SAS® Viya® 3.4 Administration: Using SAS® Environment Manager

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What Is SAS Environment Manager?

SAS Environment Manager is a web application for managing a SAS Viya environment. It includes a dashboard view, which provides a quick overall look of your environment's health and status, as well as detailed views that enable you to examine and manage your environment in detail.

You can use the application to manage these areas of your environment (some of these functions might not be available to you, depending on your role and the products that are installed):

Data
: CAS tables, caslibs, other data sources

Servers
: configuration and information for CAS servers and launcher servers

User content
: saved reports and data, favorites, and history

User information
: users and groups from your directory service and SAS groups

License information
: your SAS licenses and expiration dates.

System backups
: backups and restores of system data

Configuration
: configuration data for SAS Viya microservices

Contexts
: values such as environment variables and port ranges that are used when launching a process

User-defined formats
: user-defined data formats and format libraries

Logs
: log messages from SAS applications and services.

Machines
: information and metric data for the machines and services

Jobs
: monitoring of current and past jobs and schedules for jobs

Domains
: authentication domains (for storing a user ID and password), encryption domains (for storing an encryption key), and connection domains (for storing a user ID without a password)

Credentials
: personal credentials for the authenticated user across authentication and connection domains

Mobile device access
: lists that allow or prevent access to the system by specific mobile devices

Rules
: access controls and rules that control who can access resources and content in your system

Quality Knowledge Bases
: collections of files that store data and the logic that define data quality operations such as parsing, standardization, and matching (available only if SAS Data Quality is installed)

Publishing destinations
: destinations for publishing decisions, models, and rule sets from SAS applications (available only if SAS Model Manager, SAS Decision Manager, or Model Studio is installed)

Tenants
: information about tenants and status of tenant services (available only in a multi-tenant environment and only to provider administrators)

Note: If you are using only the SAS Viya programming interface, SAS Environment Manager is not deployed. See "Deployment Types" in *SAS Viya Administration: Orientation* for more information.

Accessing SAS Environment Manager

To access SAS Environment Manager, select **Manage Environment** (under **Administration**) in the **Applications** menu (☰).

Note: If you are using only the SAS Viya programming interface, SAS Environment Manager is not available. See "Deployment Types" in *SAS Viya Administration: Orientation* for more information.

When you log on to SAS Environment Manager, if you are a member of the SAS Administrators group, a prompt appears, asking you whether you want to opt in to your assumable groups. If you select **Yes**, your membership in the SAS Administrators group is in effect. See "Assumable Custom Groups" in *SAS Viya Administration: Identity Management* for more information about assumable groups. The functions that are available to you in SAS Environment Manager depend on your group membership. See "Predefined Custom Groups" in *SAS Viya Administration: Identity Management* for information about the functions that are available for groups.

If you are the tenant administrator in a multi-tenant system, not all functions are available. See "What is Available to a Tenant Administrator?" on page 13 for information.

To sign out of SAS, use the application bar. Click your name, and then click **Sign out**. When you click **Sign out**, you sign out of all SAS web applications.

Using the Dashboard

Overview

The Dashboard provides a quick view of the state of your system. It displays a set of tiles and reports, each of which summarizes an aspect of system status. The Dashboard is the default view when you first open SAS Environment Manager. You can return to the Dashboard from any page in SAS Environment Manager by clicking **Dashboard** from the navigation menu.

Click ⋮ then **Refresh** to refresh the data. Some tiles are also automatically refreshed, as noted in the tile's description on this page.

By default, the **Dashboard** displays these tiles:

- **Availability**
- **System Health**
- **Logged Issues**
- **Mobile Devices**

  If you are an administrator, you can also display system performance reports on the Dashboard by clicking **Show Reports**. This option is not visible if no reports are selected in the **My Dashboard Items** setting or if

no user-created reports are pinned to the Dashboard. See "Personalizing Your Dashboard" on page 6 for more information.

Using the Dashboard Tiles

The Dashboard can include these tiles:

Availability

displays grids of color-coded boxes that correspond to the machines, services, and service instances in your environment. The colors reflect the status of each machine, service, and service instance. A green box indicates that the item is available, a yellow box indicates that it is partially available or in a warning state, and a red box indicates that it is unavailable.

The grids are updated every ten seconds.

