# **Production Dashboard**

### Introduction

Production Dashboard is a set of widgets that can be used within Operations Dashboard for ArcGIS. These widgets can be authored in a view to create insight in to your organization through Workflow Manager Server and Data Reviewer Server.

For more information about extending Operations Dashboard, please click this link.

# Things to Know

- These widgets require the services to be SSL enabled. The widgets will not display data unless the incoming services are secured.
- You must have a feature service containing the areas of interest from your Workflow Manager
  repository in order to utilize the map selection capability. An example of map selection is selecting a
  wedge in a pie chart which will select the corresponding areas of interest within the Map widget. The
  data source must also be set with the Selection check box set in the Map widget.
- The widgets may work on versions previous to 10.3.1, but this is not supported. The recommended version to use is 10.4 for all involved products.

# **Workflow Manager Widgets**

These widgets chart out information provided in the Workflow Manager repository. The information is pulled from queries made in the repository by an administrator. The SQL queries must contain the desired fields in order for the widgets to find the information.

In order to use the map interaction, the data source must be configured with the **Selectable** option in the **Map Widget.** By enabling this, you can choose the OBJECTID of the feature service within each widget which will allow for selecting areas of interest by selecting the appropriate bar, pie wedge, or status indicator.

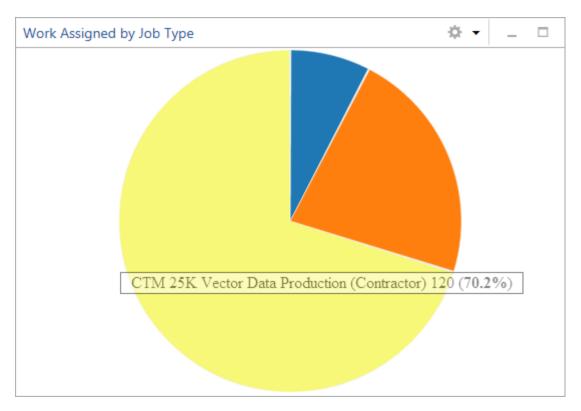
## Configure a Workflow Manager Pie Chart

This widget allows you to view a Workflow Manager attribute as proportions of a pie.

When displaying these proportions, a summary operation is performed on the field values. The aggregate can be any one of the following:

- Count
- Average
- Sum

For example, a pie chart can be used to show the number and percentage of a certain job type with an open status. From the chart, you can see that there are currently 30 active jobs for cartographic production at a 1:25,000 scale. You can also see that these jobs account for 52.6% of the total open jobs.

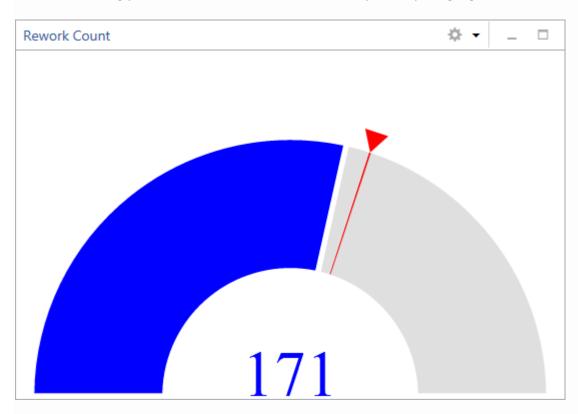


- 1. Click Edit, and click Edit Operation View.
- 2. Click Widget and then click Add Widget.
- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL and login username to the Workflow Manager repository.
- 8. In the **Query** tab, choose the appropriate guery from the dropdown.
- 9. Choose the appropriate **Operation** from the dropdown menu.
- 10. Next, choose the **Value Field** from the dropdown that will be charted. If that value is a date type, choose the appropriate interval from the dropdown.
- 11. Next, choose the **Normalize Field** attribute from the dropdown if applicable. If that value is a date type, choose the appropriate interval from the dropdown.
- 12. Click the **Appearance** tab.
- 13. Choose either Wedge Hover or Around Pie as your label placement option.
- 14. Choose a Map Selection Field from the dropdown if applicable to your chart.
- 15. Optionally, change the color ramp for your chart.
- 16. When you're satisfied with the preview, click **OK** to finish configuring the widget.

