



# REPORT WRITER

USING REPORT WRITER

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**IMAGETREND®**

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Report Writer Version 3.5

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# 1.1 REPORT WRITER OVERVIEW

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Report Writer is ImageTrend's tool that allows you to view, create and analyze reports using the data in your system. It encompasses a single reporting tool that gives you complete control of your data output and display.

**Navigation:** *More > Report Writer*

## Facts

- Report Writer allows you to dynamically create, display and save transactional reports, which gives you the power to find and display the data you need without relying on static reports.
- Report Writer contains a library of standard reports and charts for quick report creation. Finally, Report Writer offers optional features for three-dimensional analytical reporting and charting as well as mapping.
- You can choose from multiple ways to display your ad hoc report, from familiar text-based reports to (with the appropriate add-on features) pie charts and mapping.
- You can report on multiple fields within several categories and datasets, allowing you to create exactly the report you want.
- Database search criteria can be selected based on each field allowing users to define exactly what they need.
- User defined headers, sorting and grouping give users the ability to display search results using a number of options.
- Reports can be saved for later review or editing and also exported to a variety of formats.
- Finally, standard reports and saved reports are always available in the left menu of Report Writer, organized by category, for quick report generation.

## Types of Reports

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Report Writer provides several different types of reports for differing needs. Each report listed in the left menu will display an icon to indicate which type of report it is.

### Transactional Reports

While some saved transactional reports have a default setup of fields to display in a particular order, transactional reports can be entirely configured. Users can change which fields display, define additional criteria for each of those fields (e.g., display only records within a certain postal code) and change the order in which records appear. In addition, users can create transactional reports completely on their own with no pre-defined fields or setup. For more information, get started at [Transactional Reports Overview on page 15](#).

## Standard Reports

Standard reports (also sometimes called canned reports) are pre-created with all fields and display options defined for the user. Within the filters, users can define additional criteria (e.g., requesting information about a particular unit or type of service). These reports provide fewer configuration options and allow a ready-made report for common data requests. For more information, get started at [Standard Reports Overview on page 12](#).

## Analytical Tabular Reports

Analytical tabular reports are a part of the optional Visual Informatics package for Report Writer, and allow you to create a custom report with the powerful Analytics data analysis tools. Analytical tabular reports are displayed in a traditional looking report displayed in table format, and allow you to use drill-down reporting for in depth information.

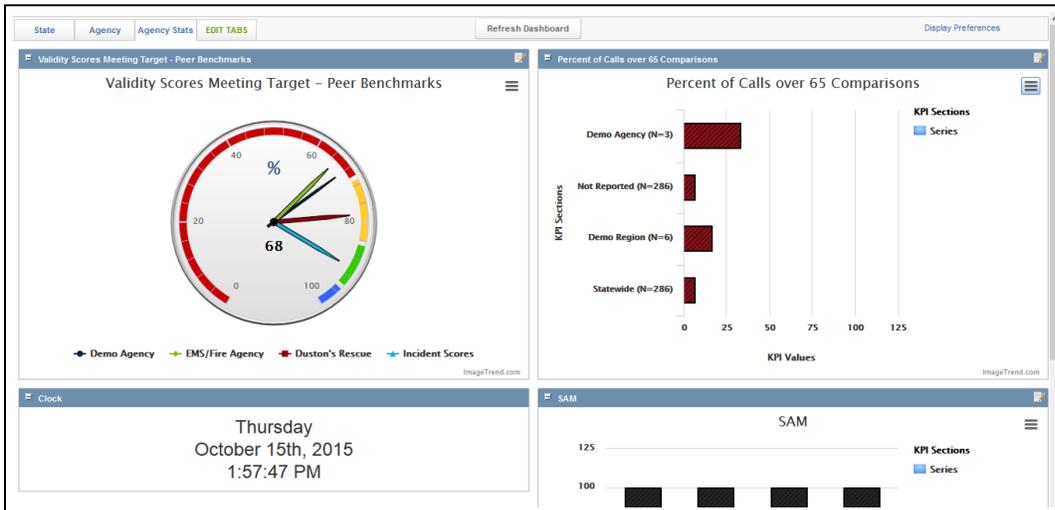
## Analytical Chart Reports

Analytical chart reports are a part of the optional Visual Informatics package for Report Writer, and allow you to create a custom chart with the powerful Analytics data analysis tools. Analytical chart reports allow you to quickly build a variety of different charts using pre-created formats to display in-depth data from your system in an easy-to-understand way.

# 1.2 REPORT WRITER DASHBOARD OVERVIEW

The Report Writer dashboard provides a central location for administrators to create dashboards with reports for their users to see.

**Navigation:** *Report Writer > Load Dashboard button in the left menu*



## Facts

- The Report Writer dashboard is separate from any dashboard page in Report Writer.
- The Report Writer dashboard can have multiple tabs, each of which can contain multiple reports.
- Administrators control the content of the Report Writer dashboard for all users, including selecting which tabs are available to each security group and what reports are displayed on those tabs. Users will see the dashboard tabs that their permission group has access to based on setup from the administrator and will not be able to change it.
- Depending on what modules your system has, you can display transactional reports, analytical reports and charts and KPI charts on the dashboard. For analytical reports and charts and KPI charts, you must have the optional Analytics add-on for Report Writer.

## Adding a Report Writer Dashboard Tab

---

Administrators can add and configure a new tab for users to view in their Report Writer dashboard.

**Navigation:** *Report Writer > Load Dashboard button in the left menu > Edit Tabs tab > Add*

## Facts

- Only administrators with the proper permissions can add a new dashboard tab. Users without the correct permissions will not see the Edit Tabs tab.
- If you create more tabs than fit on the toolbar, the tabs that do not fit will be included under a More tab.
- The new tab will be visible to everyone belonging to the security groups you select for the tab.
- In order for any report to be displayed in a widget on the dashboard, it must be saved and you must have permissions to access the report.
- Administrators can also add or remove the Default tab from the dashboard by selecting or deselecting the Default checkbox in the Edit Tabs window. Unless you disable it, the Default tab will always be displayed for all users so no one will encounter a blank dashboard with no tabs.

 TAKE A LOOK

Manage Dashboard Tabs

Name	Hover-Over Text	Security Group	Number of Columns
<input type="checkbox"/> Default <small>When checked, the default tab will always appear allowing users to edit their own tab. Always checked when other tabs aren't defined.</small>		Elite User Report Writer Tester Elite Builder	2
<div style="display: flex; align-items: center;"> <div style="margin-right: 5px;">↓</div> <input style="width: 100%;" type="text" value="State"/> </div>	State Dashboard	<div style="border: 1px solid #ccc; padding: 2px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite User</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Report Writer Tester</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite Builder</div> </div>	2 <span style="float: right;">⊕</span>
<div style="display: flex; align-items: center;"> <div style="margin-right: 5px;">↕</div> <input style="width: 100%;" type="text" value="Agency"/> </div>	as	<div style="border: 1px solid #ccc; padding: 2px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite User</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Report Writer Tester</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite Builder</div> </div>	2 <span style="float: right;">⊕</span>
<div style="display: flex; align-items: center;"> <div style="margin-right: 5px;">↕</div> <input style="width: 100%;" type="text" value="Agency Stats"/> </div>		<div style="border: 1px solid #ccc; padding: 2px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite User</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Report Writer Tester</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite Builder</div> </div>	2 <span style="float: right;">⊕</span>
<span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add			
<input type="button" value="Save"/>		<input type="button" value="Close"/>	

## Instructions

1. From the Manage Dashboard Tabs modal window, click *Add*.  
A new line appears with the details for a new tab.
2. Complete the details for in the blank line at the bottom of the list of tabs.

Manage Dashboard Tabs

Name	Hover-Over Text	Security Group	Number of Columns
<input type="checkbox"/> Default <small>When checked, the default tab will always appear allowing users to edit their own tab. Always checked when other tabs aren't defined.</small>		Elite User Report Writer Tester Elite Builder	2
<div style="display: flex; align-items: center;"> <div style="margin-right: 5px;">↓</div> <input style="width: 100%;" type="text" value="State"/> </div>	State Dashboard	<div style="border: 1px solid #ccc; padding: 2px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite User</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Report Writer Tester</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite Builder</div> </div>	2 <span style="float: right;">⊕</span>
<div style="display: flex; align-items: center;"> <div style="margin-right: 5px;">↕</div> <input style="width: 100%;" type="text" value="Agency"/> </div>	as	<div style="border: 1px solid #ccc; padding: 2px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite User</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Report Writer Tester</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite Builder</div> </div>	2 <span style="float: right;">⊕</span>
<div style="display: flex; align-items: center;"> <div style="margin-right: 5px;">↕</div> <input style="width: 100%;" type="text" value="Agency Stats"/> </div>		<div style="border: 1px solid #ccc; padding: 2px;"> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite User</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Report Writer Tester</div> <div style="background-color: #4a7ebb; color: white; padding: 2px;">Elite Builder</div> </div>	2 <span style="float: right;">⊕</span>
<span style="color: green; font-weight: bold; font-size: 1.2em;">+</span> Add			
<input type="button" value="Save"/>		<input type="button" value="Close"/>	

**i** PAGE INFORMATION

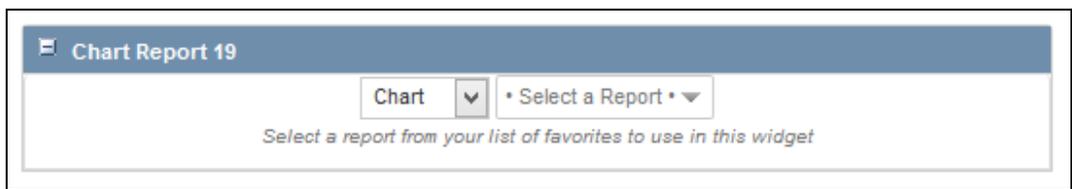
<b>Up/Down arrows</b>	If you want to change the order that the tabs will appear in on the dashboard, click the Up arrow to move the tab up in the list or the Down arrow to move it down in the list.
<b>Name</b>	The name of the tab, as it will appear on the dashboard.
<b>Security Group</b>	All selected security groups will be able to see this tab exactly as you configure it, although they will see their own organization's data in the reports. <b>HINT:</b> To select multiple security groups at the same time, press and hold the <i>Ctrl</i> key while clicking each group.
<b>Number of Columns</b>	The number of reports that will be displayed in each row for this dashboard.

3. Click *Save*.  
The new tab is added to your dashboard.
4. If needed, click the name of the new tab.
5. Click the *Display Preferences* link in the upper right.
6. Select the checkbox(es) for the widgets that you want to view.

**HINT:** If you select a chart report, you can next select any report you have permissions for to appear in the widget regardless of which widget number you select. Note that if you have used the same widget on another tab, a chart may appear already selected when the widget loads.

7. Click the *Display Preferences* link again if needed to collapse the menu and see the entire dashboard.
8. For each widget, select the report settings.

**HINT:** If the widget included a report immediately and you want to change the report, click the *View and Edit* icon  in the upper right corner of the widget to display the options for selecting a new report.



**i** PAGE INFORMATION

<b>Report type</b>	<i>Chart</i> = You will be able to select an analytical chart to appear in this widget (if your system contains the Analytics module). <i>Ad-hoc</i> = You will be able to select a transactional report to display in this widget.
<b>Select a Report</b>	Select the name of the report or chart you want to be displayed.

9. As needed, click on the title of any widget you want to move and drag it to where you want it to appear on the dashboard.
10. When finished, from the upper right, click *Save*.

## Changing Which Report Appears in a Widget

This article explains how to select a different report to appear in an existing report widget on the dashboard.

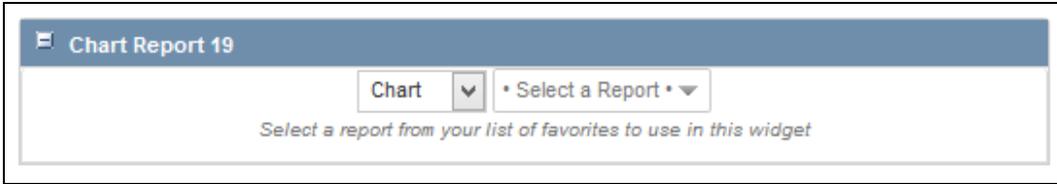
**Navigation:** *Report Writer > Load Dashboard button in the left menu > dashboard tab > View and Edit icon in the upper right of the widget*

### Facts

- Only an administrator can change which report is displayed in a report widget.
- In order for any report to be displayed in a widget on the dashboard, it must be saved and you must have permissions to access the report.
- These changes will be applied for everyone viewing this dashboard.
- As soon as you select a new report, the dashboard will automatically save.

### Instructions

1. From the upper right corner of the widget, click the *View and Edit* icon .
2. Select the new report settings.



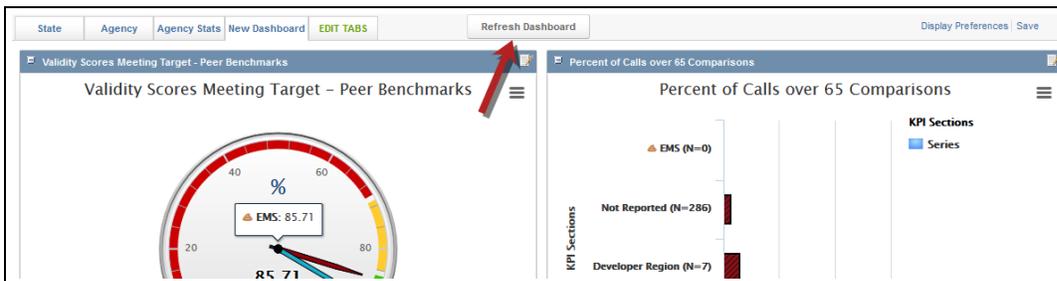
**i PAGE INFORMATION**

<b>Report type</b>	<p><i>Chart</i> = You will be able to select an analytical chart to appear in this widget (if your system contains the Analytics module).</p> <p><i>Ad-hoc</i> = You will be able to select a transactional report to display in this widget.</p>
<b>Select a Report</b>	<p>Select the name of the report or chart you want to be displayed.</p>

## Refreshing your Report Writer Dashboard

Refreshing your dashboard allows you to refresh all the reports included on it.

**Navigation:** *Report Writer > Load Dashboard button in the left menu > Refresh Dashboard button*



### Facts

- If your report includes analytical KPI charts, refreshing your dashboard will allow you to select new benchmark values if needed.
- Refreshing the dashboard will refresh the charts, which can allow them to pull any new data to be included.

# 1.3 STANDARD REPORTS OVERVIEW

Standard reports are pre-created with all fields and display options defined for the user.

