

Custom Reports

Quick Start Guide

Version R93

English

March 26, 2016

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Introduction

The Info Center in Virtual System Administrator[™] v6.3 introduces a new "custom" report builder. Custom reports enable users to customize report templates and report definitions. Existing report definitions are labeled "legacy" reports to distinguish them in the user interface. Enhancements include:

- Elements of a custom report are called "parts". Parts can be re-used to create multiple layouts. Types of parts include: Tables, Bar Charts, Pie Charts and Name Value Parts.
- A Name Value part queries the database and displays the result in a report as a single value next to a single descriptive label or "name". Useful for creating "counts" in a report.
- Modified custom report definitions can be saved as new report templates.
- An instance of a report part can be saved and reused in multiple report templates and report definitions.
- Custom report templates and report parts can be imported/exported.
- Customizable cover pages, headers and footers can be assigned to any Custom report template or Custom report definition.

This quickstart guide focuses on how to design and publish Custom Reports.

Report Definitions

A report is published from a report definition. Report definitions contain all the *default* settings that determine the content, layout and file format of the published report. You can override these defaults when you run (publish) or schedule the report.

Report definition settings are copied from a report template when the report definition is created. Changing a report definition does not change the report template it was copied from. Changes made to a report template do not affect report definitions already copied from that template.

To create a custom report definition based on a report template:

- 1. Click Info Center > Reporting > Reports > New.
- 2. Select the custom Report option.
- 3. Select a category, then a template, then click Create.

Note: A custom report template must be **published** (*page 2*) for you to see it within a Reports category.

- 4. Specify options for report definitions using header options and three tabs:
 - (Header Options) Specify the name and report title. You can also require approval for the report.
 - Layout See Report Templates (page 2) for a description of these options.

Note: When a legacy report definition is added or edited, a **Parameters** tab displays instead of the Layout tab.

General - Sets the type of report output—PDF, HTML or EXCEL—paper size and orientation.

Note: CSV is available as a report output, but only if the VSA is configured to use SQL Server Reporting Services, instead of the default Kaseya Reporting Services.

The **General** tab also sets the message used to notify users when the report is run. Tokens can be included in report email messages, in both the subject line and the body of the message.

- ✓ <gr>> machine group
- ✓ <id> machine id
- ✓ <rt> report name
- < <embd> In the message body only, you can embed an HTML report at the specified location.

Use the edit toolbar to add images and special formatting to the text. Images must be uploaded rather than copied and pasted in.

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Font Family 🔻 Paragraph	 Font Size 	- 🛃 🕰 📋 🗙 🛪 🗉

- Insert a table.
- \checkmark - Insert a horizontal line as a percentage of the width, or set a fixed width in pixels.
- 🗸 进 Indent text.
- 🗸 🔮 Outdent text.
- Remove formatting.
- ✓ Ω Insert a symbol.
- ✓ [☺] Insert an emoticon.
- Preview the display of text and images.
- \checkmark x_a Set selected text to subscript.
- ✓ x^a Set selected text to superscript.
- > Cover Page, Header, Footer Selects the cover page, header and footer (page 32) of the report.

Report Templates

Info Center > Configure & Design > Report Templates

The Report Templates page defines customizable report templates. For detailed information see:

- Folder Tree (page 4)
- Add / Edit Report Template (page 5)
- Table (page 7)
- Bar Chart (page 10)
- Pie Chart (page 13)
- Line Chart (page 16)
- **Report Image** (page 19)
- Custom Text Designer (page 19)
- Name Value Part (page 20)

Terms and Concepts

- **Report Definitions** *Report definitions* contain all the settings that determine the content, layout and file format of a report. A report is published from a **report definition** (*page 1*).
- Report Templates A report definition is created by copying settings from a *report template*. Report templates define all the *default* settings for the content, layout and file format of a report definition. There are two types of report templates:
 - > Custom Customizable report templates.

- > Legacy Fixed layout report templates provided in earlier releases.
- Data Sets Customizable report templates are constructed from *data sets*. A data set is a collection of data, in table format, queried from the Kaseya Server SQL server database. Predefined data sets are listed on the Report Parts (*page 23*) page, organized by VSA module folder. For example, in the Agent module folder, the following data sets are provided:

Agent Configuration Agent Portal Access Agent Protection Settings Agent Status

 Data Columns - Each dataset is a collection of one or more data columns. For example, the Agent Status data set lists the following data columns.

agentGuid Computer Name Current User Group Name Last Logged On User Machine ID Online Operating System OS Information Reverse Group Name Show Tooltip Timezone Offset Tooltip Notes Transition Time

- Report Parts The content and layout of a report template or report definition is constructed out of report parts. When constructing a report part, you select the columns of data in a data set you want to display in the report template or report definition. Each part can only select columns of data from a single data set. Each report part also determines the display of data in a particular format. There are several types of report part formats:
 - > Table Displays one or more columns of data in table format returned by a selected data set.
 - Bar Chart Displays a bar chart, based on two columns of data returned by a selected data set.
 - Pie Chart Displays a pie chart, based on two columns of data returned by a selected data set.
 - Line Chart Displays a line chart, based on two columns of data returned by a selected data set.
 - > Report Image Displays a selected report image.
 - > Custom Text Designer Displays a group of one or more static text and design controls.
 - Name Value Part Displays a single value with a user-defined label, based on a *custom* data set. For example: Open Tickets: 247.

Report Part Options - Each report part can be configured using the following options:

- Aggregate Options Aggregate options return a single numeric value calculated from multiple cells in a selected column. For example, the aggregate option COUNT returns the number of non-null values in a selected column. Except for COUNT or COUNT_BIG, aggregate functions ignore null values.
- Order by Data can be displayed in a preferred order, using combinations of selected columns, aggregate options, and ascending/descending sort orders.
- Group by Returned rows of data can by organized into subheadings and subgroups by selecting "group by" columns. Multiple levels of "group by" columns are supported. Applies to table parts only.

- > Filtering The data displayed can be limited by specialized data filters. These include:
 - ✓ A specified number of rows or percentage of rows of data.
 - ✓ Comparing selected columns with specified values.
- Custom Fields Custom agent fields—created using the Audit > Machine Summary or System Information pages—are supported in views, procedures, legacy reports and in selected Audit category reports parts (*page 23*). Custom reports do not support more than 40 custom fields.
- Coverpage, Header, Footer This page (page 32) defines presentation elements that are independent
 of the data displayed in the report. You can use these elements to "brand" your reports by creating
 a unique look and feel. Assign different combinations of coverpages, headers and footers to
 multiple custom report templates and custom report definitions.
- Published / Unpublished A published report template can be used to create report definitions. Unpublished report templates are hidden from the list of templates available to create report definitions.
- Make Template A Make Template button in Reports saves a report definition to a selected Report Templates folder. For example, users may create useful enhancements to their own report definitions. These in turn might be worth converting into report templates that other users can use to create report definitions.
- Reusing Parts Any time after a part is configured within a template you can optionally save a part to the Report Parts (*page 23*) page This makes it a "standard" part that can be reused in templates and report definitions. You can also copy a part directly from an existing template into another template, without saving it as a "standard" part.
- Import / Export Both report templates and report parts can be imported and exported using System > Import Center.

Folder Tree

Info Center > Configure & Design > Report Templates

Report templates are organized into a single folder tree in the middle pane underneath a **Template** cabinet. Use the following options to manage report templates in this folder tree.

