



Customizing Reports

This section explains the customization options that are available for interactive reports. The major customization tasks that you can perform are:

- [Customizing Data in Reports, page 5-3](#)
- [Grouping Data in Reports, page 5-3](#)
- [Adding a Filter, page 5-6](#)
- [Applying Quick Filters, page 5-7](#)
- [Formatting Interactive Reports, page 5-4](#)

To customize a report, select the report in the left navigation pane or open the report, then click the **Edit** icon. The report opens in edit mode. Note that when you are creating a new report, the same customization options are available to you.



Note

To be able to save a customized report, you must select the report and click Edit. While you can perform some customization by not being in edit mode, you will not be able to save the changes after you are done. After completing the customization, we recommend that you save the report using the Save As functionality. Saving the report as is changes the name of the report to a default file name (without the file name extension).

Figure 5-1 provides a snapshot view of customization options available.

Figure 5-1 Customizing Options

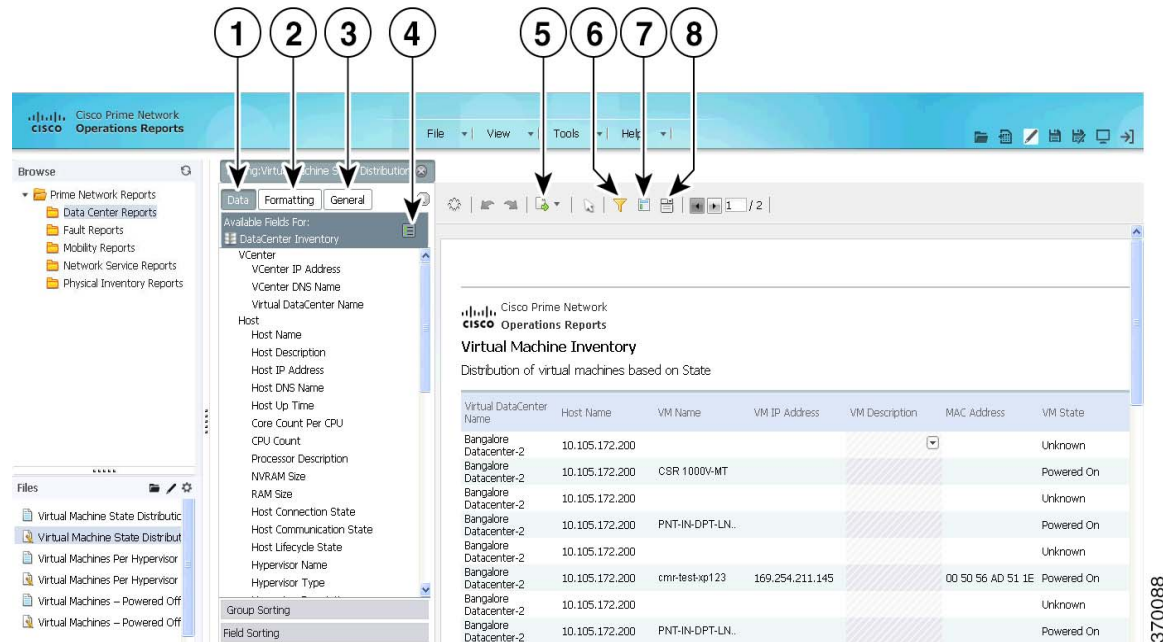


Table 5-1 Customizing Reports—Icons Description

	Item	Description
1	Data tab	Contains all the fields that can be used in the report selected.
2	Formatting tab	Allows you to customize the report by applying formatting options such as font type, size, color, background color. For more information, see Changing the Font Style, page 5-5 .
3	General tab	Allows you to change report template and orientation. For more information, see Changing the Report Template, page 5-5 and Changing the Size and the Orientation of a Reports, page 5-5 .
4	Query Settings icon	Allows you to enable options such as auto-refresh, maximum row in a report. For more information, see Additional Useful Customization Options, page 5-9 .
5	Export icon	Allows you to export your report to be saved at an external location.
6	Filter icon	Allows you to create basic and advanced filters. For more information, see Adding a Filter, page 5-6 .