**Navigation:** *Report Writer > report name from the left menu*

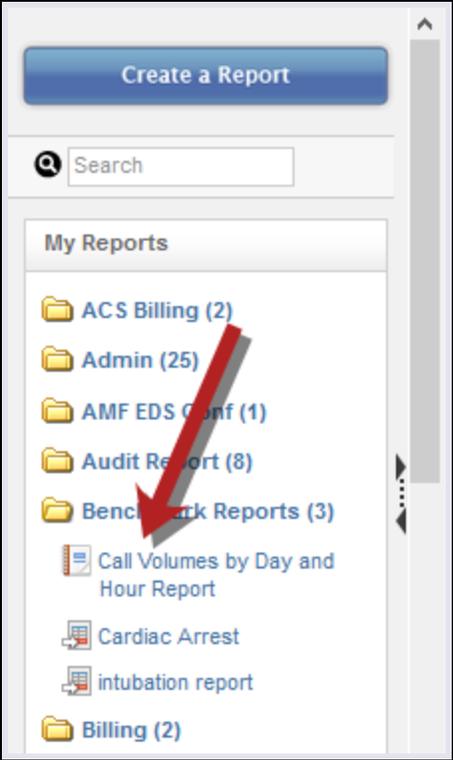
## Facts

- Standard reports are not customizable.
- For some standard reports, you can use filters to narrow down the result or even to determine which sections will appear on the report.

## Generating and Viewing Standard Reports

Standard reports are available from the All Reports section in the All Reports section of the left menu and (for reports that you have marked as favorites) in the My Reports section of the left menu.

**Navigation:** *Report Writer > All Reports or My Reports section > report name*



The screenshot shows a web interface for 'My Reports'. At the top is a blue button labeled 'Create a Report'. Below it is a search bar with a magnifying glass icon and the word 'Search'. The main area is titled 'My Reports' and contains a list of folders and reports. A red arrow points to the 'Benchmark Reports (3)' folder. Other items in the list include 'ACS Billing (2)', 'Admin (25)', 'AMF EDS Conf (1)', 'Audit Report (8)', 'Call Volumes by Day and Hour Report', 'Cardiac Arrest', 'intubation report', and 'Billing (2)'. A vertical scrollbar is visible on the right side of the list.

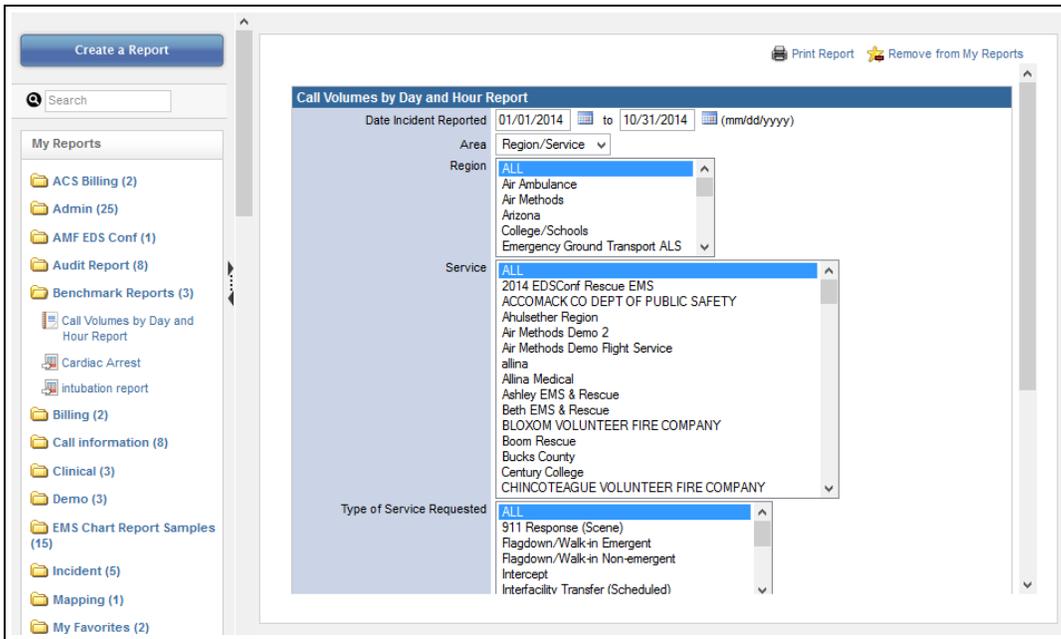
## Facts

- You can use the Search text box in the left menu or expand the categories to more easily find the report you are looking for.
- Category names have a folder icon to their left side, while reports have an icon indicating which type of report it is.
- Clicking the name of a category once will expand it to show all the reports inside. Clicking it again will collapse the folder to hide all reports inside.
- Some standard reports will allow you to set specific Filter values to select which information will be included in the report.

## Instructions

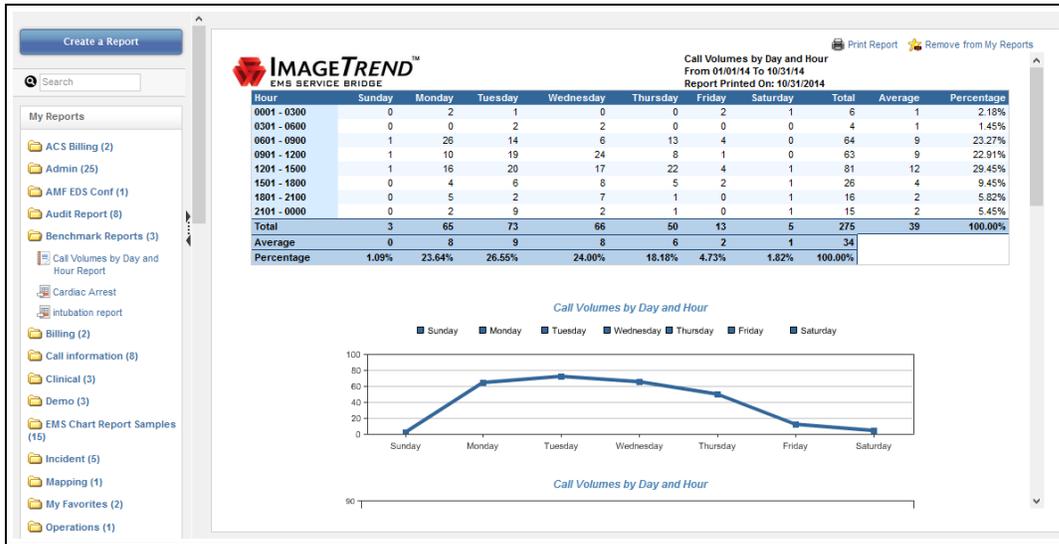
1. Click the report name from the left menu of Report Writer.
2. If a page appears before the report, use the fields on the page to enter any filter values to determine or narrow down which information will appear on the report.

 **HINT:** If your report has multiple different filters, remember that only information for records that match all the criteria you enter here will appear.



3. When you have selected all desired criteria, click *Search* or *Continue*.

The report appears.



## Adding Standard Reports to your My Reports

Report Writer provides a My Reports section that can be configured for each user. You may add reports to this category for easy access.

**Navigation:** Report Writer > All Reports section > report name > Add to My Reports

## Facts

- Reports added to My Reports will also remain in their original categories under All Reports.
- Standard reports added to My Reports will be included in the same category as they appear within in All Reports. For example, if you add the Staff Roster report in the Administrative Reports category to your My Reports, the Administrative Reports category will then appear in My Reports, with only the Staff Roster report (or any additional reports you have saved from that category).

## Printing a Copy of a Standard Report

You can print a copy of a report if you have a printer available from the computer you are viewing the report on.

**Navigation:** Report Writer > All Reports section > report name > generate the report > Print Report

## Facts

- Clicking the *Print Report* button will open the Print dialog box for your browser, which you can use to print the report.

# 1.4 TRANSACTIONAL REPORTS OVERVIEW

---

Creating a transactional report can be a simple or a detailed procedure, depending on the complexity of the report you want to create. Before beginning a transactional report, you should begin by considering each of the elements you will need to work with to create the report.

## Elements of a Transactional Report

---

### Data Set

Each report generated in Report Writer must start from a Dataset. Data sets hold individual data points that you can report on. Depending on how the system is set up, certain data points may be held in multiple data sets.

### Columns

Within a data set, you can select pieces of information to be included in each Column of the report. These pieces of information are based on the fields filled out throughout the application

### Display

On this page, users can set the Sort Order of fields, select numeric fields to display a variety of calculations for a specific column including averages, totals, the minimum value, maximum value, variance and standard deviation, determine the alignment of the field display and pre-define a date range for date fields.

### Grouping

If the records should be clustered according to a certain type of information you will need to set up Grouping rules. You have the option to group multiple times for further organization. Each group can be sorted in ascending or descending order

### Sorting

If the records should be sorted alphabetically or numerically, you can choose to sort the records based on the results in each column by using Sorting (e.g., sorting users alphabetically by last name). When used with grouping, you can only sort fields that have not been grouped. If grouping is also used, sorting will be applied after grouping. In this case, after all grouping has been performed and each group has been sorted according to their criteria, the records within each group will be sorted according to the criteria selected here.

### Criteria and Filtering

Both Criteria and Filter options are included in the Criteria tab. Criteria will allow you to determine limits on

the data that will be displayed every time this report is displayed. F

Filters allow you to specify a new value for a criterion each time the report is run. For example, you could use filters to specify the dates that the report examines, so that each time the report is run, users can specify which dates they want to look at.

Criteria and filters are important for narrowing the number of results displayed. If your organization has hundreds or thousands of records in the system, this is very important to limit the length of the report and prevent the system from timing out when trying to retrieve a large number of records.

## Additional Options

The Additional Options tab includes a variety of settings related to the appearance and functionality of your report, including options to customize the appearance (such as headers, footers and different colors), the number of records to appear per page and whether the report description or filters (when existing) should appear at the bottom of the report.

## Report Access

You can manage access to a report you create if desired. This can include saving the report, setting who can view or edit it, scheduling the report to run at a specific interval or exporting the report. These options are available from the Actions tab, as well as many other report options.

## Step One: Selecting a Dataset

---

The first step for creating a report is selecting the dataset with the columns you want to include.

**Navigation:** *Report Writer > Create a Report > Create a Transaction Report section > dataset name*

### Facts

- Reports can only use columns from a single dataset.
- Once you select a dataset, you will be brought to the Columns page to begin creating your report.

## Step Two: Selecting Columns

---

Each column represents a piece of information that will be displayed on the report. For most transactional reports, these pieces of information will be displayed in a column in a text-based report.

**Navigation:** *Report Writer > Columns tab of the report*

### Facts

- You can use the Search box in the Select Columns section to quickly find the column(s) you want to add. As you start typing in the Search box, the options in the Available scroll list will be narrowed down to display only columns with names with names that match the text you entered.
- Once you have selected columns, you can use the Up and Down buttons next to the Selected scroll

list to change the order of the columns as they will appear in the report. To change the order, select the column you want to move and click the *Up* or *Down* button as appropriate.

- Columns listed in the Available list can be added to the report. Columns listed in the Selected list will be displayed on the report.
- You must add columns to see a report. After completing this step, you can click the *Generate* link at any time to see how your report looks with the settings you have already added, then return to the tabs to edit your report further if needed.
- Once you select your columns and click Continue, you will be brought to the Display tab.

## Instructions

1. Select the dataset for the report.
2. Select the first column you want to add to the report.

 **HINT:** You can also add custom columns to your report, which allows you to build a column based on specific calculations. For more information, refer to [Creating Custom Columns on page 17](#).

3. Click the *Add* icon .

The column is moved to the Selected list.

 **HINT: ADDITIONAL SCROLL LIST OPTIONS**

Each of the icons in the scroll list performs a different function. The Add icon  moves the currently selected item in the Available list to the Selected list. The Remove icon  moves the currently selected item in the Selected list to the Available list.

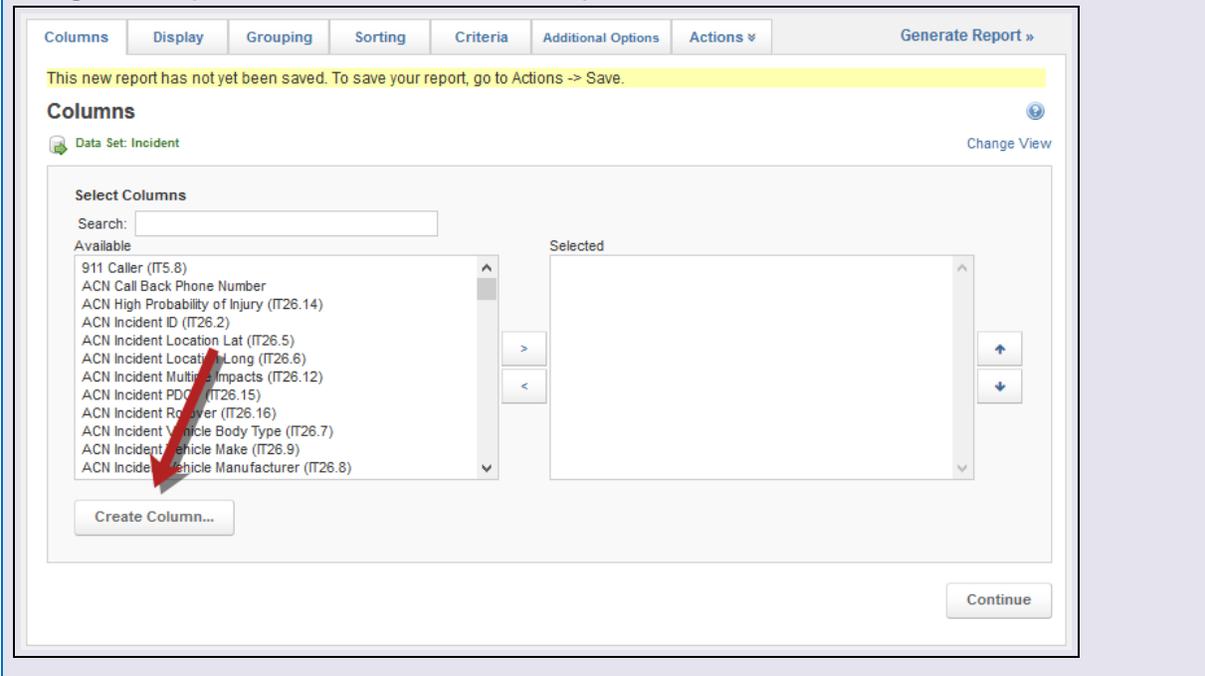
4. Repeat steps 2 – 3 until all columns are added.
5. Click *Continue* to move on to the next step.

## Creating Custom Columns

---

The Create Columns feature in Report Writer allows you to add a configurable column to your reports.

**Navigation:** Report Writer > Columns tab of the report > Create Column button



## Facts

- The Custom Columns feature allows you to configure the data points to change the way information is displayed or to add a column with information from a calculation (such as an average value or a custom time difference).
- You can create as many custom columns as you would like within your report. However, keep in mind that since the system will need to perform calculations to generate custom columns, a large number of custom columns could significantly slow down your report.
- Not all custom columns will be available for each data set. The available options are based on the data set and data points and will be shown in the Create Column modal window.
- All custom columns that are added to a report will have an asterisk in front of their name. When looking for the column in alphabetical lists (such as the lists of columns in the Grouping tab or when adding criteria), this will move the custom column names to the top of the list.

## Types of Custom Columns

Each type of custom columns allows you to create a column with a specific calculation or that displays specific information in a certain way.

### Average Column

An average column allows you to view the average of all the data for this column.

## Count

A count column displays the number of values for this column.

## Cumulative Distribution

A cumulative distribution column calculates and displays the percentage of records with a value less than or equal to this record.