Note: The categories you see when creating a new **report definition** (page 1) are based on the top-level folders in the **Report Templates** (page 2) folder tree. By default a top-level folder is created for each installed module.

When the Templates Cabinet is Selected

- Collapse All Collapses all branches of the folder tree.
- Expand All Expands all branches of the folder tree.

When a Folder is Selected

A folder for each installed module has been created for you. You can use these or create your own.

- Add Folder Adds a report template folder with a specified name.
- Add Adds a report template in the selected folder.
- Share Shares a folder with user roles and individual users. See guidelines for share rights to objects within folder trees in the Folder Rights topic.

When a Template is Selected

- Add Adds (*page 5*) a new report template in the selected folder.
- Edit Edits (*page 5*) a selected report template.

Note: System report templates 🦾 cannot be edited or deleted but can be copied.

- Delete Deletes a selected report template.
- Rename Renames a selected report template.
- Publish / Unpublish Toggles between these two states. Clicking Publish enables a report template to be used to create a report definition (page 1). Clicking Unpublish prevents a report template from being used to create a report definition.
- Copy Creates a copy of an existing report template.
- Preview Generates a report for the current user only, based on a selected report template.

Add / Edit Report Template

Info Center > Configure & Design > Report Templates > Add Report Template / Edit

Report Design Description

- Name The name of the report template.
- Template Title The title displayed.

Note: See **Report Definitions** (*page 1*) for a description of options on the General tab and Cover Page, Header and Footer tab.

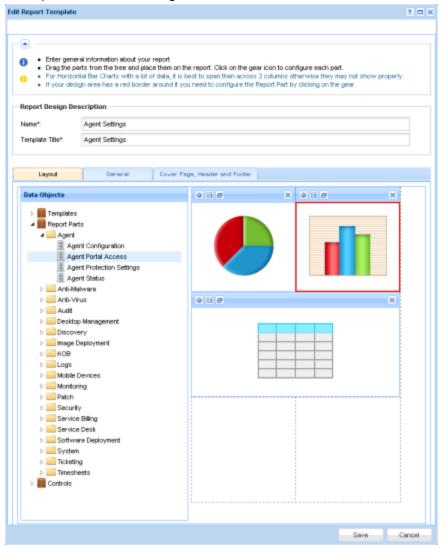
Layouts tab

In the left hand pane, the Layouts tab displays a data object tree of data sets. A two-column table displays in the right hand pane. You can drag-and-drop data sets from the data object tree into any of the cells of the two-column table. A data set can only occupy one or both cells of a single row. A report part displays data returned by a data set in a specific format. There are several types of report part formats:

- Table Displays one or more columns of data in table format returned by a selected data set.
- Bar Chart Displays a bar chart, based on two columns of data returned by a selected data set.
- Pie Chart Displays a pie chart, based on two columns of data returned by a selected data set.
- Line Chart Displays a line chart, based on two columns of data returned by a selected data set.
- Report Image Displays a selected report image.
- Custom Text Designer Displays a group of one or more static text and design controls.
- Name Value Part Displays a single value with a user-defined label, based on a *custom* data set. For example: Open Tickets: 247.

Report Templates

The data object tree also includes existing templates. You can drag and drop a part from an existing template into the right hand pane, then modify this new copy of the part for your new template. The source template remains unchanged.



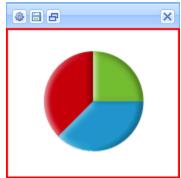
Adding a Report Part to a Layout

1. Drag-and-drop a data set from the data object tree in the left hand pane into one of the cells in the right hand pane.

2. Select the report part format. You can not switch formats after you make this selection. You can delete the report part, re-add it, then select a different format.



3. Click the gear icon is or double-click the cell to configure the report part. The report template cannot be saved until a report part has been configured at least once. Unconfigured report parts display a red box around their cells.



- 4. Configuring a report part depends on the type of report part selected. See:
 - **Table** (page 7)
 - ➢ Bar Chart (page 10)
 - > Pie Chart (page 13)
 - Line Chart (page 16)
 - Report Image (page 19)
 - Custom Text Designer (page 19)
 - > Name Value Part (page 20)
- 5. Use the Resize 🖻 icon to expand a report part into two cells on a single row or collapse it back to a single cell. *Expanding a report part into multiple rows is not supported.*
- Any time after a part is configured within a template you can optionally save a part to the **Report** Parts (*page 23*) page by clicking the save icon
 This makes it a "standard" part that can be used in templates and report definitions.

Table

Info Center > Configure & Design > Report Templates > Add Report Template / Edit > Gear Icon

A Table is configured using a three step wizard:

- Step 1 Select Columns
- Step 2 Ordering and Grouping

Step 3 - Filtering

Step 1 - Select Columns

Format

- Dataset Name The name of the data set associated with this table.
- Title Enter a title for the report part.
- Title Alignment Left, Right, Center
- Show Title If checked, the title displays on the published report with this report part. If blank, the title is hidden.
- Page Break If enabled, forces a page break next to this report part. Options include No Page Break, Before, After, Before and After. A break in either cell, before or after, has precedence over no break in the other cell. An After page break is ignored if a table runs beyond the length of the page in the other cell.
- Text Size Extra Small, Small, Normal, Large.

Columns / Column Selections

Drag-and-drop columns from the Columns list to the Column Selections list.

- Delete Row Removes a selected column from the list.
- Column A column selected for inclusion in the published report.
- Alias Displays as the heading for a selected column, in place of the column name.
- Aggregate Aggregate options return a single numeric value calculated from multiple cells in a selected column. For example, the aggregate option COUNT returns the number of non-null values in a selected column. Except for COUNT or COUNT_BIG, aggregate functions ignore null values.
 - > AVG Returns the average of the values in a group. Null values are ignored.
 - COUNT / COUNT_BIG Returns the number of items in a group. COUNT works like the COUNT_BIG function. The only difference between the two functions is their return values. COUNT always returns an *int* data type value. COUNT_BIG always returns a *bigint* data type value.
 - > MAX Returns the maximum value in a group.
 - > MIN Returns the minimum value in a group.
 - > STDEV Returns the statistical standard deviation of all values in a group.
 - STDEVP Returns the statistical standard deviation for the population for all values in a group.
 - SUM Returns the sum of all the values in a group. SUM can be used with numeric columns only. Null values are ignored.
 - > VAR Returns the statistical variance of all values in a group.
 - > VARP Returns the statistical variance for the population for all values in a group.
- Weight Determines the percentage width of each column by assigning a numerical value. For example, if four rows are sequentially weighted with the values 4, 3,2,1, then,
 - > The first row, with a weight of 4, is 40% of the sum of all weight values, 10.
 - > The second row, with a weight of 3, is 30% of the sum of all weight values, 10.
 - > The third row, with a weight of 2, is 20% of the sum of all weight values, 10.
 - > The fourth row, with a weight of 1, is 10% of the sum of all weight values, 10.

Step 2 - Ordering and Grouping

Order by

Determines the order data is displayed, from first to last. Multiple rows can be configured, with a higher row having precedence over a lower row. A selected order by column does not have be displayed in the report.

- Add Row Adds an order by row.
- Delete Row Deletes an order by row.
- Column Selects a column used to determine the order data displayed, from first to last.
- Aggregate If an aggregate option is selected, the sort order is applied to the numeric value returned by the aggregate option instead of the selected column. See the description for each aggregation option described above.
- Sort Order Ascending or Descending. Applies to either the selected column or to the aggregate option, if one is specified.