#### Configure a Workflow Manager Gauge Chart

A Workflow Manager gauge widget depicts the value of a certain attribute or a count of features as a percentage of a target value.

In many cases, gauges are more informative when the highlighted value depicted by the gauge is below or exceeds a threshold value; for example, a gauge that depicts the amount of rework count, where the color of the gauge's graphic and value text is displayed in a different color when the value is below this threshold. This is useful for drawing your attention when the information depicted by the gauge reaches some critical level.



- 1. Click Edit, and click Edit Operation View.
- 2. Click Widget and then click Add Widget.
- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. In the **Title** box, type a title that will be displayed in the widget's window.
- 5. In the **Description** box, type a caption that will be displayed below the widget.
- 6. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL and login username to the Workflow Manager repository.
- 7. In the **Query** tab, choose the appropriate query from the dropdown.
- 8. Next, choose the **Value Field** from the dropdown that will be charted.
- 9. Click the **Appearance** tab.
- 10. Choose either **Average** or **Count** as the intended operation.
- 11. Choose a Minimum Value and Maximum Value depending on your data.
- 12. Optionally, enable a **Threshold Value** by toggling the box and enter a critical value.
- 13. Optionally, choose the color or colors for your gauge depending on if you have a **Threshold Value**.

14. When you're satisfied with the preview, click **OK** to finish configuring the widget.

#### Configure a Workflow Manager Bar Chart widget

A Workflow Manager Bar Chart widget graphically displays the values of one or more attributes from the Workflow Manager repository.

For example, this widget can be configured to display the amount of jobs closed on a monthly basis to identify if enough units of work are being closed on a regular basis. If not enough work is being closed per month, perhaps the manager will have to investigate to see if the work units need to be broken down more.



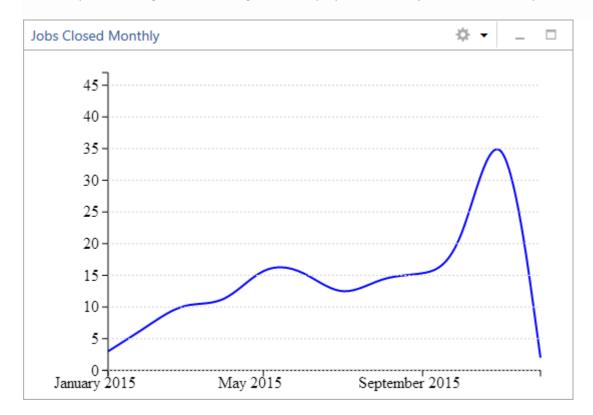
- 1. Click Edit, and click Edit Operation View.
- 2. Click Widget and then click Add Widget.
- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL and login username to the Workflow Manager repository.
- 8. In the **Query** tab, choose the appropriate query from the dropdown.
- 9. Choose the appropriate **Operation** from the dropdown menu.
- 10. Next, choose the **Value Field** from the dropdown that will be charted. If that value is a date type, choose the appropriate interval from the dropdown.

- 11. Next, choose the **Normalize Field** attribute from the dropdown if applicable. If that value is a date type, choose the appropriate interval from the dropdown.
- 12. Click the **Appearance** tab.
- 13. Choose the appropriate label options and/or enable **Grid Lines** if necessary.
- 14. Choose a color ramp or single color to fill in the chart.
- 15. Choose a Map Selection Field from the dropdown if applicable to your chart.
- 16. Optionally, choose to use a single color or color ramp for your chart.
- 17. When you're satisfied with the preview, click **OK** to finish configuring the widget.

### Configure a Workflow Manager Trend Chart widget

A Workflow Manager Bar Chart widget graphically displays the values of one or more attributes from the Workflow Manager repository and interpolates a line along these values.

For example, this widget can be configured to display the trend of jobs closed monthly.