 **HINT:** Cumulative distribution is a statistical calculation that may be most familiar as the function that creates the “curve” for a test. It calculates the percentile for a record based on both the score/value and the number of records at each score/value.

## Date Difference Column

Custom date difference columns allow you to create a column that displays the difference between two date/time columns.

## Date Part

A date part columns allows you to display a specific part of a date associated with a record; for example, just the year or just the month.

## List Column

A list column “rolls up” all the data that belongs together in an easy-to-read group.

 **HINT:** There is also an option for not displaying duplicated data in the Display tab; however, using a list column allows you to build criteria based on aggregate data.

## Math Column

You can use numeric columns from data sets and numeric literals (e.g., numbers and mathematical symbols like + and -) to create custom columns based on mathematical expressions.

## Maximum Column

A maximum column displays the highest value for the records associated with this column.

## Median Column

A median column displays the median value, or the value that is in the middle, of all the records associated with this column.

**EXAMPLE:** If a median column was working with the values 10, 11 and 12, it would display 11.

## Minimum Column

A minimum column displays the lowest value for the records associated with this column.

## Nth/Ordinal Column

An Nth/ordinal column allows you to view the “Nth” value (for example, the first value) in the column.

## Percent of Total

A percent of total column allows you to calculate and display the percentage of the grand total for a numeric data element.

## Percent Rank

A percent rank column calculates and displays the percentile (e.g., 10th percentile) that each record is in based on its value (e.g., 30) compared to the other records in the report.

 **HINT:** This type of calculation may be most familiar based on school testing, where you might be informed that a child is in the 95th percentile of all children based on their score.

**EXAMPLE:** This type of function would allow you to examine validity scores for each incident. If a specific run form had a score of 75, which was better than 50% of scores, the column would display 50%.

## Percentile

A percentile column shows you the value (e.g., 5) associated with specific percentile that you select (e.g., 65%) based on all the records included in the report.

**EXAMPLE:** This type of function would allow you to view the validity score that was at the 50th percentile of scores.

## Standard Deviation

A standard deviation column calculates and displays the standard deviation for each record, indicating how much each value varies from the average value.

## Sum

A sum column displays the sum of all values for each record or for all records in a group.

## Text Column

Custom text columns are a way to combine text columns and data in numerous ways. With this feature you can reduce the number of columns that are generated in the report while still retaining the information they hold.

## Variance

A variance column displays the variance of each value, or how far apart the values are from each other.

## How to Build an Average Column

Average columns display the average value for columns that may have multiple values.

## Facts

- Average custom columns are generally useful for columns that may have multiple values for a single record; for example, the medication dosage.
- This differs from the Average option in the Display tab in that if you create an average custom column, an average value will be displayed in each row. The Average option on the Display tab, by

contrast, is designed for reports where you want to see a row for each value, with the average displayed at the bottom of a grouping.

- One great advantage of creating an average custom column (as opposed to adding an average calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using an average custom column, the average of the column you select will be calculated by default for each row. If needed, you can choose to calculate the average by a different value, which may result in multiple rows appearing for the same record.

## Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Average* for the column type.
3. Enter the appropriate details.

**Create Column**

Type:

Name:

Column:

Sorted By:

Distinct Values:  Yes  No  
Apply to only a distinct listing of values.

**i** PAGE INFORMATION

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p>
<b>Column</b>	<p>The column you want to view average information for (for example, the average age).</p>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the average (for example, to view the average age for each job title, you would select Job Title).</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"><li>• If you select <i>Entire Report</i>, the average will be calculated for each row based on the values in the line. For example, if there is a line for each date, the average will be calculated for each date. This is the most commonly used option for average columns.</li><li>• Selecting a value allows you to view the average for a value not included in the report. This may result in additional lines being added to your report. For example, if your report includes only a date column and an average age column but you choose to sort the average by job title, you will see multiple rows for each date, one for each job title.</li></ul>
<b>Distinct Values</b>	<p><b>Yes</b> = Use only unique values in this calculation (e.g., if a value appears in three different records included in this calculation, it will only be used once in calculating the value).</p> <p><b>No</b> = Use all values in this calculation (e.g., if a value appears in three different records included in this calculation, it will be used three times in calculating the value).</p>

4. Click *Add*.

## How to Build a Count Column

Count columns display the number of records for a column that may have multiple records.

### Facts

- Count custom columns are generally only useful for columns that may have multiple records associated with a single item; for example, medications administered.
- This differs from the Count option in the Display tab in that if you create a count custom column, one row will display with the count for each related value. The Count option on the Display tab, by con-

trast, is designed for reports where you want to see a row for each value, with the count displayed at the bottom of a grouping.

- One great advantage of creating a count custom column (as opposed to adding a count calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using a count custom column, the count of the column you select will be calculated by default for each row. If needed, you can choose to calculate the count by a different value, which may result in multiple rows appearing for the same record.

## Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Count* for the column type.
3. Enter the appropriate details.

**Create Column**

Type:

Name:

Column:

*Hint: If you want a count of all records in a result set, use the default value of "All Rows." This will return a count of all records in the result set. Alternatively, if you want a count of all non-Null values for a specific column, choose a column from the "Column" drop-down list.*

Sorted By:

**i** PAGE INFORMATION

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p>
<b>Column</b>	<p>The column you want to view the number of items for.</p> <p> <b>NOTE:</b></p> <p>If you select All Rows, the count column will display a count of all records in the results set (e.g., in the report or in the grouping).</p>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the count (for example, to view the count of staff by department, you would select Department).</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"><li>• If you select Entire Report, the count will be calculated for each row based on the values in the line. For example, if there is a line for each date, the count will be calculated for each date. This is the most commonly used option for count columns.</li><li>• Selecting a value allows you to view the count for a value not included in the report. This may result in additional lines being added to your report. For example, if your report includes only a Hire Date column and a count of employees column but you choose to sort the count by department, you will see multiple rows for each date, one for each department.</li><li>• This option is not available if you selected All Rows for the column.</li></ul>
<b>Distinct Values</b>	<p>Yes = Use only unique values in this calculation (e.g., if a value appears in three different records included in this calculation, it will only be used once in calculating the value).</p> <p>No = Use all values in this calculation (e.g., if a value appears in three different records included in this calculation, it will be used three times in calculating the value).</p> <p> <b>NOTE:</b> This field will not appear until you have selected a column.</p>

4. Click *Add*.

### How to Build a Cumulative Distribution Column

A cumulative distribution column calculates and displays the percentage of records with a value less than or equal to this record.

## Facts

- Cumulative distribution custom columns are generally useful in situations where you want to compare a single value against all the other values for the report or in a group, such as for validity scores.
- Cumulative distribution is a statistical calculation that may be most familiar as the function that creates the “curve” for a test. It calculates the percentile for a record based on both the score/value and the number of records at each score/value.

## Instructions

1. From the Columns tab, click *Create Column..*
2. Select *Cumulative Distribution* for the column type.
3. Enter the appropriate details.

**Create Column**

Type: Cumulative Distribution ▼

Name:

Column: • Column • ▼ asc ▼

Partition By: • All • ▼

Add Close

**i** PAGE INFORMATION

<b>Name</b>	A name for the column, which will appear in the header row for this column in the report. <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.
<b>Column</b>	Use the first drop down menu to select the column you want to view the cumulative distribution for. Use the second drop down menu to select whether you want the calculation to be performed on records in ascending (0–10) or descending (10–0) order.
<b>Partition By</b>	The field that should be used to select which records the calculation is comparing against. <b>EXAMPLES:</b> If you want to view the cumulative distribution of validity scores within a region, you would select Region. If you want to compare all of a staff member’s incident forms by viewing the cumulative distribution of validity scores for each person’s run forms, you would select Crew Member ID or Crew Member Full Name. <b>HINT:</b> If you want to do multiple comparisons and view the cumulative distribution based on multiple criteria, you can create multiple cumulative distribution columns.

4. Click *Add*.

### How to Build a Custom Date Difference Column

Custom date difference columns allow you to create a column that displays the difference between two date/time columns.

#### Facts

- The result of date difference columns are returned as a numeric value. The difference between two date/times can be returned in any of the following increments:
  - Years
  - Quarters
  - Months
  - Day of year
  - Days

- Weeks
- Hours
- Minutes
- Seconds

## Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Date Difference* for the column type.
3. Enter the appropriate details.

**Create Column**

Type: Date Difference ▼

Name:

Later Date: • Later Date • ▼

Earlier Date: • Earlier Date • ▼

*Date Difference = Later Date - Earlier Date*

Date Increment: - Date Increment - ▼

Add
Cancel

### PAGE INFORMATION

<b>Name</b>	A name for the column, which will appear in the header row for this column in the report.  <div style="background-color: #e0e0e0; padding: 5px; border: 1px solid gray;"> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</div>
<b>Later Date and Earlier Date</b>	The later and earlier date columns for the equation: the earlier date column's value will be subtracted from the later date column.
<b>Date Increment</b>	The unit in which you want to view the difference between the two dates (e.g., minutes, hours, days).

4. Click *Add*.

## How to Build a Custom Date Part Column

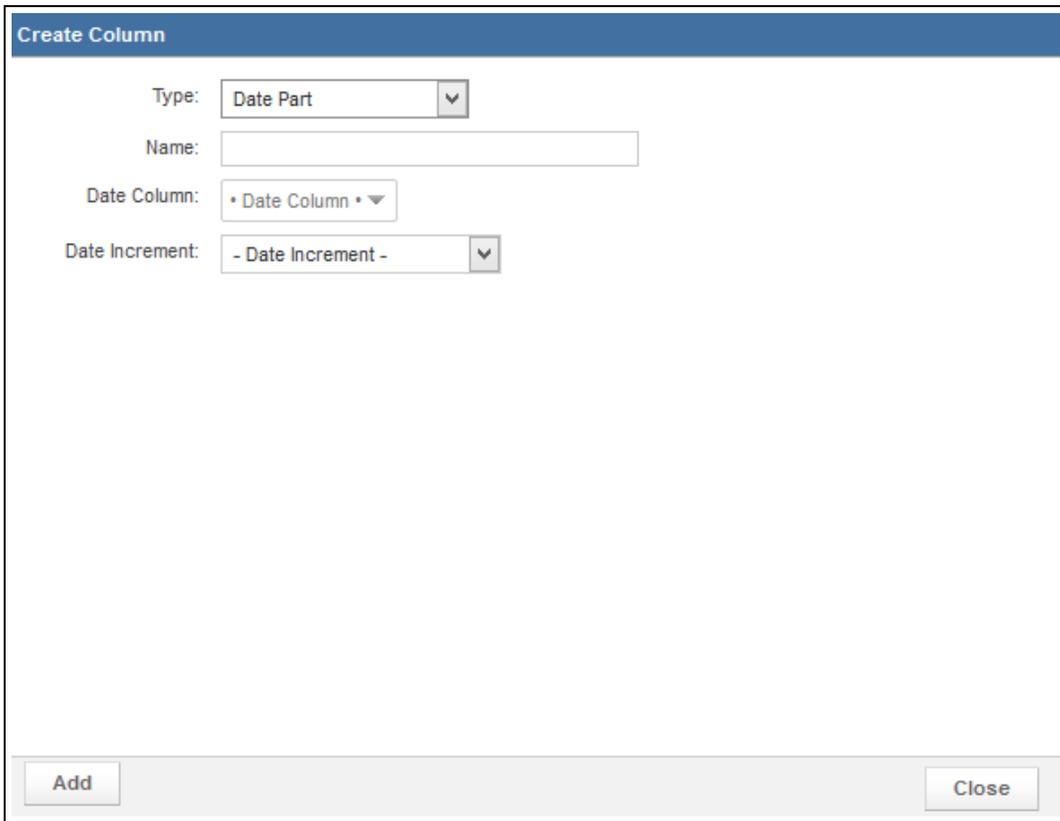
Custom date part columns allow you to create a column that displays a specific part of a date associated with a row, such as just the year or just the month.

### Facts

- Date part columns can be useful for building criteria. For example, if you want to view all incidents in March, you can create a date part column to view the incident month and create a criterion based on it.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Date Part* for the column type.
3. Enter the appropriate details.



The screenshot shows a 'Create Column' dialog box with the following fields:

- Type: Date Part
- Name: (empty text field)
- Date Column: Date Column
- Date Increment: - Date Increment -

Buttons: Add, Close

## PAGE INFORMATION

<b>Name</b>	A name for the column, which will appear in the header row for this column in the report.  <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.
<b>Date Column</b>	Select which date you want to display a part of. <b>EXAMPLE:</b> If you want this column to display the incident month, you would select the Incident Date column.
<b>Date Increment</b>	The part of the date you want to appear in this report.  <b>HINTS:</b> <ul style="list-style-type: none"><li>• If you want to display multiple parts, you can create multiple columns.</li><li>• You may notice several with number options (e.g., Month with Number). This will display both the “plain English” name and the associated number (e.g., 01 January). This can be helpful if you want to sort by the date, since it will put the items in chronological order based on the number rather than alphabetical order.</li></ul>

4. Click *Add*.

## How to Build a Custom List Column

Aggregate or list columns “roll up” the data that belongs together in a single, easy-to-read group, repeating only information that is different.

### Facts

- This same effect can be achieved with the Row Value Repetition setting in the Display tab; however, creating a custom list column enables you to create criteria based on the aggregation.

 **Recommendation:** If you want to roll up duplicate values only to make your report easier to read (rather than for creating criteria), we recommend that you use the Row Value Repetition setting on the Display tab. Creating a list custom column performs some extra calculations that can make generating your report slower than using the setting in the Display tab.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *List* for the column type.

3. Enter the appropriate details.

**Create Column**

Type:

Name:

Base Column:

Grouped By:

Sorted By:

**i PAGE INFORMATION**

<b>Name</b>	A name for the column, which will appear in the header row for this column in the report. <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.
<b>Base Column</b>	Select the column with the multiple values that you want to see “rolled up” (e.g., the Patient Full Name column).
<b>Grouped By</b>	Select how the base column should be grouped (e.g., if you want to see the patients together for each day, select appropriate date field).
<b>Sorted By</b>	Use the first drop down menu to select the values by which this column should be sorted within each record (e.g., if you want to put the records in order alphabetically by patient name, select Patient Full Name). Use the second drop down menu to select whether records should be sorted in ascending (a–z) or descending (z–a) order.

4. Click *Add*.

## How to Build a Custom Math Column

You can use numeric columns from data sets and numeric literals (e.g., numbers and mathematical symbols like + and -) to create custom columns based on mathematical expressions.

### Facts

- The multiply, divide, add and subtract operators are supported. You can also group expressions using parentheses. For example, you can create a math column that adds the mileage to the scene and to a destination to see the total mileage for each incident.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Math* for the column type.

The Math options appear.

The screenshot shows a 'Create Column' dialog box. The 'Type' dropdown is set to 'Math'. The 'Name' field is empty. The 'Expression' field contains two terms: 'ACR Incident Location Lat (726.5)' and 'ACR Incident Location Lat (726.5)', separated by a plus sign. There are 'Add' and 'Cancel' buttons at the bottom.

3. Use the Name field to enter a name for the column.

 **NOTE:** Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.

4. As needed, click the  *Add* icon to add new lines to the equation.
5. Enter the appropriate details for each line of the equation.