Group by

Returned rows of data can by organized into subheadings and subgroups by selecting "group by" columns. Multiple levels of "group by" columns are supported. Applies to table parts only.

- Add Row Adds a group by row.
- Delete Row Deletes a group by row.
- Column The column selected to group returned rows of data.

Step 3 - Filters

The data displayed can be limited by specialized data filters.

Note: Additional filtering options display when a report definition or report template is run or scheduled.

Row Filter

- Limit Type The type of row limit specified.
 - Top N Limits data returned to the first N number of rows returned. Example: If the Limit is 10, the first 10 rows of 300 rows available are returned. Result: 10 rows are returned.
 - Top N % Limits data returned to the first N % of rows returned. Example: If the Limit is 10 the first 10% of 300 available rows are returned. Result: 30 rows are returned.
- Limit The number specified for the Limit Type field.
- Select Distinct If checked, duplicate rows are not returned. For all columns displayed in the report, the values in a row must match the values of another row to be considered a duplicate.

Date Filter

Date filters only display if date/time columns are included in the report part.

Date Filter Column - Select a date/time column to filter the data queried by this part of the report.

Note: You must select a date/time column for the other date filter options below to have any effect.

- Time Range Type Select a time period to filter the data queried for this part of the report.
 - Predefined Ranges This Week, Last Week, This Month, Last Month, This Quarter, Last Quarter.
 - Inherit from Report When you schedule or run a report, Date Filter options display on the Filters tab and determine the time period used to query data for this part of the report.
 - Last N Days Enter the value of N in the Number of Days field.
 - **Fixed Range** Enter a **Start DateTime** and **End DateTime**.
- Number of Days Enter the value of N in this field if Last N Days was selected.
- Start DateTime Select a start date and time if Fixed Range was selected.

• End DateTime - Select the end date and time if Fixed Range was selected.

Advanced Filters

Rows can be limited by comparing selected columns with specified values.

- Add Row Adds a comparison row.
- Delete Row Deletes a comparison row.
- Field Selects a column used to compare with a specified value.
- **Operator** The operator used to compare a selected column with a specified value.
 - > Equal (=) Enter a comma separated list of values to create an OR statement.
 - Not Equal (!=) Enter a comma separated list of values to create an OR statement.
 - Like If a selected column contains this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
 - Not Like If a selected column does not contain this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
 - ➢ Greater Than (>)
 - Greater Than or Equal (>=)
 - Less Than (<)</p>
 - Less Than Or Equal (<=)</pre>
 - Between If the selected column is between two string values, separated by a comma, display this row. Comparison is from left to right. Examples:
 - ✓ Number field format 1000,9999
 - ✓ String field format aaa, zzz
 - ✓ Date field format 01-01-2014,03-31-2014
 - > Is Empty If the selected column does not have characters, display this row.
 - > Is Null If the selected column is null, display this row.
 - > Not Empty If the selected column has characters, display this row.
 - > Not Null If a selected column is not null, display this row.
- Value The specified value.

Bar Chart

Info Center > Configure & Design > Report Templates > Add Report Template / Edit > Gear Icon

A Bar Chart is configured using a two step wizard:

- Step 1 Layout
- Step 2 Filtering

Step 1 - Layout

Title

- Dataset Name The name of the data set associated with this table.
- Show Title on Report If checked, the title displays on the published report with this report part. If blank, the title is hidden.
- Title Enter a title for the report part.

Description - A description of the report part.

Format

- Bar Chart Type The orientation and shape of the bars in the chart.
 - > Vertical Bar
 - > Vertical Cylinder Bar
 - > Horizontal Bar
 - > Horizontal Cylinder Bar

Note: Horizontal bar charts may require both columns of the report layout to display data correctly.

- Show Chart in 3D If checked, the chart is 3 dimensional. Cylinder bar options must be 3 dimensional.
- Page Break If enabled, forces a page break next to this report part. Options include No Page Break, Before, After, Before and After. A break in either cell, before or after, has precedence over no break in the other cell. An After page break is ignored if a table runs beyond the length of the page in the other cell.
- Do not show the axis titles If checked, axis titles are not displayed.

Data Properties

- Bar Category Any column in the data set that you want to display varying numerical data for. For example, you could display a numerical value for each machine group included in the published report.
- Bar Value Any other column in the data set that can be represented numerically. A value must either be numeric or evaluate to numeric as the result of an aggregation. If a *non-numeric* column is selected, you can only use COUNT, or COUNT_BIG as aggregates.
- Alias Displays as the heading for a selected column, in place of the column name.
- Aggregate Aggregate options return a single numeric value calculated from multiple cells in a selected column. For example, the aggregate option COUNT returns the number of non-null values in a selected column. Except for COUNT or COUNT BIG, aggregate functions ignore null values.
 - > AVG Returns the average of the values in a group. Null values are ignored.
 - COUNT / COUNT_BIG Returns the number of items in a group. COUNT works like the COUNT_BIG function. The only difference between the two functions is their return values. COUNT always returns an *int* data type value. COUNT_BIG always returns a *bigint* data type value.
 - > MAX Returns the maximum value in a group.
 - > MIN Returns the minimum value in a group.
 - **STDEV** Returns the statistical standard deviation of all values in a group.
 - STDEVP Returns the statistical standard deviation for the population for all values in a group.
 - SUM Returns the sum of all the values in a group. SUM can be used with numeric columns only. Null values are ignored.
 - > VAR Returns the statistical variance of all values in a group.
 - > VARP Returns the statistical variance for the population for all values in a group.

Order by

Determines the order data is displayed, from first to last. Multiple rows can be configured, with a higher row having precedence over a lower row. A selected order by column does not have be displayed in the report.

- Add Row Adds an order by row.
- Delete Row Deletes an order by row.
- Column Selects a column used to determine the order data displayed, from first to last.
- Aggregate If an aggregate option is selected, the sort order is applied to the numeric value returned by the aggregate option instead of the selected column. See the description for each aggregation option described above.
- Sort Order Ascending or Descending. Applies to either the selected column or to the aggregate option, if one is specified.

Step 2 - Filters

The data displayed can be limited by specialized data filters.

Note: Additional filtering options display when a report definition or report template is run or scheduled.

Row Filter

- Limit Type The type of row limit specified.
 - Top N Limits data returned to the first N number of rows returned. Example: If the Limit is 10, the first 10 rows of 300 rows available are returned. Result: 10 rows are returned.
 - Top N % Limits data returned to the first N % of rows returned. Example: If the Limit is 10 the first 10% of 300 available rows are returned. Result: 30 rows are returned.
- Limit The number specified for the Limit Type field.
- Select Distinct If checked, duplicate rows are not returned. For all columns displayed in the report, the values in a row must match the values of another row to be considered a duplicate.

Date Filter

Date filters only display if date/time columns are included in the report part.

Date Filter Column - Select a date/time column to filter the data queried by this part of the report.

Note: You must select a date/time column for the other date filter options below to have any effect.

- Time Range Type Select a time period to filter the data queried for this part of the report.
 - Predefined Ranges This Week, Last Week, This Month, Last Month, This Quarter, Last Quarter.
 - Inherit from Report When you schedule or run a report, Date Filter options display on the Filters tab and determine the time period used to query data for this part of the report.
 - Last N Days Enter the value of N in the Number of Days field.
 - **Fixed** Range Enter a **Start DateTime** and **End DateTime**.
- Number of Days Enter the value of N in this field if Last N Days was selected.
- Start DateTime Select a start date and time if Fixed Range was selected.
- End DateTime Select the end date and time if Fixed Range was selected.