Selecting a box in one of the grids highlights the corresponding boxes in the other two grids. The box that you selected is outlined with a solid line, and the associated boxes are outlined with a dashed line. These are the associations between the selected boxes:

- When you click on a box in the **Machines** grid, the services and service instances that are running on that machine are highlighted in the **Services** and **Service Instance** grids. If a machine is identified as unavailable, the service instances on that machine are identified as unavailable as well.
- When you click on a box in the **Services** grid, the machines where that service is running are highlighted in the **Machines** grid, and the instances of the service are highlighted in the **Service instances** grid.
- When you click on a box in the **Service instances** grid, the machines where the service instance is running are highlighted in the **Machines** grid, and the service is highlighted in the **Services** grid.

Note: To deselect a box, hold down the Ctrl key and click the box. You can also hold down the Ctrl key and press the spacebar.

Place your cursor over a box to view the name of the machine, service, or service instance.

Double-click on a box in the **Machines** grid to open the Machine Status dialog box, which lists the services that are running on that machine and their availability. Click **Machine Details** from the Machine Status dialog box to open the Machines page for the selected machine.

Click on a box in the **Service instances** grid to view the machine address and port where the instance is running.

Note: Place your cursor over or click on an instance of the postgres service to also identify whether the instance is a pgpool instance, whether it is a primary or standby data node, and whether the node has ssl enabled.

Use the **Filter** field to display only certain machines, services, and service instances. When you type characters in the **Filter** field and click 🔍 or press the **Enter** key, the boxes displayed in the **Availability** area change. The boxes that are displayed either match the filter that you specify or are associated with the boxes that are displayed. For example, entering "`laun`" in the **Filter** field might cause two **Services** boxes to display (for the Launcher service and the Launcher server), only the **Service instance** boxes associated with the displayed services, and only the **Machines** boxes associated with the displayed services.

System Health

displays graphs that give you a quick view of the state of the nodes (machines) in your SAS Viya cluster for a selected CAS server. The data displayed on the graphs reflects all of the work taking place on the nodes, not just CAS operations. If you are on a UNIX system, the tile displays the **Node Memory Usage** and the **Load Average** graphs. Use the buttons at the top of the tile to select the graph that you want to view. If you are on a Windows system, only the **Node Memory Usage** graph is displayed.

If your environment contains more than one CAS server, a menu above the graph enables you to select the server to view. When you log in to SAS Environment Manager, this tile attempts to connect to the default CAS server. If the default server cannot be found, the tile displays information for the first server to which it

can connect. If it can connect to the default server, but the server does not respond within five seconds, the tile displays a message. You can then retry the server or choose another server.See "SAS Cloud Analytic Services: Overview" in *SAS Viya Administration: SAS Cloud Analytic Services* for more information on CAS servers.

You specify the default server in the casManagement configuration property. See "Configuration Properties: How To Configure Services" in *SAS Viya Administration: Configuration Properties* for more information.

The **Node Memory Usage** graph displays the host memory usage for each node in your cluster. This graph is displayed on both UNIX and Windows systems. Each bar represents a separate node. Bars for controller nodes use a different color than bars for worker nodes. The colors that are displayed depend on the theme that you use. Position your pointer over a bar on the graph to view the name of the node, its type, and its memory usage.

Note: If your environment contains both a primary and a secondary controller node, this graph displays information only for the controller that is currently active.

The **Load Average** graph displays the 1-minute load average over the past five minutes for the nodes in your cluster. This graph is displayed only on UNIX systems. The chart updates every ten seconds. Each node is represented by a separate line on the graph. The vertical scale of the graph changes depending on the largest value being displayed in the chart. Position your pointer on any of the lines on the graph to view the name of the node and the load average at the selected time.

The graphs update every ten seconds.

Logged Issues

displays a time series graph of the number of ERROR and FATAL level log messages captured by SAS Viya log files in the previous 30 minutes. Only the top five sources of ERROR and FATAL messages are included. If there have been no ERROR or FATAL messages in the past 30 minutes, a message is displayed in place of the graph. To view details about the messages or to filter the displayed messages, click ⋮ and then select **Open** to display the **Logs** page. This tile is updated when you refresh the Dashboard.

Custom Groups

displays the name and number of members for the top five custom groups (by number of members). Custom groups are created to control access to SAS Viya features. If you have a sufficient authorization level, you can use the **Users** page to manage custom groups. See "Manage Custom Groups" in *SAS Viya Administration: Identity Management*. This tile refreshes whenever the Dashboard is reloaded.

If you have the proper authorization, click on ⋮ and the click **Open** to display the **Users** page.