**i** PAGE INFORMATION

<b>Operator (first drop down menu)</b>	Select the operator (e.g., +, -) to relate this line to the previous one.  <b>NOTE:</b> This drop down menu does not appear for the first line in the equation
<b>Opening Parentheses (second drop down menu)</b>	If you are building a complex equation that requires parentheses, use this drop down menu to enter the opening parentheses.  <b>HINT:</b> It can sometimes be easier to add parentheses after building the rest of the equation.
<b>Field (third drop down menu)</b>	Select the field with the value you want to use for this line of the calculation.  <b>HINT:</b> If you want to use a constant (e.g., 5) instead of the value in a field, click the <i>Edit</i> icon at the end of the line to change the drop down menu into a free text box.
<b>Closing Parentheses (last drop down menu)</b>	If you are building a complex equation that requires parentheses, use this drop down menu to enter the closing parentheses.  <b>HINT:</b> It can sometimes be easier to add parentheses after building the rest of the equation.
<b>Edit icon</b>	If you want this line to calculate with a constant (e.g., 5) instead of the value in a field (e.g., the height of the fall), click the <i>Edit</i> icon to change the Field drop down menu into a text box.
<b>Remove icon</b>	Click this icon to remove this line of the equation.  <b>WARNING:</b> If you click this icon to remove a line, you cannot recover any information you had filled in.

6. Click *Add*.

## How to Build a Custom Maximum Column

Maximum columns display the largest value for a column that may have multiple records.

### Facts

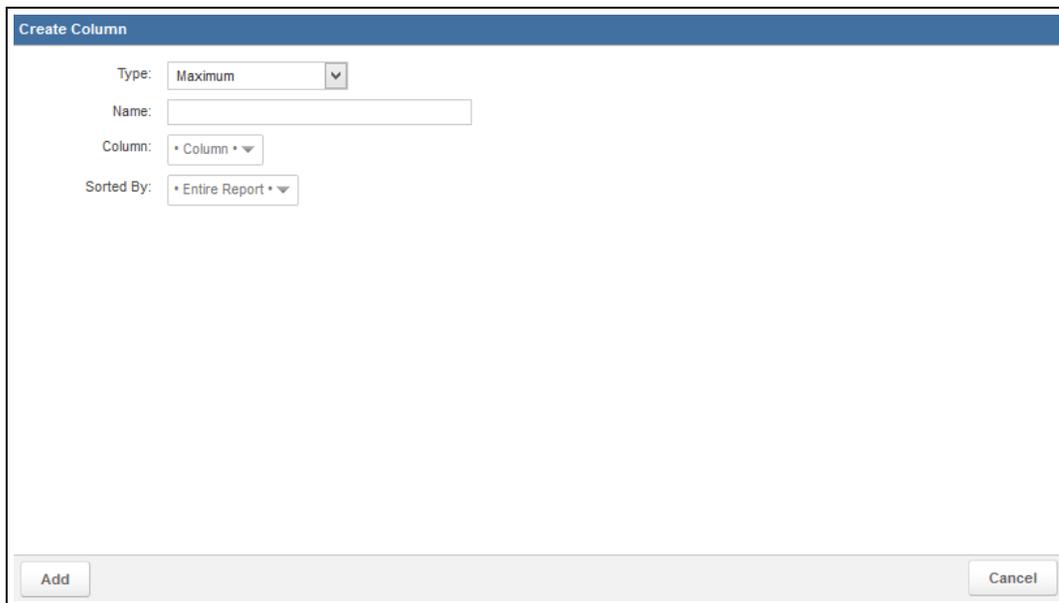
- Maximum custom columns are generally useful for columns that may have multiple records associated with a single row. For example, medication dosage.
- This differs from the Max option in the Display tab in that if you create a maximum custom column,

one row will display with the maximum value. The Max option on the Display tab, by contrast, is designed for reports where you want to see a row for each value, with the maximum value displayed at the bottom of a grouping or report.

- One great advantage of creating a maximum custom column (as opposed to adding a maximum calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using a maximum custom column, the maximum value of the column you select will be calculated by default for each row. If needed, you can choose to calculate the maximum by a different value, which may result in multiple rows appearing for the same record.

## Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Maximum* for the column type.
3. Enter the appropriate details.



The screenshot shows a 'Create Column' dialog box. The 'Type' dropdown is set to 'Maximum'. The 'Name' field is empty. The 'Column' dropdown is set to 'Column'. The 'Sorted By' dropdown is set to 'Entire Report'. The 'Add' button is highlighted, indicating it is the active button.

**i** PAGE INFORMATION

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p>
<b>Column</b>	<p>Select the column you want to view the maximum value for.</p>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the maximum (for example, to view the maximum length of service for each department, you would select Department).</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"><li>• If you select <i>Entire Report</i>, the maximum value will be calculated for each row based on the values in the line. For example, if there is a line for each shift, the maximum will be calculated for each shift. This is the most commonly used option for maximum columns.</li><li>• Selecting a value allows you to view the maximum for a value not included in the report as a column. This may result in additional lines being added to your report. For example, if your report includes only a Shift Name column and a Maximum Years of Service column but you choose to sort the maximum by department, you will see multiple rows for each shift, one with the maximum value for each department.</li></ul>

4. Click *Add*.

## How to Build a Custom Median Column

Median columns display the value that is in the middle of a set of values for a column that may have multiple records.

### Facts

- Median custom columns are generally only useful for columns that may have multiple records associated with a single item. For example, validity scores for a region or agency.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Median* for the column type.

3. Enter the appropriate details.

**Create Column**

Type:

Name:

Column:

Partition By:

Distribution Type:  Continuous  Discrete

**i PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <div style="background-color: #e0e0e0; padding: 5px; border: 1px solid gray;"> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p> </div>
<b>Column</b>	<p>Use the first drop down menu to select the column you want to view the median value for. Use the second drop down menu to select whether you want the calculation to be performed on records in ascending (0–10) or descending (10–0) order.</p>
<b>Partition By</b>	<p>The field that should be used to select which records the calculation is comparing against.</p> <div style="border: 2px solid blue; padding: 5px; margin-top: 10px;"> <p><b>EXAMPLES:</b></p> <ul style="list-style-type: none"> <li>If you want to view the median value of all validity scores within a specific agency, you would select Agency Name.</li> </ul> </div>

	<ul style="list-style-type: none"> <li>If you want to compare all of a staff member's incident forms by viewing the median validity score for each person's run forms, you would select Crew Member ID or Crew Member Full Name.</li> </ul> <p> <b>HINT:</b> If you want to do multiple comparisons and view the median value for multiple things, you can create multiple median columns.</p>
<b>Distribution Type</b>	<p><i>Continuous</i> = The exact, calculated median value.</p> <p><i>Discrete</i> = The middle value from the actual values that were used in the calculation.</p> <p> <b>HINT:</b> Most of the time for median calculations, a continuous and discrete value will be the same. However, if there is an even number of values, they may be slightly different.</p>

4. Click *Add*.

## How to Build a Custom Minimum Column

Minimum columns display the smallest value for a column that may have multiple records.

### Facts

- Minimum custom columns are generally useful for columns that may have multiple records associated with a single row. For example, medication dosage.
- This differs from the Min option in the Display tab in that if you create a minimum custom column, one row will display with the minimum value. The Min option on the Display tab, by contrast, is designed for reports where you want to see a row for each value, with the minimum value displayed at the bottom of a grouping or report.
- One great advantage of creating a minimum custom column (as opposed to adding a minimum calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using a minimum custom column, the minimum value of the column you select will be calculated by default for each row. If needed, you can choose to calculate the minimum by a different value, which may result in multiple rows appearing for the same record.

### Instructions

- From the Columns tab, click *Create Column*.
- Select *Minimum* for the column type.

3. Enter the appropriate details.

**Create Column**

Type:

Name:

Column:

**i PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p>
<b>Column</b>	<p>Select the column you want to view the minimum value for.</p>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the minimum (for example, to view the minimum length of service for each department, you would select Department).</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"><li>• If you select <i>Entire Report</i>, the minimum value will be calculated for each row based on the values in the line. For example, if there is a line for each shift, the minimum will be calculated for each shift. This is the most commonly used option for minimum columns.</li></ul>

- Selecting a value allows you to view the minimum for a value not included in the report as a column. This may result in additional lines being added to your report. For example, if your report includes only a Shift Name column and a Minimum Years of Service column but you choose to sort the minimum by department, you will see multiple rows for each shift, one with the minimum value for each department.

4. Click *Add*.

## How to Build a Custom Nth Column

Ordinal or Nth columns allow you to view only the “Nth” value that appears for a record, where you get to specify what N is.

### Facts

- Nth custom columns are generally only useful for columns that may have multiple records associated with a single row. For example, medication dosage or the number of personnel on each apparatus for an incident.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select the *Nth* column type.
3. Enter the appropriate details.

The screenshot shows a 'Create Column' dialog box with the following fields and values:

- Type: Nth
- Name: (empty text box)
- Base Column: \* Base Column \*
- N: 1th
- Grouped By: - Select Base Column -
- Sorted By: - Select Base Column - asc

Buttons: Add, Cancel

**i** PAGE INFORMATION

<b>Name</b>	A name for the column, which will appear in the header row for this column in the report.  <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.
<b>Base Column</b>	The column that you only want to view a specific value for.
<b>Nth</b>	The number corresponding to the desired N value (e.g., type 1 if you want to view only the first value).
<b>Grouped By</b>	What you are viewing the Nth value for. <b>EXAMPLE:</b> To view the first medication for an incident, select <i>Incident Number</i> .
<b>Sorted By</b>	The column that should be used to place values in order. <b>EXAMPLE:</b> To view the first medication based on time, select <i>Medication Date/Time Administered</i> . To view the first medication based on the amount given, select <i>Medication Dosage</i> .

4. Click *Add*.

## How to Build a Custom Percent of Total Column

A percent of total column allows you to calculate and display the percentage of the grand total for a numeric data element.

### Facts

- This column is not affected by grouping. The Percent of Total column type will display the percentage that each row is of the grand total (not of the group sub-total).
- The percent of total value of the column you select will be calculated by default for each row. If needed, you can choose to calculate the percent of total by a different value, which may result in multiple rows appearing for the same record.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Percent of Total* for the column type.

3. Enter the appropriate details.

**Create Column**

Type:

Name:

Column:

Sorted By:

 **PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p>
<b>Column</b>	<p>The data element for which you want to view the percent each record makes up of the grand total.</p>
<b>Sorted By</b>	<p>Determines what column you want use to define the total values for the percent of total (for example, to view the percent of total length of service for each department, you would select Department).</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"><li>• If you select <i>Entire Report</i>, the percent of total value will be calculated for each row based on the values in the line. For example, if there is a line for each shift, the percent of total will be calculated for each shift. This is the most commonly used option for percent of total columns.</li><li>• Selecting a value allows you to view the percent of total for a value not included in the report as a column. This may result in additional lines being added to your report. For example, if your report includes only a Shift Name column and a Percent of Total Years of Service column but you choose to sort the percent of total by department, you will see multiple rows for each shift, one with the percent of total value for each department.</li></ul>

4. Click *Add*.

## How to Build a Custom Percent Rank Column

A percent rank column calculates and displays the percentile (e.g., 10th percentile) that each record is in based on its value (e.g., 30) compared to the other records in the report.

### Facts

- Percent rank custom columns are generally useful in situations where you want to compare a single value against all the other values for the report or in a group, such as for validity scores.

**EXAMPLE:** This type of function would allow you to examine validity scores for each incident. If a specific incident form had a score of 75, which was better than 50% of scores, the column would display 50%.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Percent Rank* for the column type.
3. Enter the appropriate details.

**Create Column**

Type: Percent Rank ▼

Name:

Column: Column ▼ asc ▼

Partition By: All ▼

Add
Close

**1 PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <div style="background-color: #e0e0e0; padding: 5px; border: 1px solid gray;"> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p> </div>
<b>Column</b>	<p>Use the first drop down menu to select which column you want to view the ranking for. Use the second drop down menu to select whether you want the calculation to be performed on records in ascending (0–10) or descending (10–0) order.</p>
<b>Partition By</b>	<p>The field that should be used to select which records the calculation is comparing against.</p> <div style="border: 2px solid #4a7ebb; padding: 5px; margin: 5px 0;"> <p><b>EXAMPLE:</b> If you want to view the rank of validity scores within a region, you would select Region.</p> </div> <div style="background-color: #e0e0e0; padding: 5px; border: 1px solid gray; margin-top: 5px;"> <p> <b>HINT:</b> If you want to do multiple comparisons and view the ranking based on multiple criteria, you can create multiple percent rank columns.</p> </div>

4. Click *Add*.

## How to Build a Custom Percentile Column

A percentile column shows you the value (e.g., 5) associated with specific percentile that you select (e.g., 65%) based on all the records included in the report.

 **HINT:** This type of calculation may be most familiar based on school testing, where you might be informed that a child is in the 95th percentile of all children based on their score.

### Facts

- Percentile custom columns are generally only useful for columns that may have multiple records associated with a single item; for example, validity scores for a region or service.

**EXAMPLE:** This type of function would allow you to view the validity score that was at the 50th percentile of scores.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Percentile* for the column type.
3. Enter the appropriate details.

**Create Column**

Type:

Name:

Column:

Partition By:

Distribution Type:  Continuous  Discrete

Percentile:

Percentile must be between 0 and 100

Add
Close

**1 PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 10px;"> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p> </div>
<b>Column</b>	<p>Use the first drop down menu to select which column you want to view percentile information for. Use the second drop down menu to select whether you want the calculation to be performed on records in ascending (0–10) or descending (10–0) order.</p>
<b>Partition By</b>	<p>Select the field that should be used to select which records will be grouped to determine percentile.</p> <div style="border: 1px solid #0070c0; padding: 5px; margin-top: 10px;"> <p><b>EXAMPLE:</b> If you want to view the percentile of validity scores for a specific agency, you would select Agency Name.</p> </div> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 10px;"> <p> <b>HINT:</b> If you want to do multiple comparisons and view the percentile for multiple things, you can create multiple percentile columns.</p> </div>

<b>Distribution Type</b>	<p><i>Continuous</i> = The exact, calculated percentile value.</p> <p><i>Discrete</i> = The percentile value from the actual values that were used in the calculation.</p> <div style="border: 1px solid blue; padding: 5px;"> <p><b>EXAMPLE:</b> If you create a column looking for the 50th percentile of validity scores from each agency and the system calculates that a score of 75 would be equal to the 50th percentile, selecting Continuous would display 75 even if there was no run form with a score of 75. If you select Discrete, the report might display a validity score of 76, which was the 50th percentile taking into account which scores were actually used on run forms.</p> </div>
<b>Percentile</b>	The percentile you want to view the information for.

4. Click *Add*.

## How to Build a Custom Standard Deviation Column

Standard deviation columns display how much each record displays from the average value for that record.

### Facts

- In many situations, a rule of thumb is that values within one standard deviation are within the “normal” range.
- This differs from the STDEV option in the Display tab in that if you create a standard deviation custom column, one row will display with the standard deviation for each related value. The STDEV option on the Display tab, by contrast, is designed for reports where you want to see a row for each value, with the standard deviation displayed at the bottom of a grouping.
- One great advantage of creating a standard deviation column (as opposed to adding a standard deviation calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using a standard deviation custom column, the standard deviation value of the column you select will be calculated by default for each row. If needed, you can choose to calculate the standard deviation by a different value, which may result in multiple rows appearing for the same record.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Standard Deviation* for the column type.
3. Enter the appropriate details.