Advanced Filters

Rows can be limited by comparing selected columns with specified values.

- Add Row Adds a comparison row.
- Delete Row Deletes a comparison row.
- Field Selects a column used to compare with a specified value.
- Operator The operator used to compare a selected column with a specified value.
 - > Equal (=) Enter a comma separated list of values to create an OR statement.

- Not Equal (!=) Enter a comma separated list of values to create an OR statement.
- Like If a selected column contains this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
- Not Like If a selected column does not contain this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
- Greater Than (>)
- Greater Than or Equal (>=)
- Less Than (<)</p>
- Less Than Or Equal (<=)</pre>
- Between If the selected column is between two string values, separated by a comma, display this row. Comparison is from left to right. Examples:
 - ✓ Number field format 1000,9999
 - ✓ String field format aaa, zzz
 - ✓ Date field format 01-01-2014,03-31-2014
- > Is Empty If the selected column does not have characters, display this row.
- Is Null If the selected column is null, display this row.
- > Not Empty If the selected column has characters, display this row.
- > Not Null If a selected column is not null, display this row.
- Value The specified value.

Pie Chart

Info Center > Configure & Design > Report Templates > Add Report Template / Edit > Gear Icon

A Pie Chart is configured using a two step wizard:

- Step 1 Layout
- Step 2 Filtering

Step 1 - Layout

Title

- Title Enter a title for the report part.
- Show Title on Report If checked, the title displays on the published report with this report part. If blank, the title is hidden.

Format

- Pie Chart Type The orientation and shape of the pie chart.
 - Standard Pie
 - Exploded Pie
- Show Chart in 3D If checked, the chart is 3 dimensional.
- Page Break If enabled, forces a page break next to this report part. Options include No Page Break, Before, After, Before and After. A break in either cell, before or after, has precedence over no break in the other cell. An After page break is ignored if a table runs beyond the length of the page in the other cell.

Report Templates

• Display Pie Value inside of the Pie Graphic - If checked, values display inside each wedge of the pie chart. If blank, the values display as callouts around the edge of the pie chart.

Data Properties

- Category Any column in the data set that you want to display varying numerical data for. For example, you could display a numerical value for each machine group included in the published report.
- Value Any other column in the data set that can be represented numerically. A value must either be numeric or evaluate to numeric as the result of an aggregation. If a non-numeric column is selected, you can only use COUNT, or COUNT_BIG as aggregates.
- Alias Displays as the heading for a selected column, in place of the column name.
- Aggregate Aggregate options return a single numeric value calculated from multiple cells in a selected column. For example, the aggregate option COUNT returns the number of non-null values in a selected column. Except for COUNT or COUNT_BIG, aggregate functions ignore null values.
 - > AVG Returns the average of the values in a group. Null values are ignored.
 - COUNT / COUNT_BIG Returns the number of items in a group. COUNT works like the COUNT_BIG function. The only difference between the two functions is their return values. COUNT always returns an *int* data type value. COUNT_BIG always returns a *bigint* data type value.
 - > MAX Returns the maximum value in a group.
 - > MIN Returns the minimum value in a group.
 - **STDEV** Returns the statistical standard deviation of all values in a group.
 - STDEVP Returns the statistical standard deviation for the population for all values in a group.
 - SUM Returns the sum of all the values in a group. SUM can be used with numeric columns only. Null values are ignored.
 - > VAR Returns the statistical variance of all values in a group.
 - > VARP Returns the statistical variance for the population for all values in a group.

Order by

Determines the order data is displayed, from first to last. Multiple rows can be configured, with a higher row having precedence over a lower row. A selected order by column does not have be displayed in the report.

- Add Row Adds an order by row.
- Delete Row Deletes an order by row.
- Column Selects a column used to determine the order data displayed, from first to last.
- Aggregate If an aggregate option is selected, the sort order is applied to the numeric value returned by the aggregate option instead of the selected column. See the description for each aggregation option described above.
- Sort Order Ascending or Descending. Applies to either the selected column or to the aggregate option, if one is specified.

Step 2 - Filters

The data displayed can be limited by specialized data filters.

Note: Additional filtering options display when a report definition or report template is run or scheduled.

Row Filter

• Limit Type - The type of row limit specified.

- Top N Limits data returned to the first N number of rows returned. Example: If the Limit is 10, the first 10 rows of 300 rows available are returned. Result: 10 rows are returned.
- Top N % Limits data returned to the first N % of rows returned. Example: If the Limit is 10 the first 10% of 300 available rows are returned. Result: 30 rows are returned.
- Limit The number specified for the Limit Type field.
- Select Distinct If checked, duplicate rows are not returned. For all columns displayed in the report, the values in a row must match the values of another row to be considered a duplicate.

Date Filter

Date filters only display if date/time columns are included in the report part.

Date Filter Column - Select a date/time column to filter the data queried by this part of the report.

Note: You must select a date/time column for the other date filter options below to have any effect.

- Time Range Type Select a time period to filter the data queried for this part of the report.
 - Predefined Ranges This Week, Last Week, This Month, Last Month, This Quarter, Last Quarter.
 - Inherit from Report When you schedule or run a report, Date Filter options display on the Filters tab and determine the time period used to query data for this part of the report.
 - Last N Days Enter the value of N in the Number of Days field.
 - Fixed Range Enter a Start DateTime and End DateTime.
- Number of Days Enter the value of N in this field if Last N Days was selected.
- Start DateTime Select a start date and time if Fixed Range was selected.
- End DateTime Select the end date and time if Fixed Range was selected.

Advanced Filters

Rows can be limited by comparing selected columns with specified values.

- Add Row Adds a comparison row.
- Delete Row Deletes a comparison row.
- Field Selects a column used to compare with a specified value.
- Operator The operator used to compare a selected column with a specified value.
 - > Equal (=) Enter a comma separated list of values to create an OR statement.
 - > Not Equal (!=) Enter a comma separated list of values to create an OR statement.
 - Like If a selected column contains this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
 - Not Like If a selected column does not contain this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
 - ➢ Greater Than (>)
 - Greater Than or Equal (>=)
 - Less Than (<)</p>
 - Less Than Or Equal (<=)</pre>
 - Between If the selected column is between two string values, separated by a comma, display this row. Comparison is from left to right. Examples:
 - ✓ Number field format 1000,9999
 - ✓ String field format aaa, zzz
 - ✓ Date field format 01-01-2014,03-31-2014
 - > Is Empty If the selected column does not have characters, display this row.

- > Is Null If the selected column is null, display this row.
- > Not Empty If the selected column has characters, display this row.
- > Not Null If a selected column is not null, display this row.
- Value The specified value.

Line Chart

Info Center > Configure & Design > Report Templates > Add Report Template / Edit > Gear Icon

A Line Chart is configured using a two step wizard:

- Step 1 Layout
- Step 2 Filtering

Guidelines

- A line chart is most often used to represent time-based data with varying numerical values. Look
 for report parts that include both a time-based column and a second column containing varying
 numerical values.
- Some report parts—like the Monitor Counter Logs report part —include a Time (UTC) that can be used to construct time-based line charts. Use filtering to select the counter object, counter and counter instance you want to display. MS Reporting Services automatically orients the Time (UTC) labels vertically while Kaseya Reporting Services orients them horizontally.
- Enter a time based column in the Line Category field. Enter a varying numerical value column in the Line Value column. You can also use a non-numerical column, but if so, you must select an aggregation of COUNT or COUNT_BIG. Optionally enter a column used to group values into separate lines in the Line Series column.
- You will probably want to **Order By** the time-based column, to ensure that time-based data is sorted left to right accurately. A source table with time-based data may not have been populated in time-based order.
- After previewing the line chart, you may decide to filter out ranges of values, to produce more meaningful trend lines.

