifying target audience and their requirements**

Before you even start building reports, it is important to know who the target audience or end user is. Meeting with them to know about their specific requirements is crucial to build comprehensive reports that display complete and accurate information.

- **Choosing the right chart**

The right chart or graph can help you display your data most efficiently and effectively. Pie charts can be used for fewer data points, while bar graphs can be used to show comparison among categories. Line charts, on the other hand, are most useful for showing changes over a period of time. Choosing the wrong chart can create confusion and the data might even be interpreted incorrectly. The Reports module offers seven different chart types to choose from.

- **Highlighting key areas**

Using colors to highlight key areas is a powerful way to guide the end users to important data. However, the choice of colors is crucial and overuse of colors in your reports may be distracting. The **Reports** module offers color code mapping for pie charts, donut charts, bar charts, and stacked bar charts.

- **Grouping related metrics together on Dashboard**

It is important to group related metrics together to help the end user quickly make connections between the data on a dashboard. The **Reports** module has a provision for moving widgets around on the dashboard so that you can keep related widgets/reports in one place.

- **Adding interactive elements**

Using the **Chart Drilldown** feature in the **Reports** module is a great way to ensure that your reports are interactive. Displaying high level data first and allowing the user to drill down for further details keeps the user engaged.

- **Keeping it simple**

Last, but not least, keep your reports simple. Do not clutter it with too much information and avoid using too many colors. Prioritize readability by making them visually appealing and easy to understand.

Chapter 17: Troubleshooting

Following are the common issues you may face when working with the **Reports** module:

Issue	Cause	Solution
There is something wrong with my Scheduled Job.	Avx_platform_report_generator plugin is disabled.	Check plugin status and enable it.
Report pinned to dashboard shows error message.	Report is not enabled.	Enable the report on My Reports page.
I am not able to edit a report in the Store .	Prebuilt reports in the Store cannot be edited .	Clone the report and customize it as per your need.
Schedule time elapsed error while defining the interval.	Time entered is the same as the current time.	Enter a time which is 1-2 minutes later than the current time.

In case of any other issues with the **Reports** module, users can access the following logs for further investigation:

- avx-subsystems log
- avx-commons log