Table 5-1 Customizing Reports—Icons Description (continued)

	Item	Description
7	Layout icon	Allows you to view the layout of the report. This is useful when you need to view and rearrange groups.
8	Prompts icon	Allows you to apply a quick, simple filter to the report. For more information, see Applying Quick Filters , page 5-7.

Customizing Data in Reports

To customize a report, select the report in the left navigation pane or open the report. When you click the **Edit** icon, the data available in the corresponding data source of the report loads. You can customize the report data by dragging and dropping the required fields from the Data tab.

Grouping Data in Reports

You can group the data in your report by one or more fields. For example, you could group your data by device type, severity, or location. From the following example (Figure 5-2), the group names are placed in the following order: Device Name, Configured Service, and Configured Service Name.

The Device Name contains a groups of Configured Services, which in turn contain groups of entries for Configured Service Names. The list of devices is arranged in ascending order and each device data is reported serially.

Figure 5-2 Grouping Report Data—Example

The screenshot shows the Cisco Prime Network Operations Reports interface. The main window displays a report titled "Mobility Gateway Applications" with the following structure:

- Device Name:** ASR5k-1
 - Configured Service:** GGSN
 - Configured Service Name:** ggsn1

Device IP	Software Version	Chassis Serial Number	APN Name
6.0.0.63	14.0 (43929)		apn1
- Configured Service Name:** ggsn_h

Device IP	Software Version	Chassis Serial Number	APN Name
6.0.0.63	14.0 (43929)		apn1

Follow the procedure below:

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- Step 1** Click the **Layout** icon.
A field to add groups and the available columns in the report appear.
- Step 2** Drag and drop the fields to the **Groups** field. The report immediately rearranges based on the grouping specified.

If you need to group the data in your report by more than one field, drag and drop the required fields. If more than one field is present, the groups are arranged in sets. The first field in the group is the super set of the second field.
- Step 3** To delete the group name, click the name of the group from the **Groups** field, and drag and drop in the recycle bin that appears. When you delete a group, the related column is deleted also from the table.
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Changing the Data Presentation in Reports

Reordering Columns

This section describes the procedure to adjust and reorder the columns in your report.

To reorder your column, select the column you want to move and drag it to your desired location. Alternatively, select the column you want to move, click the down-arrow and select **Move** (Right or Left) from the menu.

To adjust your column width, select the column, then click on the vertical line that divides your column headers. A small arrow appears. Move the arrow left or right to adjust your column width.

Sorting Data in Reports

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- Step 1** To sort the data available in your report, click the small down-arrow icon next to the column name.



Note If the down arrow is not available, you must enable the menu options from **General tab > Preferences > Enable Menu Buttons**.

- Step 2** Click **Sort > Ascending/Descending**.
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Formatting Interactive Reports

You can specify how your reports are formatted and presented. The following topics help you perform the task.

Changing the Report Template

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- Step 1** From the left navigation pane, choose **General** tab.
 - Step 2** Browse through the available templates using the left and right arrows. Select the template of your preference and confirm. The template Left Indented - Jade contains the product name, Cisco Prime Network Operations Reports, on the header.
 - Step 3** Click **Select**.
The Select dialog box with all the available options of templates appears. Choose the template. The template is applied to the report.
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Changing the Size and the Orientation of a Reports

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- Step 1** From the left navigation pane, choose **General > Page Setup**.
The Page Setup dialog box appears.
 - Step 2** Choose the correct page format and orientation for your report from the list. The page margin measurements are available in the lower portion of the dialog box. You can adjust the measurements as needed. We recommend that you choose the landscape option if the number of fields in your report are many.
 - Step 3** Click **OK** to save the changes.
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Changing the Font Style

After you generate a report, you can change the font, the color, and the font size of the report contents. You can later copy and paste the formatting from one column to another column within the same report. On an interactive report, from the left navigation pane, choose **Formatting**.

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- Step 1** On an interactive report, select the column for which you want the formatting to be applied. To select multiple columns, select the columns with the **Ctrl** key pressed.
 - Step 2** From the left navigation pane, select **Formatting**. Set the formatting specification for the table. The formatting is instantly applied.
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To copy the format from one column to another:

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- Step 1** Select the column from which the format is to be copied.
 - Step 2** Click the **Copy** icon.
 - Step 3** Choose the column on to which the formatting has to be applied.
 - Step 4** Click the **Paste** icon.
The formatting is applied.
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Filtering Interactive Reports

Some reports are very long, and may run into several pages. However, not all details represented in the report may interest you. You can filter the report to specifically view the information that you need.