Step 1 - Layout

Title

- Dataset Name The name of the data set associated with this table.
- Show Title on Report If checked, the title displays on the published report with this report part. If blank, the title is hidden.
- Title Enter a title for the report part.
- Description A description of the report part.

Format

- Line Chart Type
 - > Standard Line Displays straight line segments between data points.
 - > Smooth Line Displays curved 'best fit' line segments between data points.

Note: Horizontal line charts may require both columns of the report layout to display data correctly.

- Multi Line Chart If checked, a separate line is created for each Line Category included in the chart. If blank, a single line is created that represents the sum of all line values of all line categories included in the chart. The Line Series field displays when this option is checked.
- Show Chart in 3D If checked, the chart is 3 dimensional. Cylinder bar options must be 3 dimensional.
- Do not show the axis titles If checked, axis titles are not displayed.
- Page Break If enabled, forces a page break next to this report part. Options include No Page Break, Before, After, Before and After. A break in either cell, before or after, has precedence over no break in the other cell. An After page break is ignored if a table runs beyond the length of the page in the other cell.

Data Properties

- Line Category Any column in the data set that you want to display varying numerical data for. For example, you could display a numerical value for each machine group included in the published report.
- Line Value Any other column in the data set that can be represented numerically. A value must either be numeric or evaluate to numeric as the result of an aggregation. If a *non-numeric* column is selected, you can only use COUNT, or COUNT_BIG as aggregates.
- Line Series This option displays when the the Multi Line Chart checkbox is checked. Enter the column used to group values into separate lines.
- Alias Displays as the heading for a selected column, in place of the column name.
- Aggregate Aggregate options return a single numeric value calculated from multiple cells in a selected column. For example, the aggregate option COUNT returns the number of non-null values in a selected column. Except for COUNT or COUNT BIG, aggregate functions ignore null values.
 - > AVG Returns the average of the values in a group. Null values are ignored.
 - COUNT / COUNT_BIG Returns the number of items in a group. COUNT works like the COUNT_BIG function. The only difference between the two functions is their return values. COUNT always returns an *int* data type value. COUNT_BIG always returns a *bigint* data type value.
 - > MAX Returns the maximum value in a group.
 - > MIN Returns the minimum value in a group.
 - > STDEV Returns the statistical standard deviation of all values in a group.
 - STDEVP Returns the statistical standard deviation for the population for all values in a group.
 - SUM Returns the sum of all the values in a group. SUM can be used with numeric columns only. Null values are ignored.
 - > VAR Returns the statistical variance of all values in a group.
 - > VARP Returns the statistical variance for the population for all values in a group.

Order by

Determines the order data is displayed, from first to last. Multiple rows can be configured, with a higher row having precedence over a lower row. A selected order by column does not have be displayed in the report.

- Add Row Adds an order by row.
- Delete Row Deletes an order by row.
- Column Selects a column used to determine the order data displayed, from first to last.
- Aggregate If an aggregate option is selected, the sort order is applied to the numeric value returned by the aggregate option instead of the selected column. See the description for each aggregation option described above.

Report Templates

Sort Order - Ascending or Descending. Applies to either the selected column or to the aggregate option, if one is specified.

Step 2 - Filters

The data displayed can be limited by specialized data filters.

Note: Additional filtering options display when a report definition or report template is run or scheduled.

Row Filter

- Limit Type The type of row limit specified.
 - Top N Limits data returned to the first N number of rows returned. Example: If the Limit is 10, the first 10 rows of 300 rows available are returned. Result: 10 rows are returned.
 - Top N % Limits data returned to the first N % of rows returned. Example: If the Limit is 10 the first 10% of 300 available rows are returned. Result: 30 rows are returned.
- Limit The number specified for the Limit Type field.
- Select Distinct If checked, duplicate rows are not returned. For all columns displayed in the report, the values in a row must match the values of another row to be considered a duplicate.

Date Filter

Date filters only display if date/time columns are included in the report part.

Date Filter Column - Select a date/time column to filter the data queried by this part of the report.

Note: You must select a date/time column for the other date filter options below to have any effect.

- Time Range Type Select a time period to filter the data queried for this part of the report.
 - Predefined Ranges This Week, Last Week, This Month, Last Month, This Quarter, Last Quarter.
 - Inherit from Report When you schedule or run a report, Date Filter options display on the Filters tab and determine the time period used to query data for this part of the report.
 - Last N Days Enter the value of N in the Number of Days field.
 - **Fixed Range** Enter a **Start DateTime** and **End DateTime**.
- Number of Days Enter the value of N in this field if Last N Days was selected.
- Start DateTime Select a start date and time if Fixed Range was selected.
- End DateTime Select the end date and time if Fixed Range was selected.

Advanced Filters

Rows can be limited by comparing selected columns with specified values.

- Add Row Adds a comparison row.
- Delete Row Deletes a comparison row.
- Field Selects a column used to compare with a specified value.
- **Operator** The operator used to compare a selected column with a specified value.
 - Equal (=) Enter a comma separated list of values to create an OR statement.
 - > Not Equal (!=) Enter a comma separated list of values to create an OR statement.
 - Like If a selected column contains this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
 - Not Like If a selected column does not contain this specified value as a substring, then display this row. Enter a comma separated list of values to create an OR statement.
 - ➢ Greater Than (>)

- Greater Than or Equal (>=)
- Less Than (<)</p>
- Less Than Or Equal (<=)</pre>
- Between If the selected column is between two string values, separated by a comma, display this row. Comparison is from left to right. Examples:
 - ✓ Number field format 1000,9999
 - String field format aaa, zzz
 - ✓ Date field format 01-01-2014,03-31-2014
- > Is Empty If the selected column does not have characters, display this row.
- Is Null If the selected column is null, display this row.
- Not Empty If the selected column has characters, display this row.
- Not Null If a selected column is not null, display this row.
- Value The specified value.

Report Image

Info Center > Configure & Design > Report Templates > Add Report Template / Edit > Gear Icon

A **Report Image** specifies a report image to add to a report. Available report images are based on the images uploaded to the VSA using the Info Center > Configure & Design > **Report Images** (*page 33*) page.

- Title Enter a title for the report image.
- Show Title If checked, the title displays on the published report with the report image. If blank, the title is hidden.
- Selected Image The image selected for this report image. To select an image, select a row, then click the OK button.
- Report Images
 - > Name The name of the image.
 - **Type** The type of image—png, jpg, gif, bmp.
 - Height The height of the image in pixels.
 - > Width The width of the image in pixels.
 - > Thumbnail A thumbnail of the image.

Custom Text Designer

A Custom Text Designer controls enable you to insert presentation elements above, below, or between other elements of your report or report template.

Custom Text Designer Window

Drag and drop the **Custom Text Designer** control from the **Folder Tree** (*page 4*) in the left hand pane of any report or report template **page layout** (*page 5*) into any cell on the right side. Once added, the grid cell displays the following icons:

- Image: Optimized to save the element. Added controls must be configured to save the element.
- Image: Resizes the grid element.

Deletes the grid element.

Add or change the following in the header of the Custom Text Designer window.