Create Column

Type: Standard Deviation ▼

Name:

Column: Column ▼

Return For:  Yes  No

Population: Generate results by the population of each record rather than all records.

Sorted By: Entire Report ▼

Distinct Values:  Yes  No  
Apply to only a distinct listing of values.

Add
Cancel

**PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 5px;"> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p> </div>
<b>Column</b>	<p>Select the column you want to view the standard deviation for.</p>
<b>Return for Population</b>	<p>Select whether this calculation is being run on the entire population of records for the calculation.</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 5px;"> <p> <b>HINT:</b> A different equation is used depending on whether you are working with the entire population (i.e., all the records) that you are examining or whether you are working with a sample (e.g., a random assortment of records rather than all that pertain). If you select Yes, the calculation for the entire population will be used. If you select No, the calculation for a sample of the population will be used.</p> </div>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the standard deviation (for example, to view the standard deviation of length of service for each department, you would select Department).</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 5px;"> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"> <li>If you select <i>Entire Report</i>, the standard deviation value will be calculated for each row. For example, if there is a line for each shift, the standard deviation will be calculated for each shift. This is the most commonly used</li> </ul> </div>

	<p>option for standard deviation columns.</p> <ul style="list-style-type: none"> <li>• Selecting a value allows you to view the standard deviation for a value not included in the report as a column. This may result in additional lines being added to your report. For example, if your report includes only a Shift Name column and a Standard Deviation of Years of Service column but you choose to sort the standard deviation by department, you will see multiple rows for each shift, one with the standard deviation value for each department.</li> </ul>
<p><b>Distinct Values</b></p>	<p><i>Yes</i> = Use only unique values in this calculation (e.g., if a value appears in three different records included in this calculation, it will only be used once in calculating the value).</p> <p><i>No</i> = Use all values in this calculation (e.g., if a value appears in three different records included in this calculation, it will be used three times in calculating the value).</p>

4. Click *Add*.

## How to Build a Custom Sum Column

Sum columns display the total from adding all values together for a specific column.

### Facts

- Sum custom columns are generally useful for columns that may have multiple records associated with a single item; for example, the amount of controlled substances wasted.
- This differs from the Total option in the Display tab in that if you create a sum custom column, one row will display with the sum for each related value. The Total option on the Display tab, by contrast, is designed for reports where you want to see a row for each value, with the total displayed at the bottom of a grouping or of the entire report.
- One great advantage of creating a sum custom column (as opposed to adding a total calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using a sum custom column, the sum value of the column you select will be calculated by default for each row. If needed, you can choose to calculate the sum by a different value, which may result in multiple rows appearing for the same record.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Sum* for the column type.
3. Enter the appropriate details.

Create Column

Type:

Name:

Column:

Sorted By:

Distinct Values:  Yes  No  
Apply to only a distinct listing of values.

**PAGE INFORMATION**

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 5px;"> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p> </div>
<b>Column</b>	<p>Select the column you want to view the sum of all values for.</p>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the sum (for example, to view the sum of length of service for each department, you would select Department).</p> <div style="background-color: #e0e0e0; padding: 5px; margin-top: 5px;"> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"> <li>If you select <i>Entire Report</i>, the sum value will be calculated for each row. For example, if there is a line for each shift, the sum will be calculated for each shift. This is the most commonly used option for sum columns.</li> <li>Selecting a value allows you to view the sum for a value not included in the report as a column. This may result in additional lines being added to your report. For example, if your report includes only a Shift Name column and a Sum of Years of Service column but you choose to sort the sum by department, you will see multiple rows for each shift, one with the sum value for each department.</li> </ul> </div>
<b>Distinct Values</b>	<p>Yes = Use only unique values in this calculation (e.g., if a value appears in three different records included in this calculation, it will only be used once in calculating the value).</p>

*No* = Use all values in this calculation (e.g., if a value appears in three different records included in this calculation, it will be used three times in calculating the value).

4. Click *Add*.

## How to Build a Custom Text Column

Custom text columns are a way to combine text columns and data in numerous ways.

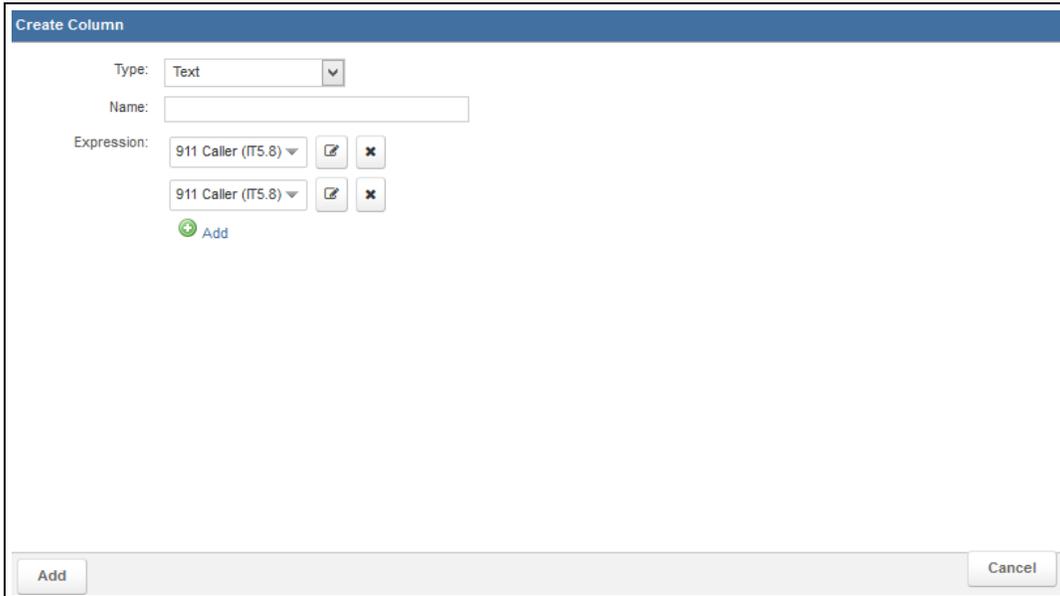
### Facts

- With this feature you can reduce the number of columns that are generated in the report while still retaining the information they hold.
- Text columns function similar to the Concatenate function in Microsoft Excel. For example, you can combine the elements of address, city and state into one text column.
- By default when you select Text as the column type, two lines will be added, with the top column in the list selected for each.

### Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Text* for the column type.

The Text options appear.



The screenshot shows a 'Create Column' dialog box. At the top, the title is 'Create Column'. Below the title, there is a 'Type:' dropdown menu set to 'Text'. Underneath is a 'Name:' text input field. The 'Expression:' section contains two rows, each with a dropdown menu set to '911 Caller (IT5.8)', an edit icon (pencil), and a delete icon (X). Below the expression field is a green plus icon followed by the text 'Add'. At the bottom of the dialog, there are two buttons: 'Add' on the left and 'Cancel' on the right.

3. Use the Name field to enter a name for the column.

 **NOTE:** Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.

4. As needed, click the *Add* icon  to add new lines for text elements.
5. Enter the appropriate details.

 **PAGE INFORMATION**

<b>Expression drop down menu</b>	Select the field with the text you want to use for this part of the text concatenation.  <b>HINT:</b> If you want to use static text (e.g., the number 5, a space, the word <i>and</i> ) instead of the contents of in a column, click the <i>Edit</i> icon at the end of the line to change the drop down menu into a free text box.
<b>Edit icon</b>	If you want to use static text (e.g., the number 5, a space, the word <i>and</i> ) instead of the contents of in a column (e.g., the street address), click the <i>Edit</i> icon to change the Expression drop down menu into a text box.
<b>Remove icon</b>	Click this icon to remove this line and its contents from the text column.  <b>WARNING:</b> If you click this icon to remove a line, you cannot recover any information you had filled in.

 **HINT:** To ensure that a space appears between each element in the column, create a line containing only a space between each expression holding an element.

6. Click *Add*.

## How to Build a Custom Variance Column

A variance column displays the variance of each value, or how far apart the values are from each other.

### Facts

- Variance is related to the standard deviation for a value.
- This differs from the VAR option in the Display tab in that if you create a variance custom column, one row will display with the variance for each related value. The VAR option on the Display tab, by contrast, is designed for reports where you want to see a row for each value, with the variance displayed at the bottom of a grouping.
- One great advantage of creating a variance column (as opposed to adding a variance calculation in the Display tab) is that you can create criteria based on the custom columns.
- When using a variance custom column, the variance value of the column you select will be

calculated by default for each row. If needed, you can choose to calculate the variance by a different value, which may result in multiple rows appearing for the same record.

## Instructions

1. From the Columns tab, click *Create Column*.
2. Select *Variance* for the column type.
3. Enter the appropriate details.

**Create Column**

Type: Variance

Name:

Column: Column

Return For:  Yes  No

Population: *Generate results by the population of each record rather than all records.*

Sorted By: Entire Report

Distinct Values:  Yes  No  
*Apply to only a distinct listing of values.*

Add Cancel

**i** PAGE INFORMATION

<b>Name</b>	<p>A name for the column, which will appear in the header row for this column in the report.</p> <p> <b>NOTE:</b> Be sure to note the name of each custom column you create. You will need its name if you want build criteria based on it.</p>
<b>Column</b>	<p>Select the column you want to view the variance for.</p>
<b>Return for Population</b>	<p>Select whether this calculation is being run on the entire population of records for the calculation.</p> <p> <b>HINT:</b> A different equation is used depending on whether you are working with the entire population (i.e., all the records) that you are examining or whether you are working with a sample (e.g., a random assortment of records rather than all that pertain). If you select Yes, the calculation for the entire population will be used. If you select No, the calculation for a sample of the population will be used.</p>
<b>Sorted By</b>	<p>Determines what you want to group the values by for the variance (for example, to view the variance of length of service for each department, you would select Department).</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"><li>• If you select <i>Entire Report</i>, the variance value will be calculated for each row. For example, if there is a line for each shift, the variance will be calculated for each shift. This is the most commonly used option for variance columns.</li><li>• Selecting a value allows you to view the variance for a value not included in the report as a column. This may result in additional lines being added to your report. For example, if your report includes only a Shift Name column and a Variance of Years of Service column but you choose to sort the variance by department, you will see multiple rows for each shift, one with the variance value for each department.</li></ul>
<b>Distinct Values</b>	<p>Yes = Use only unique values in this calculation (e.g., if a value appears in three different records included in this calculation, it will only be used once in calculating the value).</p> <p>No = Use all values in this calculation (e.g., if a value appears in three different records included in this calculation, it will be used three times in calculating the value).</p>

4. Click *Add*.

## Step Three: Setting Display Options

The Display tab allows you to change the order or labels of the columns, the alignment or several additional formatting options.

**Navigation:** Report Writer > Display tab of the report

### Facts

- All settings in the Display tab are optional.
- Many settings in the Display tab will appear only based on the dataset or the type of column you select. For example, you will not see the option to view a total for a date column.
- You can click the *Generate* link at any time to see how your report looks with the settings you have already added, then return to the tabs to edit your report further if needed.
- Once you enter any display options and click *Continue*, you will be brought to the Grouping tab.

### Instructions

1. Select the *Display* tab of your report or click *Continue* from the Columns tab.
2. To adjust the display options for a specific column, click the *Expand* arrow to the left of its sort order.

 TAKE A LOOK



3. Fill out all appropriate options to adjust your report display settings for each column.

Columns Display Grouping Sorting Criteria Additional Options Actions Generate Report »

This new report has not yet been saved. To save your report, go to Actions -> Save.

**Display**  
Data Set: Staff

Display

Order	Label	Format
1	Address (D8.4)	Text
Show Group Summary... Count: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Min: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Max: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Column Display... Set Blank Value: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Column Formatting... Align: left <input type="checkbox"/> right <input checked="" type="checkbox"/>		
2	City (D8.5)	Text
3	State (D8.6)	Text
4	Postal Code (D8.7)	Text

Display Options

Row Value Repetition:  Repeat All  Do Not Repeat  
*Display each repeated row value for each consecutive row*

Back Continue

**i PAGE INFORMATION**

<b>Order</b>	The sort order of each column. Update the numbers to change the order in which columns will appear.
<b>Label</b>	The header that appears for this column on the report.
<b>Format</b>	The way the data will be displayed. Many columns will offer only one option: however, numeric or date fields may offer several different formatting options.
<b>Show Group Summary section</b>	
<b>Total</b>	<p>This will display the sum of all numbers in this column within each grouping and for the report as a whole.</p> <p><b>HINT:</b> This differs from the Sum custom column option in that if you use the option on the Display tab, you can see both a row with every value and the total displayed at the bottom of each group and for the report. By contrast, Sum custom columns displays only one row with the sum for all related values.</p>
<b>Count</b>	<p>This will display the number of rows with a value recorded that are listed within each grouping and within the report as a whole.</p> <p><b>HINT:</b> This differs from the Count custom column option in that if you use</p>

	<p>the option on the Display tab, you can see both a row with every value and the count displayed at the bottom of each group and for the report. By contrast, Count custom columns displays only one row with the count of all related values.</p>
<b>Avg.</b>	<p>This will display the mean value of the numbers in all rows within each grouping and for the report as a whole.</p> <p> <b>HINT:</b> This differs from the Average custom column option in that if you use the option on the Display tab, you can see both a row with every value and the average displayed at the bottom of every group and for the report. By contrast, Average custom columns displays only one row with the average of all related values.</p>
<b>Min.</b>	<p>This will display the smallest/minimum value within each grouping and for the report as a whole.</p> <p> <b>HINT:</b> This differs from the Minimum custom column option in that if you use the option on the Display tab, you can see both a row with every value and the minimum displayed at the bottom of every group and for the report. By contrast, Minimum custom columns displays only one row with the minimum of all related values.</p>
<b>Max.</b>	<p>This will display the largest/maximum value within each grouping and for the report as a whole.</p> <p> <b>HINT:</b> This differs from the Maximum custom column option in that if you use the option on the Display tab, you can see both a row with every value and the maximum displayed at the bottom of every group and for the report. By contrast, Maximum custom columns displays only one row with the maximum of all related values.</p>
<b>Variance</b>	<p>This will display the variance of the numbers in all rows within each grouping and for the report as a whole.</p> <p> <b>HINT:</b> This differs from the Variance custom column option in that if you use the option on the Display tab, you can see both a row with every value and the variance displayed at the bottom of every group and for the report. By contrast, Variance custom columns displays only one row with the variance of all related values.</p>
<b>Standard Deviation</b>	<p>This will display the standard deviation of the numbers in all rows within each grouping and for the report as a whole.</p> <p> <b>HINT:</b> This differs from the Standard Deviation custom column option in that if you use the option on the Display tab, you can see both a row with every value and the standard deviation displayed at the bottom of every group and for the report. By contrast, Standard Deviation custom columns displays only one row</p>

	with the standard deviation of all related values.
<b>Column Display section</b>	
<b>Link</b>	The file or page that any content in this column will link to. This option is only available for columns in certain datasets.
<b>Set Blank Value</b>	Yes = Allows you to set text to appear for any row that has no content in a specific column. When you select Yes, the Blank Value text box appears. No = If a specific row has no content for a column, the cell will be left blank.
<b>Blank Value</b>	The text that will appear for any row that has no content for a specific column. This option will appear only if you select Yes for the Set Blank Value option.
<b>Column Formatting section</b>	
<b>Align</b>	The text alignment of the information within its column.
<b>Scale</b>	Select the number of digits that should appear after the decimal place. This option will be available only for columns set as numeric columns.
<b>Display Options section</b>	
<b>Row Value Repetition</b>	<p><i>Repeat All</i> = Values that are repeated for multiple rows will be displayed in every row.</p> <p><i>Do Not Repeat</i> = Values that are repeated for multiple rows will be displayed in only the first row.</p> <div style="background-color: #e0e0e0; padding: 10px;"> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"> <li>• If you choose not to repeat duplicate rows, it can be important to pay attention to the order that your columns appear in. You will notice that when there are duplicate values, the first column will be the first to “roll up,” with all columns below it with duplicate values rolling up within the previous column.</li> <li>• Numeric columns will never be rolled up. Even if you select Do Not Repeat, numeric values will appear in every row. This makes it easy to tell when a value was repeated and when no value was entered.</li> </ul> </div>

4. Click *Continue* to move on to the next step.

## Step Four: Setting Grouping Rules

If you would like to place all records with similar values in a specific column together (e.g., all incidents from a specific county grouped together), you will need to set grouping rules.