Adding a Filter

After you generate a report, you can filter the contents of the report based on the columns present in the report. To create a filter:

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- Step 1** Click the **Filter** icon.
The filter pane opens.
- Step 2** From the left navigation pane, from the **Data** tab, drag and drop the fields (that are already available in the report as columns) to the Apply Filter pane.
The **Filter on *Field Name*** appears.
- Step 3** From the **Filter on *Field Name***, specify the condition based on which the filter has to be applied. Enter a parameter name that describes the filter name.
To narrow down the filter parameters, and to specify your exact requirement, choose the **Select from a List** option. For example, if you want to filter the report for a few types of devices, drag the Device Type field, and from the **Select from List** option, choose the types of devices to be included, and move them to the **Currently (Included)** pane. The filter is now applied only on the device types specified.
- Step 4** Click **OK**.
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Creating Advanced Filters

After you create filters using the steps explained in [Adding a Filter](#), you can customize the filter to exclude and include data in the combination that you set. For example ([Figure 5-3](#)), from the Virtual Machine State Inventory report, you can set the filter to view report details of one of the following fields: Host Name (with specific name), RAM Size (that you can specify), Host Up Time (specify a period). You can also give an 'AND', 'OR' operator with a few more conditions that must be filtered with the above-mentioned conditions.

Figure 5-3 Filtering Reports—Example

The screenshot shows the 'Editing: Virtual Machine State Distribution' window. On the left, a tree view lists available fields for filtering, including Host Name, RAM Size, and Host Up Time. The main area shows a filter configuration with three criteria: Host Name (None) Includes 10.105.172.133, 10.105.172.160, 10.105.172.162; RAM Size (None) Includes 127.93 GB, 47.94 GB, 5.99 GB; and Host Up Time (None) Includes 2013-Jun-04-18:03:55, 2013-Jun-04-20:24:43, 2013-Jun-07-14:47:56. The filter is set to 'OR'. Below the filter configuration, the report title is 'Virtual Machine Inventory' and the subtitle is 'Distribution of virtual machines based on State'. The report table has the following data:

Virtual DataCenter Name	Host Name	VM Name	VM IP Address	VM Description	MAC Address	VM State
Bangalore Datacenter-2	10.105.172.200					Unknown
Bangalore Datacenter-2	10.105.172.200	CSR 1000V-MT				Powered On
Bangalore Datacenter-2	10.105.172.200					Unknown
Bangalore Datacenter-2	10.105.172.200	PNT-IN-DPT-LN..				Powered On

Perform the following steps to customize the filter for advanced settings:

- Step 1** Create a filter as outlined in the section [Adding a Filter](#).
- Step 2** From the fields that are listed in the filters pane, create advanced filters by creating a hierarchy. From the down arrow displayed on the filter parameter, choose the position of the parameter. Click **Move Up** or **Move Down**, as required.
- Step 3** If you prefer a parameter to be an AND operator of another parameter, click the down arrow of the first parameter and choose **Indent**.
For example, if you want to view report details of Host Name of a specific RAM Size, move the Host Name up, and indent RAM Size. If you desire to view the details of a host with Host Name and Host Up time parameters, move Host Name up and indent Host Connection State.
- Step 4** Repeat the procedure for the filters you have chosen.
- Step 5** From the master AND, OR operator, choose as required.

For example, if you desire to filter based on both (Host DNS Name and RAM Size) and (Host Name and Host Connection State), choose the AND operator from the drop-down list on its right.

Applying Quick Filters

Prompts are quick filters that are used without adding specific restrictions. You can filter the data based on any data field available on the left navigation pane. However, you cannot specify 'And'/'Or' options.

To create a prompt, click the **Prompts** icon, and drag and drop the fields from the left navigation pane.

For example, if you set the prompt for VM Device State and Number of Devices, you can see the number of devices for a specific VM device state. Prompts are especially useful when you want to add a From and To date before you begin generating customizable prepackaged fault reports.

**Note**

To add a prompt for a range of days (with From and To dates options), drag the Date field twice. This creates two options from which you can select the From and To date.