- Name The name of the element.
- Description The description of the element.
- Show Name on Report If checked, the name of the element displays on the report.

Custom Text Designer Controls

The **Custom Text Designer** page layout is similar to the report or report template page layout. It enables you to add and configure one or more of the following controls to a single "grouped" design element.

- Text Box Specifies the text, alignment and format of a text box. Both the Text Box and Text Area controls support the following embedded tags.
 - <rt> = report name
 - <rd> = report date
 - <org> = organization filter
 - <gr> = machine group filter
 - <id> = machine filter
- Text Area Specifies the text, alignment and format of a text area.
- Horizontal Line Specifies the format and color of a horizontal line separating other rows of the grid.
- Spacer Specifies the size of vertical white space separating other rows on the grid.

Name Value Part

A name value part is a type of data object that can be added to a report template or report definition. *A* name value part displays a single value, along with a user-defined label, based on a custom data set. These custom data sets are defined using the **Name Value Parts** (page 24) page. For example you might want to create a list of single value counts for ticket status.

Tickets Created Last <N> Days Total Tickets Past Due Tickets Closed Last <N> Days Total Open Tickets

Note: Creating or editing of name value parts is not supported on the Kaseya Cloud platform. All Cloud-based accounts can use pre-defined name value parts via the Control cabinet when creating a report template or a new custom report.

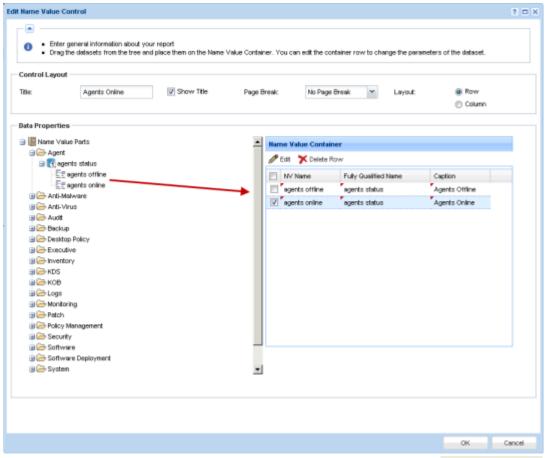
Adding a Name Value Part to a Layout

1. Drag-and-drop a name value part from the folder tree in the left hand pane in to one of the cells in the right hand pane.

2. Click the gear icon (a) to configure the name value part. The report template cannot be saved until the name value part has been configured at least once. Unconfigured name value parts display a red box around their cells.

Enter general information about your report • Enter general information about your report • The host and Baout of date, it is best to span then across 2 columns otherwise they may not show properly. • If your design area has a red border around it you need to configure the Report Part by clicking on the gear. Report Design Description Name*: Template Tite*: • Entropy of the state of the clicking on the gear (control of the state	Add Report Template	? 🗆 🗙
Name*: Template Title*: Layout General Cover Page, Header and Footer Bata Objects > E Templates > E Templates > E Report Parts 4 E Controls	Enter general information about your report Drag the parts from the tree and place them on the report. Click o For Horizontal Ber Charls with a lidt of data, it is best to span then	across 2 columns otherwise they may not show property.
Data Objects Image: Control is D Image: Control is Image: Control is	Name*:	
Emplates Export Parts Controls	Layout General Cover Page, Header and	Footer
	E Templates E Report Parts Controls	

 Drag-and-drop a name value part from the folder tree in the left hand pane into the Name Value Container list in the right hand pane. You can drop multiple instances of the same name value part into the same list. For example a Name Value Container list can include two instances: Agents Online and Agents Offline.



You can optionally edit an instance. Let's assume you want to change the Agents Offline instance to Agents All.

- 4. Select the row of the instance you want to edit in the Name Value Container list.
- 5. Click Edit. Any changes you make only applies to this instance in the report template or report definition you are editing.
 - > Name The name displayed by this Name Value Instance in configuration dialogs.
 - > Name Label The label displayed in the report with its corresponding value.
 - Parameters One or more parameters that determine the value returned for this name value part when a report is published. The values a parameter can have are determined by the query or stored procedure specified using the Name Value Parts (page 24) page.

Note: Hover the cursor over each parameter's name to see a tooltip description of the acceptable values for that parameter.

- 🛋		
 Config Only p config 	e values for the parameters for this Name Value ured DataSet, arameters that are NOT "Well Known" are ureable. "Well Known" parameter values are set system.	
General		
Name*:	agents online	_
Value Label*:	Agents Online	
Parameters	Online	
	Online	-
	Online	
	Cnine	
	Cnine	

Report Parts

Info Center > Configure & Design > Report Parts

The **Report Parts** page lists all pre-defined data sets used in custom reports. This page also enables you to configure report parts outside of a report template or report definition. Report parts defined using this page provide *default "standard" configurations* for report parts added to report templates and report definitions.

Note: See Report Templates (page 2) for a list of terms and concepts used in this topic.

Custom Fields

Custom agent fields—created using the Audit > Machine Summary or System Information pages—are supported in views, procedures, legacy reports and in selected Audit category reports parts. Custom reports do not support more than 40 custom fields.

Folder Tree

Each module folder in the folder tree lists one or more data sets appropriate to that module. Click any data set in the folder tree to see the columns and column descriptions included in that data set. Clicking an existing report part displays its current configuration in table format in the right hand pane.

When the Cabinet is Selected

- Collapse All Collapses all branches of the folder tree.
- Expand All Expands all branches of the folder tree.

When a Folder is Selected

No actions are available.

When a Data Set is Selected

- New Creates a report part, based on a selected data set.
 - > Table Adds a Table (page 7) report part.
 - **Bar Chart** Adds a **Bar Chart** (*page 10*) report part.
 - > Pie Chart Adds a Pie Chart (page 13) report part.

When a Report Part is Selected

- New Creates a report part, based on a selected data set.
 - > Table Adds a Table (page 7) report part.
 - > Bar Chart Adds a Bar Chart (page 10) report part.
 - > Pie Chart Adds a Pie Chart (page 13) report part.
- Edit Edits a selected report part.
- Delete Deletes a selected report part.
- Rename Renames a selected report part.
- Preview Generates a preview of the report part.

Name Value Parts

Info Center > Configure & Design > Name Value Parts

The Name Value Parts page creates a custom data set that returns a single value from the SQL database at the time a report is published. The value is displayed with a user-defined, descriptive name on a report. For example, a name value part called OnlineAgents could return a single number: a count of all online agents that match the filtering selected for the report. For detailed information see:

- Folder Tree (page 25)
- Add / Edit Data Set (page 25)
- Well Known Parameters (page 27)
- Report Contexts (page 30)
- Name Value Instances (page 32)

Note: Creating or editing of name value parts is not supported on the Kaseya Cloud platform. All Cloud-based accounts can use pre-defined name value parts via the **Control** cabinet when creating a report template or a new custom report.

Terms and Concepts

Name Value Control - Name value parts are added to a Name Value Part (page 20) cabinet on the Report Templates page. Each Name Value Control in a report template can display a set of Name Value Parts in row or column format. For example, you could create a Ticket Status section of the report that shows a series of counts, one for each of the following "names":

Tickets Created Last <N> Days Total Tickets Past Due Tickets Closed Last <N> Days Total Open Tickets

- Parameters Each name value part can be passed a number of parameters. Parameters must have default arguments. The argument of a user-defined parameter is entered or confirmed by the user when the report is published.
- Well Known Parameters Certain parameters are already "well known" to the system and do not have be defined by the user or provided an argument when the report is published. See Well Known Parameters (page 27).