Mobile Devices

displays the type of mobile device access control in use and the number of successful and unsuccessful logon attempts. You can use the **Mobile Devices** page to manage mobile device access and view detailed information about access attempts. See "Mobile: How To" in *SAS Viya Administration: Mobile*. This tile refreshes whenever the Dashboard is reloaded. If you do not have a sufficient authorization level, this tile does not appear.

If you have the proper authorization, click on ⋮ and then click **Open** to display the **Mobile Devices** page.

Reports

You can display two types of reports on the Dashboard.

User-selected reports are selected by right-clicking on the report in the Content page and selecting **Pin to dashboard**. References to the selected reports are stored in the folder `Users/user_name/Application Data/SAS Environment Manager/Dashboard Items`. Any user can pin reports to their dashboard.

System performance reports are provided by default in SAS Viya and are available only to SAS administrators. These reports are available:

Application Activity

performance and usage by application. See "Monitor Application Activity" in *SAS Viya Administration: Monitoring* for more information about this report.

CAS Activity
CPU, memory usage, and system performance for CAS. See "Monitor CAS Activity" in *SAS Viya Administration: Monitoring* for more information about this report.

Disk Space
disk usage history and forecast. See "Monitor Disk Space" in *SAS Viya Administration: Monitoring* for more information about this report.

Infrastructure Data Server Tables
size and usage for SAS Infrastructure Data Server tables. See "Monitor SAS Infrastructure Data Server Tables" in *SAS Viya Administration: Monitoring* for more information about this report.

Message Queue Activity
activity and traffic on the RabbitMQ message exchanges that are used by the operations infrastructure. See "Monitor Message Queue Activity" in *SAS Viya Administration: Monitoring* for more information about this report.

System Activity
memory and CPU usage and network activity. See "Monitor System Activity" in *SAS Viya Administration: Monitoring* for more information about this report.

User Activity
reports based on audit records. See "View Audit Record Reports and Tables" in *SAS Viya Administration: Auditing* for more information about this report.

By default, the reports are hidden. Click **Show Reports** to display thumbnails for the reports. If you display the reports and then log out of SAS Environment Manager, the reports are displayed when you log back in to SAS Environment Manager.

Select ⋮ in any report tile and then click on **Open** to display the full report in SAS Report Viewer.

Click › and ‹ to change the displayed reports.

The CAS tables that are used to create these reports are refreshed every five minutes. During a deployment, it might take longer than five minutes for data to appear in these reports. This delay is variable and depends on how quickly SAS Infrastructure Data Server, RabbitMQ, CAS, and authentication services are operational and able to respond.

Note: In SAS Environment Manager 3.2, some system reports used data from the CAS_SYSTEM table. In SAS Environment Manager 3.3, these reports now use data collected by the operations infrastructure, in order to provide a consistent view of SAS Viya metric data. The CAS_SYSTEM table will be removed after SAS Viya 3.4, so if you have created any reports that use data from this table, they must be rewritten.

Personalizing Your Dashboard

- To add or remove a tile, at the top of the window, select ***your_user_name*** ⇨ **Settings**. In the Settings dialog box, select **Dashboard**. Select the check boxes for the tiles that you want to display on the Dashboard.
- To remove a tile that is currently displayed on the Dashboard, click ⋮ and then click **Unpin**.
- To choose which system status reports to display on the Dashboard, at the top of the window select ***your_user_name*** ⇨ **Settings**. In the Settings dialog box, select **Public Dashboard Items**. Select the check boxes for the reports that you want to display on the Dashboard. These reports are available only to administrators.
- To add a system status report to those provided by default, place the report in the folder `/Products/SAS Environment Manager/Dashboard Items`. An administrator can then pin the report to the reports in their Dashboard.
- To add a report to your dashboard, navigate to the report in the **Content** area of SAS Environment Manager. Right-click on the report in the folder tree and select **Pin to dashboard** from the pop-up menu. The report is

added to the report gallery and is copied to the folder /user/Application Data/SAS Environment Manager/Dashboard Items.

- To choose which of your reports to display on the **Dashboard**, at the top of the window select ***your_user_name*** ⇨ **Settings**. In the Settings dialog box, select **My Dashboard Items**. Select the check boxes for the reports that you want to display on the Dashboard.

Note: If you do not select any reports in the **My Dashboard Items** list or you do not pin any reports to the Dashboard, the report container and the options **Show Reports** and **Hide Reports** do not appear on the Dashboard.