## Facts

- All calculations that have been added in the Display tab will be performed on groups if you create groupings. For instance, if you choose to display a minimum value or an average, the report will display a minimum value and average for each group.
- You can only group by columns that are included as columns on your report.
- If you group by a value, instead of appearing as a column, that value will appear as a header for a group of records. For example, if you group by primary impression, the generated report will have the primary impressions act as headers to group incidents under (instead of displaying a Primary Impression column).
- All settings in the Grouping tab are optional.
- You can group by multiple fields.
  - If multiple fields are selected for grouping, select the fields and use the Up and Down buttons to indicate which grouping should be done first.
  - Fields that are listed first will be the primary grouping rules. Each field following will be grouped within the first field.

**EXAMPLE:** If the first field groups incidents by county, the second field could group incidents by the agency. Run reports would be clustered into a county group, inside of which they would be listed by agency.

- You can sort any grouping in Ascending or Descending order by using the Asc and Desc buttons next to the Selected scroll list. This changes the order that the groups themselves appear in.
- You can click the *Generate* link at any time to see how your report looks with the settings you have already added, then return to the tabs to edit your report further if needed.
- Once you enter any grouping options and click Continue, you will be brought to the Sorting tab.

## Instructions

This new report has not yet been saved. To save your report, go to Actions -> Save.

**Grouping**

Data Set: Staff

**Grouping**

Available

- Address (D8.4) (asc)
- City (D8.5) (asc)
- State (D8.6) (asc)
- Postal Code (D8.7) (asc)

Selected

Buttons: > < ↑ ↓ asc desc

Buttons: Back Continue

1. Select the *Grouping* tab of your report or click *Continue* from the *Display* tab.
2. Select the first column you want to group by.

3. Click the *Add* icon .

The column is moved to the *Selected* list.

 **HINT: ADDITIONAL SCROLL LIST OPTIONS**

Each of the icons in the scroll list performs a different function.

- The *Add* icon  moves the currently selected item in the *Available* list to the *Selected* list.
- The *Remove* icon  moves the currently selected item in the *Selected* list to the *Available* list.

4. Repeat steps 2 – 3 until all columns are added.
5. As needed, use the *Up* and *Down* buttons to adjust the order in which the groupings will be applied.

 **HINT:**

To adjust the order, select a column and click the *Up* or *Down* button until the column is in the desired position.

6. As needed, use the *Asc* and *Desc* buttons to change the sorting of the groupings.

 **HINT:**

To adjust the sorting, select the column you want to change order for and click the *Asc* or *Desc* button as needed.

7. Click *Continue* to move on to the next step.

## Step Five: Setting Sorting Rules

---

If you would like to place records in a particular order (e.g., a–z, 10–1) by the values in a certain column, you may do so using sorting.

**Navigation:** *Report Writer > Sorting tab of the report*

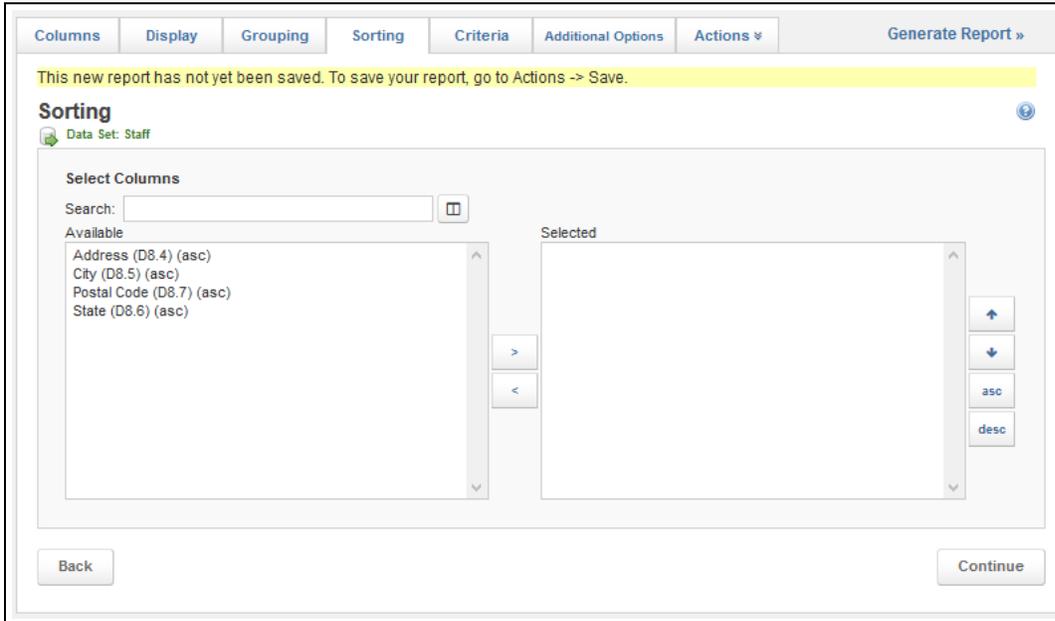
### Facts

- All settings in the Sorting tab are optional.
- When combined with grouping, sorting will be performed after all data is grouped. In this case, after being placed in each of the assigned groups, data in those groups will be sorted according to the rules set here.
- You can sort by multiple fields.
  - If multiple fields are selected for sorting, select the fields and use the Up and Down buttons to indicate which sorting should be done first.
  - Fields that are listed first will be the primary sorting rules. Each field following will be sorted within the first field.

**EXAMPLE:** If the first field sorts incidents by incident city, the second field could sort incidents by incident date. In this case, all runs would be put in order based on the incident city. In cases where multiple incidents took place in the same city, they would then be placed in order based on their incident date.

- You can sort records in Ascending or Descending order by using the *Asc* and *Desc* buttons next to the Selected scroll list. This changes the order that all records appear in.
- You can click the *Generate* link at any time to see how your report looks with the settings you have already added, then return to the tabs to edit your report further if needed.
- Once you select your columns and click *Continue*, you will be brought to the *Criteria* tab.

## Instructions



1. Select the *Sorting* tab of your report or click *Continue* from the Grouping tab.
2. **Optional:** To view a list of all available columns to sort by (rather than only the columns that are currently included in your report), click the *Include All Possible Columns* icon  to the right of the Search box.
3. Select the first column you want to sort by.
4. Click the *Add* icon . The column is moved to the Selected list.

### **HINT: ADDITIONAL SCROLL LIST OPTIONS**

Each of the icons in the scroll list performs a different function.

- The *Add* icon  moves the currently selected item in the Available list to the Selected list.
- The *Remove* icon  moves the currently selected item in the Selected list to the Available list.

5. Repeat steps 3 – 4 until all columns for sorting are added.
6. As needed, use the *Up* and *Down* buttons to adjust the order in which the sorting will be applied.

**HINT:**

To adjust the order, select a column and click the *Up* or *Down* button until the column is in the desired position.

7. As needed, use the *Asc* and *Desc* buttons to change the order that records will be sorted in.

**HINT:**

To adjust the sorting, select the column you want to change order for and click the *Asc* or *Desc* button as needed.

8. Click *Continue* to move on to the next step.

## Step Six: Setting Criteria and Filters

---

Criteria and filters allow you to narrow down the number of results displayed on the report by adding limits.

**Navigation:** *Report Writer > Criteria tab of the report*

### Facts

- **Criteria** will allow you to determine limits on the data that will be displayed every time this report is displayed. For example, in a report that records incidents in several counties, you can add criteria to limit to certain counties.
- **Filters** allow you to specify a new value for a criterion each time the report is run. For example, you could use filters to specify an agency name, so that each time the report is run, users can select which agency they are examining.
- Criteria and filters are important for narrowing the number of results displayed. If your organization has hundreds or thousands of records in the system, this is very important to limit the length of the report and prevent the system from timing out when trying to retrieve a large number of records.

### How to Create Criteria

Criteria are applied every time a report is run, allowing you to narrow down the results that appear consistently.

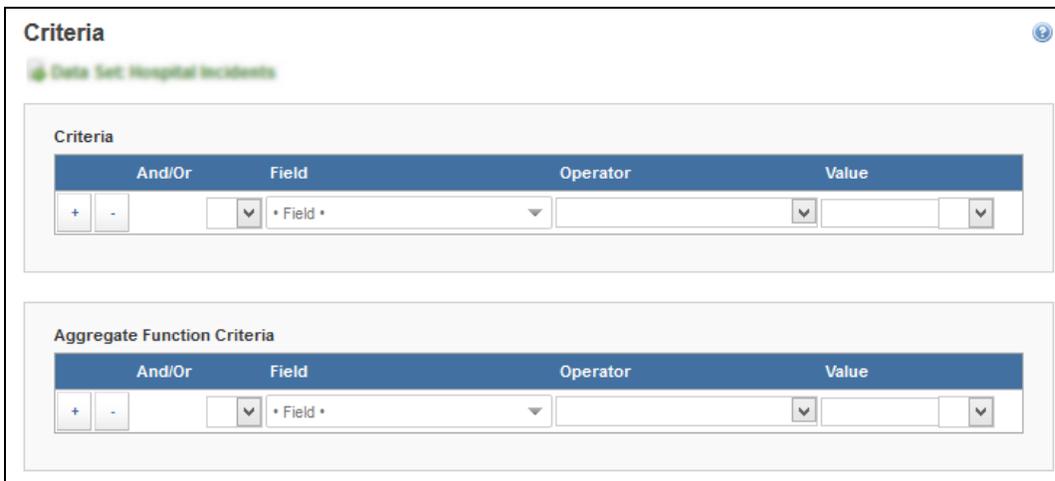
### Facts

- There are two separate sections to enter criteria on the Criteria tab.
  - The Criteria section is for criteria that are looking at regular values that might be put into a run form or a staff profile.

- The Aggregate Function Criteria section is for creating criteria based on custom columns you may have built for this report that aggregate data; you can set criteria here for any average, count, maximum, minimum or sum custom columns you have created.
- The Aggregate Function Criteria section appears only if you have added an applicable custom column to your report.
- When creating the report, all criteria in the first Criteria section will be applied first, then records that meet the first set of requirements will be further narrowed down with any aggregate criteria.

 **HINT:** It can help to think of setting up criteria as setting up basic equations. For example, you want the value in a specific column to equal a specific value to appear, or you do not want records where a specific column is blank to appear in the report. If you are setting up multiple lines, you may need to add parentheses to tell the system which items go together.

## Instructions



1. Select the *Criteria* tab of your report or click *Continue* from the Sorting tab.
2. Begin in the appropriate section for the type of criteria you want to create.

 **HINTS:**

- For creating criteria based on average, count, maximum, minimum, standard deviation or sum custom columns you added to this report, begin within the **Aggregate Function Criteria section**.
- For creating criteria based on other columns, begin within the **Criteria section**.
- When creating the report, all criteria in the first Criteria section will be applied first, then records that meet the first set of requirements will be further narrowed down with any aggregate criteria. However, you can create the criteria in any order you prefer.

3. As needed, click the *Add* icon  to add new lines for criteria.
4. Enter the appropriate details for each line of the equation.

**i PAGE INFORMATION**

<p><b>And/Or</b></p>	<p><i>And</i> = Both this criterion and the one immediately preceding it must be true in order for a record to appear on the report.</p> <p><i>Or</i> = Either this criterion or the one immediately preceding it must be true in order for a record to appear on the report.</p> <p> <b>NOTE:</b> This option will not appear in the first line of criteria since it is used to relate multiple lines to each other.</p>
<p><b>Opening Parentheses (second drop down menu)</b></p>	<p>If you are building a complex set of criteria that requires parentheses, use this drop down menu to enter the opening parentheses.</p> <p> <b>HINTS:</b></p> <ul style="list-style-type: none"> <li>• It can sometimes be easier to add parentheses after building the rest of the equation.</li> <li>• You will only need to add parentheses if you have multiple criteria linked with both And and Or, since when there both an And and an Or are used, the order in which criteria are applied makes a difference.</li> </ul> <p><b>EXAMPLE:</b> The criteria displayed below indicate that the returned incident records must have taken place in either Crook or Dakota County and the mileage from the scene to destination must be greater than twelve. The county criteria (joined with an Or) must be grouped together by parentheses.</p>
<p><b>Field</b></p>	<p>The column you are using to restrict records in the report.</p>
<p><b>Operator</b></p>	<p>Select the operator (e.g., is greater than, is not blank, contains) to relate the selected column to the value you will specify.</p>
<p><b>Value</b></p>	<p>The value that the system will check records against.</p>
<p><b>Closing Parentheses (last drop down menu)</b></p>	<p>If you are building a complex set of criteria that requires parentheses, use this drop down menu to enter the closing parentheses.</p> <p> <b>WARNING:</b> Make sure that there are no parentheses left open when you continue; if there is an extra opening or closing parenthesis, the report will generate an error and your criteria selections will be lost. The easiest way to look at this is to make sure that there is the same number of parentheses in the left column as in the right column.</p>

5. Repeat steps 3 – 4 until all criteria are added.

 **HINT:** If you add a line for a criterion that you do not need, you can click the corresponding *Remove* icon



to delete that line. Keep in mind that anything you have entered in that line will be lost as soon as you remove it.

- When finished, add filters or click *Continue* to move to the next step.

## How to Add and Configure Filters

Filters are useful for reports that will be run multiple times; they allow you to change the value narrowing down report results each time the report is generated.

### Facts

- When you add filters, a Filter your Results page will be displayed each time the report is run and will allow viewers to select the value to narrow down report results.
- You can update how every filter that is added to your report will appear on the Filter your Results page, including updating the label of the filter, setting a default value or adding instructions to appear underneath that filter.

## Adding Filters



- Select the *Criteria* tab of your report or click *Continue* from the Sorting tab.
- Scroll to the Filters section.
- Select the first column you want to add as a filter.