 Name Value Instance - An instance stores the arguments assigned to user-defined parameters of a custom data set. These name value instances can be added to a name value control, bypassing the need to enter arguments manually each time a report template is created.

Folder Tree

Info Center > Configure & Design > Name Value Parts

Name value parts are organized into a single folder tree in the middle pane underneath a Name Value Parts cabinet. Use the following options to manage name value parts in this folder tree.

When the Name Value Parts Cabinet is Selected

- Collapse All Collapses all branches of the folder tree.
- Expand All Expands all branches of the folder tree.

When a Folder is Selected

A folder for each installed module has been created for you. You can use these or create your own.

• New Data Set - Adds (page 25) a custom data set in the selected folder.

When a Data Set is Selected

- Edit Data Set Edits (page 25) a selected custom data set.
- Add Name Value Instance Adds a name value instance in the selected folder.
- Delete Deletes a custom data set.

When a Name Value Instance is Selected

- Edit Edits a name value instance.
- Delete Deletes a name value instance.

Add / Edit Data Set

Info Center > Configure & Design > Name Value Parts > New Data Set or Edit Data Set

The New Data Set or Edit Data Set window specifies the custom data set used to return a single value from a SQL database. The custom data set uses either a SQL select statement or a stored procedure to return data. The value in a selected column, returned by the first row of data, is the value displayed in the report.

Action

- Create Registration File Once you have added or edited a name value part using this dialog:
 - 1. Click Create Registration File. A link to a generated data set XML displays on the subsequent dialog page.
 - 2. Download the data set XML and place it in the following location: \<KServerInstallDirectory>\Xml\Reporting\Custom\DataSetRegistration\1
 - 3. Click the System > Server Management > Configure > Change Reporting Configuration > Run Registration button to register the new or modified data part XML with your VSA.

Properties

- Name The name of the custom data set.
- Description A longer description of the custom data set.

 Category - The Name Value Parts folder, typically corresponding to a module, that a custom data set is located in.

SQL Definition

- **Return Column** The data column in the SQL select statement that contains the value that will be used in the published report. The value in the first row of data returned is used.
- Caption The caption displayed with the value on the published report.
- Data Type The data type returned. This data type must be compatible with the data type of the data column in the SQL select statement.
 - STRING
 - ≻ INT
 - DECIMAL
 - ► DATE
 - > BOOLEAN
- Context Determines the type of filter displayed just before a report is generated. The context should be compatible with the data returned by the SQL definition. For example, if the data returned by the SQL definition supports filtering primarily by agent machines, then the selected context should be MachineFilter.
 - MachineFilter
 - ServiceDeskFilter
 - AssetsFilter
 - DevicesFilter
 - MobileDevicesFilter
 - > TicketingFilter
- Text A SQL select statement that returns one or more columns of data. Only the first row of data returned by the SQL select statement is used.
- Stored Procedure The name of a stored procedure and any user defined parameters. Only the first row of data returned by the stored procedure is used.

Parameters

User-defined parameters specified by a SQL select statement or stored procedure must be registered here. This enables report templates and name value parts to display these parameters in configuration dialogs.

Actions

- Add Row Adds a parameter row.
- Delete Row Deletes a selected parameter row.

Columns

- **Param Name** The name of the parameter.
- Param Value The default value for the parameter.
- **Param Type** The data type of the parameter.
 - STRING
 - ≻ INT
 - DECIMAL
 - DATE
 - BOOLEAN
- Size The size of the parameter.

Description - Enter a description of the acceptable values supported by this parameter. When
selecting a different value for a parameter, users can reference this description by hovering the
cursor over a parameter's name to display its tooltip.

Well Known Parameters

When creating name value parts, you can include **Well Known** parameters in your queries. You insert these in SQL queries using the format <code>@<wellknownname></code>. You must also add them to the parameters table. The following are some of the well known values you can use:

- @LogoURL The URL to the logo used on the report.
- @ViewID The ID for the view selected when the report was created, or -1.
- @AdminID The ID of the VSA user running the report.
- @CompanyName The organization name set for MyOrg.
- **@EffectiveDate** The date the report is run, adjusted for time zone.
- @PartitionID The ID of the partition running the report.
- **@ReportDate** The date the report is run, adjusted for time zone.
- @ReportTitle The title of the report as set when the report was created.
- **@**ScopeID The ID of the scope the report is run under.
- @RoleID- The ID of the role the report is run under.
- @ReportSessionId The ID used for a run of a report. It is used to JOIN to a selected context (page 30) table. You must choose a context from the drop-down when using @ReportSessionId.
- @LangID The ID of the language used for the report.
- @StartDateTime A special date parameter, that when used in conjunction with @EndDateTime lets you set the date range at report run time.
- @EndDateTime A special date parameter, that when used in conjunction with @StartDateTime lets you set the date range at report run time.

ReportSessionID

If you are using a context, then include a <a>@ReportSessionId parameter as the value for one of the parameters.

Examples

Here are some examples of how to make name value parts using well known parameters.

Name Value Parts

1. This name value part uses <a>@CompanyName to return the company name.

Data Set						?
 ——— 						
 Create a ne 	ew custom dataset.					
Properties						
Name*:	CompanyName	Description:		Category*:	Executive	~
SQL Definition —		_				
Return Column*:	CoName	Data Type*:	STRING	 Context*: 	NONE	*
Caption:	Company Name]				
E. Taut	Stored Procedu	-				
Text	Stored Procedu	ie -				
Parameters						
🕂 Add Row 🗙	Delete Row					
+ Add Row 🗙		ault Value	Data Type	Size	Description	
-	Defa	ault Value aram Value	Data Type STRING	Size 64	Description	
	Defa				Description	
Name	Defa				Description	
Name	Defa				Description	
Name	Defa				Description	
Name	Defa				Description	
Name	Defa				Description	
Name	Defa				Description	
Name CompanyNa	Defa	aram Value			Description	
Name	Defa				Description	
Name CompanyNa	Defa	aram Value			Description	
Name CompanyNa	Defa	aram Value			Description	
Name CompanyNa	Defa	aram Value		64	Description	Cance

2. This name value part uses **@PartitionID** to return the machine with the lowest disk space in the partition ID.

·								
Create a n	ew custom dataset.							
Properties								
Name*:	Machine with Lov	uest C	escription:			Category*:	Audit	~
vanie .	Machine with Lov	resit D	escription.			category .	Abdic	•
SQL Definition								
Return Column*:	machName	D	ata Type*:	STRING	~	Context*:	NONE	~
Caption:	Machine with Lov	vest [
Text	Stored Proced	lure						
WHERE mnt.partitio	nid = @PartitionID an eMBytes	d ard.totalMBy	ard.agentGuid /tes > 0					
ORDER BY ard free	eMBytes	d ard.totalMBy	rd.agentGuid /tes > 0					
ORDER BY ard, free	eMBytes	fault Value	rd.agentSuid /tes > 0	Data Type	Size	Descrip	tion	
Parameters Add Row X Name	; Delete Row	d ard.totaIMBy	ra agentsuid rtes > 0	Data Type		Descrip	tion	
Parameters	eMBytes	d ard.totaIMBy	ra agentsuid (tes > 0		Size 4	Descrip	tion	
Parameters Add Row X Name	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type		Descrip	tion	
Parameters Add Row X Name	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type		Descrip	tion	
Parameters Add Row X Name	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type		Descrip	tion	
Parameters Add Row X Name	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type		Descrip	tion	
Parameters Add Row Name PartitionD	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type DECIMAL		Descrip	tion	
Parameters Add Row X Name	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type		Descrip	tion	
Parameters Add Row X Name @ParttionD	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type DECIMAL		Descrip	tion	
Arameters Add Row X Name @ParttionD	; Delete Row	d ard.totaIMBy	rd agentsuid (tes > 0	Data Type DECIMAL		Descrip	tion Create Registration	