SAS Environment Manager Functions

Accessing the Functions

To access a SAS Environment Manager page, select it from the navigation bar.

Depending on your organization's environment and authorization policies, you might not have access to all pages.If you are not a member of the SAS Administrators group, or you do not opt in to the group, you can access only the **Dashboard**, **Data**, **Servers**, **Content**, **Jobs**, and **My Credentials** pages. **Quality Knowledge Bases** is also available if SAS Data Quality is installed. Your organization might also use other groups that could restrict your ability to access certain pages. See "Identity Management: Access to Functionality" in *SAS Viya Administration: Identity Management* for more information.

Data

Select **Data** from the navigation menu to view and manage your data and data sources. You can select three views of your data.

The **Available** view displays information about all of the data tables that have been loaded into CAS memory. The view displays basic information for the selected table, such as the number of columns and rows, size, location, and dates of creation and last modification. The **Details** tab for a selected table displays detailed information about each variable in the table such as the type, raw length, formatted length, format used, and tags assigned. The **Sample Data** tab displays a selected number of rows of data (the default is 100). The **Profile** tab displays any selected profiles for the table and enables you to run a profile job for the table. From the Available view, you can also select the table for importing and view the table's authorization.

The **Data Sources** view enables you to create a connection between a caslib and either a database server or a remote file system. You can navigate through the data source to locate a data table. When you select a data table, the **Details**, **Sample Data**, and **Profile** tabs are all available, as in the **Available** view.

The **Import** view enables you to create a connection between a caslib and either a local file, social media content, or Esri data. You can also create a connection between a caslib and a table or file on the **Data Sources** tab.

See "Understanding SAS Data Explorer" in *SAS Data Explorer: User's Guide* for more information.

Servers

Select **Servers** to display information about the SAS Viya servers. The window displays basic information about the servers, such as the state, host, and port. While in the **Servers** view, you can also view detailed properties and system metrics for the server, including the settings and configuration values for the server and the users and groups that are superusers for the server. If you have the proper authorization, you can also assume the superuser access for the server, which enables you to edit the additional settings and configuration values.

See "SAS Cloud Analytic Services: How To (SAS Environment Manager)" in *SAS Viya Administration: SAS Cloud Analytic Services* for more information.

Content

Select **Content** from the navigation menu to display folders that contain items that users have saved. When you open the Content page, you have access to your own data in the My Folder folder. If you have administrative access, you can also view the folders of other users. From this page, you can create, delete, move, and rename folders, create shortcuts, and manage the authorization for any folder or item that you select (if you have sufficient authorization). You can also export the reports in a folder to a package file and import the reports from a package file into a folder.

Each user's folder contains several subfolders:

My Favorites
contains references to items identified as favorites, to enable quick access to often-used reports and data.

My Folder
contains saved items.

Application Data
contains items used by SAS Viya applications, such as items pinned to a user's Dashboard in SAS Environment Manager.

My History
contains a list of the most recent items that you have accessed. You can select entries in this folder to quickly return to items that you have worked with recently.

See "Content Management: How To" in *SAS Viya Administration: Content Management* for more information.

Users

Select **Users** from the navigation menu to view information about users and groups, and to manage custom groups. The information displayed for users and groups comes from your organization's directory service (such as LDAP or Microsoft Active Directory). Because this information is managed by your identity provider, it is displayed as read-only data in SAS Environment Manager.

You can also manage custom groups on the **Users** page. Custom groups enable you to manage special permissions for groups of users.

See "View User and Group Information" in *SAS Viya Administration: Identity Management* for more information.

Licensed Products

Select **Licensed Products** from the navigation menu to view information about the licenses for your products. You can view a list of all your currently licensed products and see the expiration date, grace period, warning period, and maximum CPU count for each one. You can filter the list by any of the displayed criteria to make it easier to find products in the table.

See "Licensing: Overview " in *SAS Viya Administration: Licensing* for more information.

Note: This page is not available for a tenant administrator.

Backup and Restore

Select **Backup and Restore** from the navigation menu to back up and restore your environment.

Configuration

Select **Configuration** from the navigation menu to manage the configuration settings for SAS Viya services. You can select from a list of basic services, all services, or definitions. When you select a service, the service's configuration properties are displayed on the right side of the window. Click to change any of the displayed properties.

See "Introduction" in *SAS Viya Administration: Configuration Properties* for more information.