Upon adding prompts, the report is filtered to reflect the prompts, and a refreshed report appears. If you select the prompt for VM Device State (with the state Suspended selected), the devices whose VM device state is suspended appears.

The structure added in Prompts reflects in the Filter option as well.

Editing Prompts

You can edit the prompts that you have created for reports. Editing the prompts functionality allows you to choose the methods of selecting prompt options such as radio buttons, check box, or text box. You can also specify the first value that needs to be selected by default. To edit a prompt, follow the procedure below:

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- Step 1** Select a Prompts. From the data tab, choose the required parameters and drag and drop to the Prompts field.
- Step 2** After the data field is added, mouse over on the prompt. A pencil icon appears. Click the pencil icon. The **Prompt for *data field*** window appears.
- Step 3** Enter a name for the prompt.
- Step 4** Choose a **Type of Control**; this decides the modality of selection of items in the prompts. If you choose the control type List, you can specify the number of values that are displayed when you begin choosing the items listed in the Prompts field.
- Step 5** Choose a **Data Type**. The following options are available:
- Metadata List—Select this data to enable the prompts feature to work against a database. If you choose Metadata List, select the Data Source that the report runs against.
 - Static List—This option is not supported in Prime Network 4.2 Operations Reports.
- Step 6** From the Control Properties pane, choose the options as required:
- Initially Selected—This allows you to specify the value that is selected from the list by default
 - Use First Value—By default, selects the first value from the available list
 - Specify—Specify the value that should be selected by default when you click Prompt.
- Step 7** Click **OK**.
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Applying a Summary Function

You can view a summary of the report generated for numerical values from the column, group or the entire report. The summary feature can be applied to columns to view the sum of values listed; for example, the total number of modules. You can also count the number of rows present in the report by using the Count option.

From the column that contains numerical values, perform the following:

- Step 1** Right-click the column and choose **Summary**
- Step 2** Choose an option based on the options in the table below:

Table 5-2 Summary Functions Description

Function Name	Description
None	No summary function assigned.
Average	Calculates the average of the selected column.
Count	Counts the items in a group or report, but does not require a numeric value.
Max	Identifies the highest or largest value in a column.
Min	Identifies the lowest or smallest value in a column.
Sum	Calculates a total sum of the group or report (group level, and running total in the report footer).

Additional Useful Customization Options

- Setting a row limit—You can limit the number of rows that are displayed in your report. From the **Data** tab, click the **Query Settings** icon. Check **Row Limit** option, and specify the number of rows. This feature is especially useful to avoid out of memory errors or processes that consume too many resources on the database server.



Note The row limit that you set is applicable only for the current session. You must set the row limit for a report each time when you open that report in a session.

- Including duplicate entries—By default, reports filter out duplicate entries for clones or items with same entries such name, description. If you have several items such as chassis or devices with the same description or name, only one entry is displayed. In such a case, you run the risk of missing critical data. To view all entries, click the **Query Settings** icon, and then uncheck **Select Distinct**.
- Setting a timeout—You can specify number of seconds for which a query (to generate a report) runs before a timeout occurs. This feature is especially useful to avoid out of memory errors or processes that consume too many resources on the database server. From the **Data** tab, click the **Query Settings** icon. Check **Query Timeout** and enter the period in seconds.

- Eliminating duplicate entries—From the Data tab, click the **Query Settings** icon to prevent the report from displaying duplicate values in columns. Enabling this option will list the different (distinct) values in a table, exclusively.
- Changing the column name—Double-click the column name and in the pop-up dialog box, enter the new column name and press **Enter**.
- Exporting a report—Click the **Export** icon and select your export file type: PDF, Excel, CSV or HTML. Exported files can be saved locally on your computer.
- To enable menu buttons and show tips—The menu options to sort data, move columns, create a summary are available in individual columns of the generated report. To be able to view the options, from **General tab > Preferences**, click **Enable Menu Buttons**. To be able to view tips, from **General tab > Preferences**, click **Show tips** or **Show tips on startup**.
- Including date and page numbers in the report—Double-click the Cisco Prime Network text that appears next to the Cisco logo at the top of the report, and in the pop-up dialog box, click **Date** and **#/Pages**.