3. This name value part uses the @ReportSessionID parameter to return a count of the number of agent procedures run. The MachineFilter context (page 30) enables you to choose filters when the report is run. The parameters @StartDateTime and @EndDateTime let you pick a date range at run time.

roperties							
ame":	Number of Scripts Ru	n Description	n:		Category*:	Agent	*
QL Definition							
eturn Column*:	AVRun	Data Type	INT INT	~	Context*:	MachineFilter	~
aption:	Scripts Run						-
Text	Stored Procedure						
	iner wertas On o voc ter Machiner Her List. Rep ETWEEN @StartDateTim	ortSessionId =@Reg		ilterList.AgentGu	NJ		
ND (EventTime BE	ter.MachineFilterList.Rep	ortSessionId =@Reg	portSessionId	iterList.AgentGu	NU		
ND (EventTime BE	ter.MachineFitterList.Rep ETWEEN @StartDateTim	ortSessionId =@Reg	portSessionId	iterList AgentGu Size	Description		
arameters	ter.MachineFilterList.Rep TWEEN @StartDateTim Delete Row Defau	ortSessionid =@Reg AND @EndDateTin	portSessionId ne)				
arameters Add Row X Name @EndDateTim	ter.MachineFilterList.Rep TWEEN @StartDateTim belete Row Defau me GETD	ortSessionid =@Reg AND @EndDateTin	Data Type	Size			
arameters Add Row X Name @EndDateTim	ter.MachineFilterList.Rep TWEEN @StartDateTim belete Row belete Row befau ne GETD sionId 0	ortSessionid =@Reg AND @EndDateTin	Data Type DATE	Size 4			
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Report Contexts

You can use **report contexts** to apply filters to your data sets when a report definition is run or when a report part or report template is previewed. Each context provides a different filter. A filter fills a temporary table with a list of items you can JOIN to, which then limits what your query returns. The following table lists available report contexts, the temporary table used by each context, and the column to JOIN on.

Name	TableName	Column
MachineFilter	ReportCenter.MachineFilterList	AgentGuid
ServiceDeskFilter	ReportCenter.IncidentsFilterList	IncidentId
AssetsFilter	ReportCenter.AssetsFilterList	AssetId

DevicesFilter	ReportCenter.DevicesFilterList	Deviceld
MobileDevicesFilter	ReportCenter.MobileDevicesFilterList	Deviceld
TicketingFilter	ReportCenter.TicketingFilterList	Ticketld

Your query should both JOIN to one of the table columns above and include a WHERE statement using the **Well Known Parameters** (*page 27*) **@ReportSessionId** parameter. This ensures you get the data for the current run of the report.

Example

The following example uses the MachineFilter context.

SELECT COUNT(u.agentGuid) AS agentCount
FROM dbo.users u
INNER JOIN ReportCenter.MachineFilterList mfl ON mfl.AgentGuid = u.agentGuid
WHERE mfl.ReportSessionId = @ReportSessionid AND u.firstCheckin IS NOT NULL

Here is how you enter it in the name value part edit dialog.

Edit Data Set						?	
_ <u> </u>							
 Create a net 	w custom datase	t.					
- Properties							- 1
Name*:	Agent Count	Description:		Category*:	Agent	~	
							-
SQL Definition							-1
Return Column*:	agentCount	Data Type*:	NT 👻	Context*:	MachineFilter	~	
Caption:	Agent Count						
Text	Stored Proce	edure					
	Delete Row						
Name	0	efault Value	Data Type	Size	Description		
@ReportSessic	onid 0		DECIMAL	26			
•						Þ	-
					Create Registration File	Can	cel

Name Value Instances

Info Center > Configure & Design > Name Value Parts

A Name Value Instance stores the arguments assigned to user-defined parameters (*page 25*) of a custom data set. These name value instances can be added to a Name Value Part (*page 20*), bypassing the need to enter arguments manually each time a report template is created.

Fields

- Name The name of the custom data set.
- Value Label The label displayed with the returned value of the custom data set.

Parameters

These are the arguments for each parameter that are stored with an instance of the custom data set.

Cover Page, Header, Footer

Info Center > Configure & Design > Coverpage, Header, Footer

The **Coverpage**, **Header**, **Footer** page defines presentation elements that are independent of the data displayed in the report. You can use these elements to "brand" your reports by creating a unique look and feel. Assign different combinations of coverpages, headers and footers to multiple custom report templates and custom report definitions.

Tabs

Each type of element is defined using a separate tab.

- Cover Page
- Header
- Footer

Actions

Each element tab displays the same set of buttons.

- Add / Edit Displays the element designer window.
- Delete Deletes the element.
- Default Sets this element as the default.
- Preview Generates a preview of the element.

Element Designer Window

Once the element designer window opens, drag and drop any control into any of cells on the right side of the page to add it to the element's page layout. Once added, the grid cell displays the following icons:

- If a configure the grid element. Added controls must be configured to save the element.
- E Resizes the grid element.
- Deletes the grid element.

Add or change the following in the header of the element designer window.

- Name The name of the element.
- Description The description of the element.
- **Default** If checked, this element serves as the default when a report template is created.

Controls in the Cover Page, Header and Footer Tabs

Report Logo - Sets the width, height and alignment of the report logo.

Note: By default, VSA report headers display the image specified by the System > Site Customization > Site Header. Changing the value in the System > Configure > Change Reporting Config... > Logo field overrides this default, changing the URL *for report headers only*. Changing the URL in the Change Reporting Config... > Logo field does not affect the display of the Site Header image.

- Text Box Specifies the text, alignment and format of a text box. Both the Text Box and Text Area controls support the following embedded tags.
 - <rt> = report name
 - <rd> = report date
 - <org> = organization filter
 - <gr> = machine group filter
 - <id> = machine filter
- Text Area Specifies the text, alignment and format of a text area.
- Filter Table Includes a cover legend describing the filtering applied to the report.
- Horizontal Line Specifies the format and color of a horizontal line separating other rows of the grid.
- Spacer Specifies the size of vertical white space separating other rows on the grid.

Controls in the Header and Footer Tabs Only

Page # - Specifies the text, alignment and format of a page number.

Report Images

Info Center > Configure & Design > Report Images

The **Remote Images** page enables you to upload and store images—png, jpg, gif, bmp—that can be added to reports and report templates by dragging and dropping a **Report Image** (*page 19*) control from the **data object tree** (*page 5*) > **Controls** cabinet.

Actions

- Add Uploads and stores an image. The maximum report image file size that you can upload is 1 MB.
- Delete Deletes a selected image.

Table Columns

- Name The name of the image.
- Created The date/time the image was created.
- Last Modified The date/time the image was last modified.
- **Type** The type of image—png, jpg, gif, bmp.
- Height The height of the image in pixels.
- Width The width of the image in pixels.
- Thumbnail A thumbnail of the image.

Defaults

Info Center > Configure & Design > Defaults

The **Defaults** page sets defaults for report definitions. Defaults include:

- Default Paper Size
- Default Distribution

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