Contexts

Select **Contexts** from the navigation menu to manage launcher contexts. A context is a collection of values such as environment variables and port ranges that are used when launching a SAS Viya instance. You can also specify values for a deployment, such as the deployment ID and the installation and configuration directories.

User-Defined Formats

Select **User-Defined Formats** to display information about all of the user-defined formats and format libraries that are available for the data. The window displays a list of available user-defined formats and format libraries. You can add and import new formats, as well as edit, copy, and delete existing formats. You can import formats from a SAS item store, although some steps are required outside of SAS Environment Manager. You can also create, delete, and change the search order of format libraries. This function is available only for administrators.

Logs

Select **Logs** from the navigation menu to view information about messages that have been written to the logs. You can view a chart of the number of log messages and a table of the detailed messages. By default, the chart and table reflect the messages logged during the previous 30 minutes, but you can select a different time range. You can also search for a specific message or filter the messages by level and source.

See "Logging: Overview" in *SAS Viya Administration: Logging* for more information.

Note: This page is not available for a tenant administrator.

Machines

Select **Machines** from the navigation menu to monitor the machines in your environment and the service instances running on those machines. You can view this information:

- charts of the percent of CPU utilization and memory used for each machine
- status of predefined checks (such as disk or memory usage) for the selected machine
- service instances running on the selected machine, along with their current state
- properties for the selected server

See "Monitoring: How to (SAS Environment Manager)" in *SAS Viya Administration: Monitoring* for more information.

Note: This page is not available for a tenant administrator.

Jobs

Select **Jobs** from the navigation menu to monitor and schedule jobs. You can perform these tasks:

- View a table or a chart of jobs that are currently running and that have run in a specified time in the past.
- Filter the jobs to narrow the number of jobs displayed and change the time period for displaying jobs.
- Re-run jobs and delete jobs.
- Schedule jobs to run at a particular time or in response to a specific trigger.
- Run a scheduled job immediately.
- Create time-based triggers to control when scheduled jobs run.
- Unschedule, delete, and view the properties of scheduled jobs.
- Manage CAS tables.

See "Jobs: Overview" in *SAS Viya Administration: Jobs* for more information.

Domains

Select **Domains** from the navigation menu to manage domains used for authentication, encryption, and connection.

See "About the Domains Page" in *SAS Viya Administration: External Credentials* for more information.

My Credentials

Select **My Credentials** from the navigation menu to create and manage credentials for authentication, encryption, and connection domains. See "Manage Personal Passwords" in *SAS Viya Administration: External Credentials* for more information.

Mobile Devices

Select **Mobile Devices** from the navigation menu to manage how mobile devices access certain reports. You can use either a blacklist or a whitelist. If you use a whitelist, all mobile devices are blocked except for those listed in the whitelist. If you use a blacklist, all mobile devices are allowed except for those listed on the blacklist. The **Mobile Devices** page displays a table of recent access attempts by mobile devices, the devices listed in the blacklist, and the devices listed in the whitelist. The page indicates whether the blacklist or the whitelist is being enforced, and it enables you to select which list to use. You can also add devices to either list.

See "Mobile: How To" in *SAS Viya Administration: Mobile* for more information.

Rules

Select **Rules** from the navigation menu to manage access to specific locations and content.

See "General Authorization: How to (Rules Page)" in *SAS Viya Administration: General Authorization* for more information.

Quality Knowledge Bases

Select **Quality Knowledge Bases** from the navigation menu to view and manage Quality Knowledge Bases. Quality Knowledge Bases are collections of files that store data and logic that define data quality operations

such as parsing, standardization, and matching. This area is available only if you have licensed SAS Data Quality. See SAS Viya Administration: QKB Management for more information.

Publishing Destinations

Select **Publishing Destinations** from the navigation to manage destinations for publishing decisions, models, and rule sets using SAS Decision Manager, SAS Model Manager, and Model Studio. You can create, edit, delete, and view properties for destinations. This area is available only if SAS Model Manager, SAS Decision Manager, or Model Studio is installed and if you opt in to the SAS Administrators group when you sign in to SAS Environment Manager. See "Publishing Destinations: How To" in *SAS Viya Administration: Publishing Destinations* for more information.

Tenants

If you are the provider administrator of a multi-tenant environment, select **Tenants** from the navigation menu to view information about tenants and tenant services.