### HINTS:

- To search for a field to add as a filter, type the name of the filter into the Search text box. As you type, the options displayed in the Available scroll list will be narrowed down to display only options that match your entry.
- To select multiple fields, press and hold the *Ctrl* key while clicking each desired option.



- Click the *Add* icon . The column is moved to the Selected list.

 **HINT: ADDITIONAL SCROLL LIST OPTIONS**

Each of the icons in the scroll list performs a different function.

- The Add icon  moves the currently selected item in the Available list to the Selected list.
- The Remove icon  moves the currently selected item in the Selected list to the Available list.

5. Repeat steps 3 – 4 until all filters are added.
6. As needed, use the *Up* and *Down* buttons to adjust the order in which the filters will appear on the page.

 **HINT:**

To adjust the order, select a column and click the *Up* or *Down* button until the column is in the desired position.

7. When finished, update your filters or click *Generate* to view the report.

## Configuring Filter Appearance and Default Values

1. Select the *Criteria* tab of your report or click *Continue* from the Sorting tab.
2. Scroll to the Filters section.
3. Select the filter you want to update from the Selected scroll list.
4. Click *Edit Labels*.
5. Fill in the appropriate details.

 **PAGE INFORMATION**

<b>Order</b>	The sort order of each filter. Update the numbers to change the order in which filters will appear.
<b>Label</b>	The text that will appear on this filter on the Filter your Results page.
<b>Instructions</b>	Type up to 200 characters to appear below the filter.
<b>Default Operator</b>	The operator option that will appear by default as soon as the Filter your Results page appears.

6. When finished, click *Continue* to continue to the Additional Options page or click *Generate* to view the report.

## Associated Tasks and Reference

**Full List of Associated Operators:** See [Criteria Operators Definitions: for Transactional Reports on page 1](#).

## Step Seven: Setting Additional Report Options

The Additional Options page includes a variety of options including how many records are displayed per page when the report is generated, whether a header or footer appears, and style options such as colors.

**Navigation:** *Report Writer > Additional Options tab of the report*

### Facts

- If you want to create a report with a custom look, you can change the headers and footers, as well as the colors for the text, each row, and the rows beginning each group of data.
- You can set localization preferences such as the appropriate currency symbol, decimal mark or date format for this report.
- Some of the preferences assigned on this page will only apply if you save this report to use later.

### Instructions

1. Select the *Additional Options* tab or click the *Continue* button from the *Criteria* tab.
2. To expand any section to edit the details, click the section header.
3. Complete any details as needed for your report.

The screenshot shows the 'Additional Options' tab of a report writer. The interface includes a navigation bar with tabs for 'Columns', 'Display', 'Grouping', 'Sorting', 'Criteria', 'Additional Options', 'Actions', and 'Generate Report'. The main content area is titled 'Additional Options: Another List Custom Column Report'. It features three expandable sections: 'General Options (Default Page, Show Filter, Records Per Page)', 'Headers and Footers', 'Localization Options (Decimal, Thousands Separator, Currency, Default Date Format)', and 'Style Options (Text color, Row Color, Group Color, Display Criteria, PDF Page Break)'. The 'General Options' section is expanded, showing radio buttons for 'Default Open Page' (Report Results, Columns), 'Show Filters' (Yes, No), and 'Show Description' (Yes, No), along with a 'Records Per Page' dropdown menu set to 1000. 'Back' and 'Continue' buttons are located at the bottom of the form.

**i** PAGE INFORMATION

General Options section	
<b>Default Open Page</b>	<p><i>Report Results</i> = When this report is opened in the future, the report results page will be generated first.</p> <p><i>Columns</i> = When this report is opened in the future, the Columns tab for the report will be displayed first.</p> <p> <b>NOTE:</b></p> <p>This option will only be used if this report is saved and accessed again.</p>
<b>Show Filters</b>	<p>Whether filters and criteria applied to this report should appear at the top or the bottom (based on the Display Criteria On setting under Style Options) of the report, or not appear at all.</p>
<b>Show Description</b>	<p>Whether the description information for this report should appear at the bottom of the report.</p> <p> <b>NOTE:</b></p> <p>This option will only be used for saved reports that have a description entered on the Save or Properties page.</p>
<b>Records per Page</b>	<p>The number of records that should appear per page by default for this report.</p>
Headers and Footers section	
<b>Select Header</b>	<p>The header to be displayed at the top of the report.</p> <p> <b>HINT:</b></p> <p>To create a new header, see <a href="#">How to Create New Headers and Footers on page 69</a>.</p>

<p><b>Select Footer</b></p>	<p>The footer to be displayed at the bottom of the report.</p> <p> <b>HINT:</b></p> <p>To create a new footer, see <a href="#">How to Create New Headers and Footers on the next page.</a></p>
<p><b>Localization Options section</b></p>	
<p><b>Currency Symbol</b></p>	<p>The symbol that will appear in front of any currency information displayed on the report.</p>
<p><b>Thousands Separator</b></p>	<p>The symbol that will be used to separate thousands groups for any numeric information displayed on the report.</p>
<p><b>Decimal Mark</b></p>	<p>The symbol that will be used as the decimal mark for any numeric information displayed on the report.</p>
<p><b>Date Format</b></p>	<p>The format that all dates displayed on the report will take.</p>
<p><b>Style Options section</b></p>	
<p><b>Display Criteria On</b></p>	<p>Select whether a summary of the criteria and filters used to generate the report will be displayed at the top or the bottom of the report.</p>
<p><b>PDF Orientation</b></p>	<p><i>Landscape</i> = When this report is exported to PDF, the long side of the page will be horizontal.  <i>Portrait</i> = When this report is exported to PDF, the long side of the page will be vertical.</p>
<p><b>PDF Page Break</b></p>	<p>Whether a page break will be inserted after the end of every grouping when this report is exported to PDF.</p>
<p><b>Text Color</b></p>	<p>The color that all text in the body of the report will appear.</p>

<b>Row Color</b>	The color that the background of normal rows in the report will appear.
<b>Group Color</b>	The color that the background of grouping header rows will appear.
<b>Sample</b>	A sample report that will display the colors you choose in the Text Color, Row Color and Group Color fields.

<b>Sample Grouping</b>		
Sample Sub Grouping		
<b>Sample Column 1</b>	<b>Sample Column 2</b>	<b>Sample Column 3</b>
Sample Row 1	Sample Row 2	Sample Row 3
Sample Row 4	Sample Row 5	Sample Row 6
Sample Row 7	Sample Row 8	Sample Row 9

4. Click *Continue*.

## How to Create New Headers and Footers

**Navigation:** *Headers and Footers section > Add or Modify a Header or Add or Modify a Footer link*

Columns
Display
Grouping
Sorting
Criteria
Additional Options
Actions ▾

**Additional Options:** *Another List Custom Column Report*

Data Set: *Inventory*

⊕ **General Options** *(Default Page, Show Filter, Records Per Page)*

⊖ **Headers and Footers**

Select Header: - Use Default Header - [Add or Modify a Header](#)

Select Footer: - Use Default Footer - [Add or Modify a Footer](#)

⊕ **Localization Options** *(Decimal, Thousands Separator, Currency, Default Date Format)*

⊕ **Style Options** *(Text color, Row Color, Group Color, Display Criteria, PDF Page Break)*

Back

1. From the Additional Options page, click *Add or Modify a Header* or *Add or Modify a Footer*.
2. Complete the details of the new header or footer.

**Additional Options**  
Data Set: Incident

**General Options** (Default Page, Show Filter, Records Per Page)

**Headers and Footers**

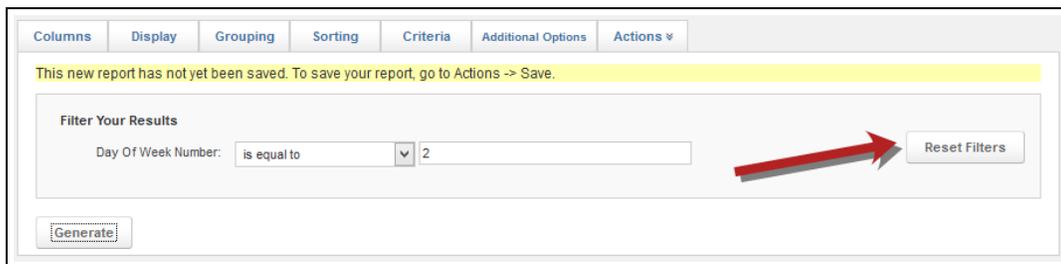
Select Header:  [Add or Modify a Header](#)

Header Title:

Navigation: Report Writer > report name > Generate Report

## Facts

- Once you have added columns, you can click the *Generate Report* link at any time to see how your report looks with the settings you have already added.
- If your report contains filters, you will see the Filter Your Results page appear, letting you select the filter values. If you have already run this report during this session (e.g., without leaving Report Writer or being logged out), your filter values will be remembered so you do not need to fill them out repeatedly. If you want to clear all your filter values after they have "stuck," click the *Reset Filters* button.



- Many reports may have multiple pages of data. You can move between pages or change the number of records available on the page by using the links at the bottom right of the report.

 TAKE A LOOK

### PAGE INFORMATION

<b>First</b>	Brings you to the first page of the report.
<b>Previous</b>	Brings you to the page immediately before the one you are currently viewing on this report.
<b>Next</b>	Brings you to the page immediately after the one you are currently viewing on this report.
<b>Page</b>	Displays the current page number and allows you to jump to a specific page by selecting the number.
<b>Per Page</b>	The number of records displayed on the current page.

## Saving a Report

You can save a report in Report Writer to access it again from the left menu.

Navigation: Report Writer > open or create the report > Actions > Save or Save As

## Facts

- Report Writer offers two saving options: Save and Save As.
  - For new reports, both Save and Save As will save the new report.
  - **Save** will save new changes to any existing report.
  - **Save As** allows you to save a new report or to save another copy of an existing report under a different name, preserving both versions.
- Additionally, you can use the **Rename/Change Properties** option from the Actions drop down menu to change the name of an existing name without saving a copy. This option is not available for new reports that haven't been saved yet.

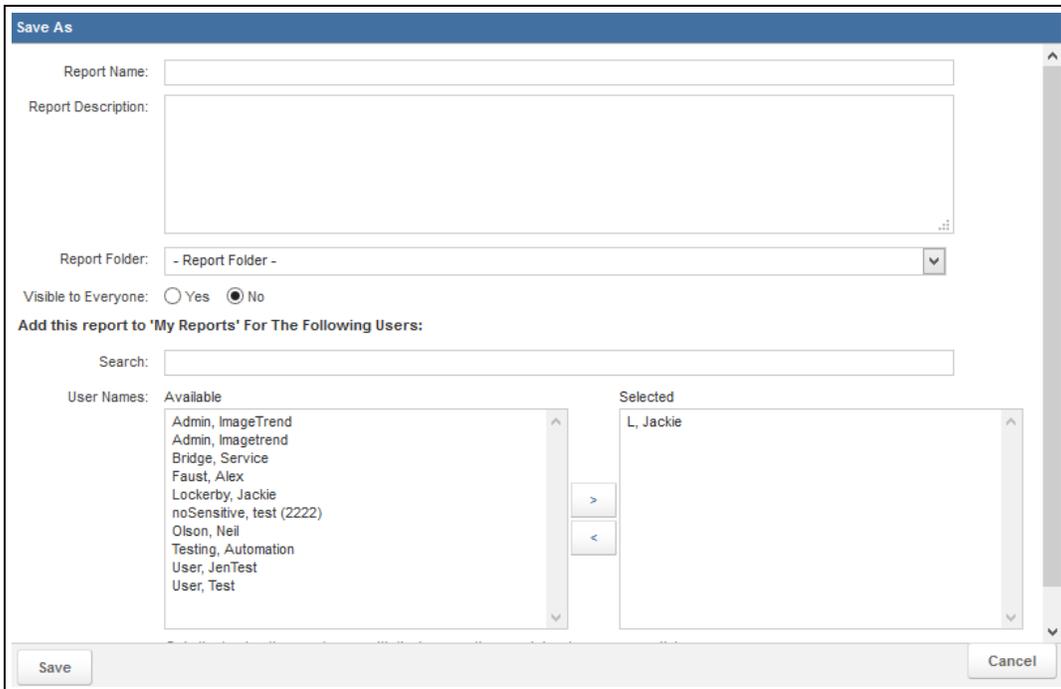
## Instructions

1. From the Actions menu, select **Save** or **Save As**.

 **HINT:** If you are re-saving an existing report:

- Clicking **Save** will save your changes immediately and you will not need to complete any further steps.
- Clicking **Save As** will allow you to save a copy of the report with a different name or details.
- Clicking **Rename/Change Properties...** will allow you to change the name and details of the report and save those changes without creating a copy.

2. Enter the details of the report.



**Save As**

Report Name:

Report Description:

Report Folder:

Visible to Everyone:  Yes  No

Add this report to 'My Reports' For The Following Users:

Search:

User Names: Available

- Admin, ImageTrend
- Admin, Imagetrend
- Bridge, Service
- Faust, Alex
- Lockerby, Jackie
- noSensitive, test (2222)
- Olson, Neil
- Testing, Automation
- User, JenTest
- User, Test

Selected

- L, Jackie

Save Cancel

**i** PAGE INFORMATION

<b>Report Name</b>	The title of the report, as it will appear at the top of the report and in the left menu when people access it.
<b>Report Description</b>	Any additional descriptive information. This will appear both to appear to anyone who views the Properties, Save or Save As page for this report and at the bottom of any report when the report is set to display its description.
<b>Report Folder</b>	The category in the left menu that this report will appear underneath.
<b>Visible to Everyone</b>	Yes = Other people in the same Report Writer security group as you will be able to view this report from the Report Writer left menu. No = Only you will be able to view this report.
<b>Add this report to 'My Reports' For the Following Users</b>	Select any users who you want this report to appear in the My Reports section for.  <b>HINTS:</b> <ul style="list-style-type: none"><li>• Users in the Selected scroll list will have this report added to their My Reports section. Users in the Available scroll list can have this report added to their My Reports section if you add them to the Selected section.</li><li>• To search for specific users, type the user's name into the Search box. As you type, the options in the Available scroll list will be narrowed down to display only names matching your entry.</li></ul> Each of the icons in the scroll list performs a different function. <ul style="list-style-type: none"><li>• The Add icon  moves the currently selected item in the Available list to the Selected list.</li><li>• The Remove icon  moves the currently selected item in the Selected list to the Available list.</li></ul>

3. Click Save.

## Deleting a Report

When a report is deleted, it cannot be accessed by anyone, including you.

**Navigation:** *Report Writer > open the report > Actions > Delete*

## Facts

- Only saved reports can be deleted.
- When you choose to delete a report, a confirmation prompt will appear. Once you confirm your decision to delete the report, it will no longer be accessible.
- Deleted reports cannot be recovered.

## Assigning Permissions to a Report

You can assign permissions to the report after saving it. This allows you to set who sees which part of the report.

**Navigation:** *Report Writer > open or create the report > Actions > Permissions*

## Facts

- Viewing permission can be restricted for parts or all of the report, depending on your preferences.
- These settings are only relevant if you have shared this report with others on the Properties page when saving the report. If you have set the Visible setting to No and have not added this report to the My Reports section for anyone, making changes here will have no effect.
- Groups will be able to access any section with a check mark: they will not be able to access that page if the checkbox is not selected.