How To

Work with Information Displayed in Tables

When you are viewing information that is displayed in a table in SAS Environment Manager, use these tips to control how data is displayed:

- To sort a table, right-click on a column header and select **Sort**. You can sort the table by the contents of the column or add the column as a secondary sort criteria.
- To reorder the columns in a table, click on the column heading and drag the header to the new location.
- To prevent a column from being reordered, right-click on the column heading and select **Freeze**. The column is moved to the left of the table and cannot be reordered. To enable the column to be moved, right-click on the header and select **Unfreeze**.
- To select which columns are displayed, click on the **Options** icon on the right side of the table header and select **Manage columns** from the pop-up menu. The **Columns** window displays a list of hidden columns and displayed columns. Select the columns that you want to display and click **OK**.
- To reduce the number of items displayed in the table, use the **Filter** field. As you enter text in the field, the table changes to display only the items that contain text that matches the text that you enter. The table is filtered dynamically as you enter text. The text that you enter as filter text is not case sensitive.

Note: Not all of the tables in SAS Environment Manager use all of these features.

Manage Settings

Access Settings

To access the Settings window, select your user name in the upper right of the SAS Environment Manager window. Select **Settings** from the pop-up menu.

General

The **General** section includes settings that enable users to change the appearance of the web applications, enable warning and information messages to be displayed, and choose a profile picture. Here are the values:

- You can change the appearance of the web applications by using the **Theme** setting. The default theme is specified by the system administrator. The theme specifies the collection of colors, graphics, and fonts that appear in the application. You can choose from SAS themes or custom themes, if available.

  Select **Choose a theme**, and then select another theme from the drop-down list to change the look of the applications. The theme change takes affect after you close the Settings window.

  SAS themes:

  Illuminate
  This theme has a clean and uncomplicated color palette that is easy to use.

  Inspire
  This theme consists of vibrant and cohesive colors that shift the emphasis from the application to the content.

  High Contrast
  This theme presents a dark background with high-contrast foreground elements to meet the needs of users with low vision.

- If you want messages to display that you previously asked not to display, click **Reset Messages**. By default, all warning and information messages are displayed.

- You can select a profile picture to display as an avatar in the application bar, as well as other places within the application that use avatars. An avatar is the graphical representation of the user or the user's alter ego or character.

  Click **Choose Picture** and then select an image file to upload. The image file’s size can be up to 1 MB. The valid file types are BMP, GIF, JPEG, JPG, and PNG.

Region and Language

The **Region and Language** section includes values that enable users to specify the locale for regional formats and sorting, as well as for offline processes.

- The **Locale for regional formats and sorting** setting specifies the locale that is used for sorting data and formatting values such as dates, times, numbers, and currency. By default, the browser locale is used. Changes take affect after you sign out and sign back in.

- The **Locale for offline processes** setting specifies the locale that is used for offline jobs or background processes such as report distributions or notifications. By default, the locale of the Java Runtime Environment is used

Accessibility Settings

Several settings in the **Accessibility** section can assist people who rely on assistive technologies. Accessibility features are part of the global settings, which are applied to all SAS web applications. Accessibility features are not specific to SAS Environment Manager.

The following accessibility features are available:

- Select **Enable sounds** to hear audio indicators for events that occur within the user interface.

- Select **Enable visual effects** to show visual effects that indicate state changes. For example, when this setting is selected, you will see a subtle movement in the user interface if you delete an item.

- Select **Invert application colors** to make the user interface easier to see for users with sensitivity to certain bright colors (for example, a black-on-white display). You can also use the Ctrl+` (Ctrl+back quote) keyboard shortcut to invert the application colors.
- Select **Display tooltips when using the keyboard to navigate** to enable keyboard users to access tooltips. When this option is selected, putting keyboard focus on a control also displays the tooltip on the screen. By default, this option is not selected, so a mouse is required for you to see a tooltip. You can also select the location in the browser window to display the tooltip. By default, the tooltip is displayed in the bottom-right corner of the browser window.
- The focus indicator is an outline that indicates which user interface component is active. You can make the focus indicator easier to see by selecting **Customize the focus indicator settings** and adjusting the color, thickness, and opacity.

What is Available to a Tenant Administrator?

If you are the tenant administrator in a multi-tenant system, these functions are not available:

- Licensed Products
- Tenants
- Logs
- Machines

By default, the Dashboard for a tenant administrator contains these items:

- **System Health** tile
- **Mobile Devices** tile
- **Top 5 Custom Groups** tile
- Personal reports that are pinned to the Dashboard

Other Dashboard items that are listed in this document are not available to tenant administrators.

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