## Instructions

1. From the Actions menu, select *Permissions*.
2. Select the checkboxes for each section or task that you want each group to be able to access.

Security Group	Columns	Display	Grouping	Sorting	Criteria	Results	Save	Save As	Delete	Rename / Change Properties	Additional Options	Publish to Web Service	Permissions	Scheduling	Share Report
Report Writer Administrator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
Elite User	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
Report Writer Tester	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
Elite Builder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

Records 1-4 of 4

Save Permissions Cancel

**i** PAGE INFORMATION

<b>Columns</b>	Whether users will be able to view and update report settings on the Columns tab of this report.
<b>Display</b>	Whether users will be able to view and update report settings on the Display tab of this report.
<b>Grouping</b>	Whether users will be able to view and update report settings on the Grouping tab of this report.
<b>Sorting</b>	Whether users will be able to view and update report settings on the Sorting tab of this report.
<b>Criteria</b>	Whether users will be able to view and update report settings on the Criteria tab of this report.
<b>Results</b>	Whether users will be able to generate this report to see the report itself within Report Writer.
<b>Save</b>	Whether users will be able to save changes to this report using the Save command.
<b>Save As</b>	Whether users will be able to use the Save As command for this report to save a copy of the report with a new name.
<b>Delete</b>	Whether users will be able to remove this report from the system.
<b>Rename/Change Properties</b>	Whether users will be able to view and update report settings on the Rename/Change Properties page of this report: this includes the ability to move the report to a different folder, grant access to other people or change the report's name.
<b>Additional Options</b>	Whether users will be able to view and update report settings on the Additional Options tab: this includes the ability to add or modify headers and footers and set how many records will appear on this report by default.
<b>Permissions</b>	Whether users will be able to view and update report settings on the Permissions page.
<b>Scheduling</b>	Whether users will be able to view and access the Schedule Report page to schedule this report.
<b>Share Report</b>	Whether users will have access to change the Visible to Everyone option for this report to add it to the All Reports section for everyone in the system.

3. Click *Save Permissions*.

## Scheduling a Report

---

You can schedule reports to automatically run for individuals at a certain time interval. The report will then be emailed to a person as an attachment.

**Navigation:** *Report Writer > open or create the report > Actions > Schedule Report > Add... button*

### Facts

- Reports can be generated in PDF, CSV or XML format and included in the email that will be sent.
- You will not be able to schedule any report until it has been saved.
- The Schedule Report page that appears when you click the Schedule Report option from the Action menu will display a list of all current schedules for this report to be sent.
- Reports will begin generating at the scheduled time, but may take a short time to generate. If you need the report to be delivered at a certain time, you may want to schedule the report for a slightly earlier time to make sure it will always arrive on time.
- Scheduled reports will begin generation at the selected time based on central time.

#### **EXCEPTION**

If you host your own system, the schedule will be based on your server's time zone.

### Instructions

1. From the Schedule Report page, click *Add...*
2. Complete the needed information for the schedule.

Add Schedule

Recurring: Daily on  Sunday  Monday  Tuesday  Wednesday  
 Thursday  Friday  Saturday

Time: 8 : 00 AM  
Time Zone: UTC-6 Central Time (US & Canada)

From: 03/19/2015 Today to 03/19/2016 Today

Format:  PDF  CSV  XML  
When generating a PDF, a maximum of 1000 records will be displayed

Subject:

Message:

Allow Unsubscribe:  Yes  No  
Allow recipients to unsubscribe from the report

Recipient Search:

Available	Selected
Admin, ImageTrend	L, Jackie

**PAGE INFORMATION**

<b>Recurring</b>	How often and on what schedule this report will be run and sent to recipients.
<b>Time</b>	The time that the report will be run. <div style="background-color: #e0e0e0; padding: 5px; margin-top: 5px;"> <b>HINT:</b> If this is a large report, you will want to run it at a time when few people will be using the system, so it will not slow down people who are working on other reports. </div>
<b>From/To</b>	If you want this report to run only between certain dates, use the From text box and/or Calendar icon to enter the first date that this report will be run and sent, and use the To text box and/or Calendar icon to enter the last date that this report will be run and sent.
<b>Format</b>	The format that the report will appear in when attached to the email for this schedule.
<b>Subject</b>	The subject line of the email that will be sent every time this scheduled report is run.
<b>Message</b>	Any content that should appear in the body of the email message that will contain the report attachment.
<b>Allow Unsubscribe</b>	Whether individuals who are selected to receive this report should be able to remove themselves from the list of recipients or not.

**Recipients**

All individuals whose names are listed in the Selected scroll list will receive this report on the schedule set up here.

 **HINTS:**

To search for specific users, type the user's name into the Search box. As you type, the options in the Available scroll list will be narrowed down to display only names matching your entry.

Each of the icons in the scroll list performs a different function.

- The Add icon  moves the currently selected item in the Available list to the Selected list.
- The Remove icon  moves the currently selected item in the Selected list to the Available list.

3. Click *Save Schedule*.

## Exporting a Report

If you would like to save a copy of a report with all the data that is displayed in the report as you are viewing it, you can choose to export the report into several formats that you can save and refer to at any time.

**Navigation:** *Report Writer > open or create the report > Actions > Export > file type*

## Facts

- Exporting a report generates a file that you can use outside the system.

## Instructions

1. From the report, select *Actions > Export*.
2. Select the type of file you want to export to.

### PAGE INFORMATION

**PDF** The PDF function can create a PDF file of reports that will contain all report records. PDF file can be viewed with the free Adobe Reader program. This is the recommended option if you want to print the entire report.

<b>CSV</b>	The CSV function can create a simple CSV-format spreadsheet containing the report records. This file can be opened in Excel or another spreadsheet tool.
<b>Doc</b>	The Doc function lets you generate a Word document of the current page of the report.
<b>HTML</b>	The HTML function lets you generate an HTML file for the current page of the report.
<b>XML</b>	The XML function lets you generate an XML file containing the current page of the report.

## Printing a Transactional Report

Printing a transactional report opens the Print dialog box for the browser you are using.

**Navigation:** *Report Writer > open or create the report > Actions > Print*

### Facts

- You can use the Print dialog box from your browser to select the printer and any additional printer settings (such as printer tray).
- This option generates a PDF file that will be printed with the report results.



## 2.1 GLOSSARY

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### A

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#### Active

Active records or features are currently available for use in the system.

#### Administrator

An administrator is a general term for a user with a high level of access to the system. Most administrators will be able to configure the system to some degree and may also have additional access to records within the system. Your organization may have several different levels of administrators who have different levels of access to the system.

#### Aggregate Custom Columns

1) A technical term sometimes used to group together certain types of custom columns including average, count, maximum, minimum, standard deviation, sum and variance columns. 2) A term formerly used to describe the List custom column.

#### Analytical Chart Reports

Analytical chart reports are a part of the optional Visual Informatics package for Report Writer, and allow you to create a custom chart with the powerful Analytics data analysis tools. Analytical chart reports allow you to quickly build a variety of different charts using pre-created formats to display in-depth data from your system in an easy-to-understand way.

#### Analytical Tabular Reports

Analytical tabular reports are a part of the optional Visual Informatics package for Report Writer, and allow you to create a custom report with the powerful Analytics data analysis tools. Analytical tabular reports are displayed in a traditional looking report displayed in table format, and allow you to use drill-down reporting for in depth information.

#### Ascending

Ascending order will sort items from A to Z or 1 to 10.

### B

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#### Benchmark

Benchmarks are lists of items that can be compared in analytical benchmark charts based on data elements. Benchmarks can also contain filters that will be applied every time someone builds a chart with the benchmark.

## C

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### Calculation

1) A general term for a mathematical operation used to find a specific value. 2) Within transactional reports, calculations are options available in the Display tab that will determine and display a calculated value such as the sum, average, standard deviation or count of records. These calculations will be displayed for the report as a whole and also for each group.

### Category

The category a report is saved in is the "folder" it will appear in within the left menu for later access. Categories are an organizational tool that will have no other effect on the report.

### Column

1) In Report Writer, a column in a report is a single field or data element to be displayed on the report (for example, the date of the record). 2) Throughout the system, a column is a general term for a vertical line of information (for example, the Date column on a specific page would display a list of dates).

### Criteria

Criteria are settings that allow you to determine limits on the data that will be displayed. For Report Writer reports, the limits set in criteria will be applied every time the report is run.

### CSV

Comma separated value: a common file format for spreadsheet files. These files can be opened in nearly any spreadsheet application including Microsoft Excel.

### Custom Column

In Report Writer, a custom column in a transactional report is a column that you can create to fit your own specifications. There are multiple types of custom columns.

## D

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### Data Elements

The fields that collection information in the system.

### Dataset

A dataset in Report Writer is a collection of individual data points that can be included in a report.

## Deactivate

Deactivating a record is marking it as inactive, which will result in the record being saved in the system but not available for current use.

## Default

A default value is something that will be used automatically unless a different value is selected. For example, a default value in a filter will be filled in automatically each time the report is run, although the user can manually change that value.

## Descending

Descending order will sort items from Z to A or 10 to 1.

## Dimension

A dimension is a term for a data element that can be added to analytical reports as a row or column. Dimensions can contain any kind of data except for numeric calculations (which are known as measures).

## Drop down menu

A drop down menu is a field that allows you to pick one choice from several choices that will be displayed. To view the choices, click the arrow on the menu.

## E

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### Export

1) Exporting data is sending it to a file that can be referred to and used outside of the system. 2) An export is the file that is generated through the process of exporting.

## F

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### Fields

Fields are text boxes, drop downs, buttons and other methods used in the system to collect information.

### Filter

1) Filters are applied to a transactional report are columns that can be used to set a different limit on the data that will appear on the report every time the report is run. (For example, a Date filter would allow you to set a different date to view records for each time you view the report.) 2) For analytical chart and tabular reports, a filter is a setting that can contain multiple criteria lines to narrow down which data will appear in the report. Unlike in transactional reports, filters in analytical charts will have their criteria saved and will not need to be re-entered every time you run the report. 3) Filters are a general term used to describe fields that can be used to narrow down the records on a page.

## G

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### Generate

Generating a report is building that report for you to view based on the current data in the system.

### Grouping

In Report Writer, grouping places all records in the report that have the same value for a specific column together in a visual grouping.

## I

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### ImageTrend

ImageTrend is the company that provides and supports Service Bridge, State Bridge, Fire Bridge, Rescue Bridge and Report Writer.

### Inactive

Inactive records are not available for use in the system, although they are saved in the system for reference.

## L

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### Label

The label is the text that accompanies a specific field or column anywhere in the system. For example, in the First Name field or column, the label would say "First Name."

### Login

1) Your login information is your username and password, which are used to access the system. 2) To log in to the system is to enter your credentials (username and password) so you can access the system.

### Logout

Logging out of the system is closing the system so that no unauthorized user will have access to the information within the system.

## M

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### Many-to-One

A many-to-one record in Report Writer is a field that might be recorded multiple times for a single record.

## Measure

Measures are numeric fields or calculated fields (e.g., averages, counts, lengths of time) used in analytical tabular and analytical chart reports.

## My Reports

The My Reports section of the left menu in Report Writer contains a categorized reports that you have added to your My Reports section as favorites. The list of reports in the My Reports section is unique to you and no one else will see this list.

## O

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## Operator

An operator is a symbol that determines what should happen between two values in an equation or criterion. Common operators might include "is equal to," "is not blank," "+" or "contains."

## P

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## Parentheses

Parentheses are used in criteria to group together lines that should be checked in a certain order, in the same way that they might be used in a math equation to set the order of operations.

## Password

A password is a short collection of letters and/or numbers that, in combination with your username, identifies you to the system. Your password should be kept secret.

## Permission Group

Permission groups are groups that users can be assigned to that define their level of access to the system. Permission groups control access to each major section of the system. Permission groups are also sometimes called security groups.

## Permissions

Permissions are controls on how much access to the system a particular group has.

## Populate

Populating a field is automatically filling information in according to data that is elsewhere in the system.

## R

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### Row

In a Report Writer transactional report each row is a single record that appears on a report. In an analytical tabular report, a row is a data element. The report will display a line for each data value (and its associated measure data) associated with that data element.

### Row Value Repetition

In Report Writer, a setting for transactional reports that determines whether content will be repeated in a column for each line it appears in, or whether it will appear only in the first line if the same value appears in multiple consecutive rows.

## S

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### Schedule

In Report Writer, scheduling reports is creating a setting in the system to automatically generate the report and email it to specific users on a regular timeframe.

### Session timeout

The session timeout is the amount of time that can pass when a user does not do anything on the system before that user is logged out of the system. Session timeout is a security feature, making it less likely that someone can access the data on the system if a staff member forgets to log out.

### Sort Order

The sort order is the order in which the records appear (e.g., first, second). Sort order should always be recorded as a number. Typically, the sort order controls the order of records on the incident form.

### Sorting

1) In Report Writer, sorting places records within the report in order based on the values in a certain column.

### Standard Reports

Standard reports (also sometimes called canned reports) are pre-created with all fields and display options defined for the user. Within the filters, users can define additional criteria (e.g., requesting information about a particular unit or type of service). These reports provide fewer configuration options and allow a ready-made report for common data requests.

### Status

A status is the condition of a particular record (e.g., active or inactive for users). The system has different types of statuses for different records.

## System Administrator

The system administrator is the individual in charge of setting up and maintaining the entire system.

## T

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### Transactional Report

Transactional reports are "ad hoc" reports that you can build from scratch, adding your own fields, criteria and display settings.

## U

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### User

A user is a person who can log in to and use the system. In contrast to an administrator, a user can only use the features of the system and not set up the system.

### Username

A username is the name the system uses to identify you when you try to log in to the system.

## V

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### Value

1) In criteria, a value is the content that a specific column will be compared against to determine whether each record will be included in the report. 2) A value is any text, number or selection entered into a field. This include selectable options found in single and multi-select drop downs.

## W

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### Windowed Custom Columns

A technical term sometimes used to group together certain types of custom columns including cumulative distribution, median, percent rank and percentile columns.

## 3.1 HELP AND SUPPORT

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### Before Contacting ImageTrend

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Please have the following information accessible when calling ImageTrend:

- A description of your computer system.
- The name of your operating system and service pack version (if applicable).
- A description of what happened and what you were doing when the problem occurred.
- The exact wording of any error messages you see.
- Your company name and contact information.

### Contacting ImageTrend

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If you are unable to find the information needed to use Report Writer effectively, please consult ImageTrend in any of the following ways:

- EDS Support Phone: (888) 730.3255
- Other Inquiries Phone: (952) 469.1589
- Other Inquiries (Toll-Free): (888) 469.7789
- Fax: (952) 985.5671
- Web: <http://support.imagetrend.com>
- Email: [support@imagetrend.com](mailto:support@imagetrend.com)

ImageTrend support services are available:

Monday – Friday

8:30 a.m. to 5:00 p.m. central time

### Technical Support

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For 24-hour technical support, ImageTrend provides online assistance through their website and email services:

- Web: <http://support.imagetrend.com>
- Email: [support@imagetrend.com](mailto:support@imagetrend.com)