- 1. Click Edit, and click Edit Operation View.
- 2. Click Widget and then click Add Widget.
- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.

- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL and login username to the Workflow Manager repository.
- 8. In the **Query** tab, choose the appropriate query from the dropdown.
- 9. Choose the appropriate **Operation** from the dropdown menu.
- 10. Next, choose the **Value Field** from the dropdown that will be charted. If that value is a date type, choose the appropriate interval from the dropdown.
- 11. Next, choose the **Normalize Field** attribute from the dropdown if applicable. If that value is a date type, choose the appropriate interval from the dropdown.
- 12. Click the **Appearance** tab.
- 13. Choose the appropriate label options and/or enable **Grid Lines** if necessary.
- 14. Choose a color ramp or single color to fill in the chart.
- 15. Choose a **Map Selection Field** from the dropdown if applicable to your chart.
- 16. Optionally, choose to use a single color or color ramp for your chart.
- 17. When you're satisfied with the preview, click **OK** to finish configuring the widget.

# Configure a Workflow Manager Status Chart widget

Shows the current state of jobs and displays similarly to the indicator widget. This widget will determine if there are jobs overdue, behind schedule, or on schedule. If there at least 1 job **Overdue**, the status will show **Overdue**. If there are none **Overdue** but at least 1 **Behind Schedule**, the status will show behind schedule. If there are none **Behind Schedule** or **Overdue**, the status will show **On Schedule**.

For example, perhaps the technical manager wants to see how many jobs are overdue throughout all departments to check if there needs to be adjustments to the workloads. The manager finds that there are a large portion of jobs that are overdue and needs serious investigation to find out what happened and how to fix the process so it does not happen again.



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- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL and login username to the Workflow Manager repository.
- 8. In the **Query** tab, choose the appropriate guery from the dropdown.
- 9. The **Start Data, Due Date,** and **Percentage Complete** fields should automatically populate if the chosen query has those fields. These fields are required.
- 10. In the **Appearance** tab, choose the desired symbol and color for each status. Select **Percentage** if the query is showing **Percentage**.
- 11. Choose a Map Selection Field from the dropdown if applicable to your chart.
- 12. Optionally, choose to use a single color or color ramp for your chart.
- 13. When you're satisfied with the preview, click **OK** to finish configuring the widget.

# Data Reviewer widgets

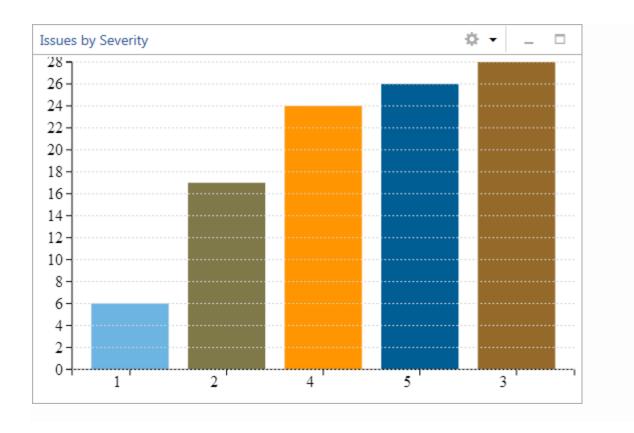
The Data Reviewer widgets utilize Data Reviewer Server. The resulting service gives access to certain fields in the Data Reviewer workspace and allows the charting of that information. More information can be found at: <a href="http://www.esri.com/software/arcgis/arcgisserver/extensions/data-reviewer">http://www.esri.com/software/arcgis/arcgisserver/extensions/data-reviewer</a>.

The variables that can be utilized are: SEVERITY, BATHJOBCHECKGROUP, LIFECYCLESTATUS, SESSIONID, CHECKTITLE, SUBTYPE, and any user defined attributes added to the table.

#### Configure a Data Reviewer Bar Chart

A Data Reviewer Bar Chart widget graphically displays the values of a field from the Data Reviewer workspace.

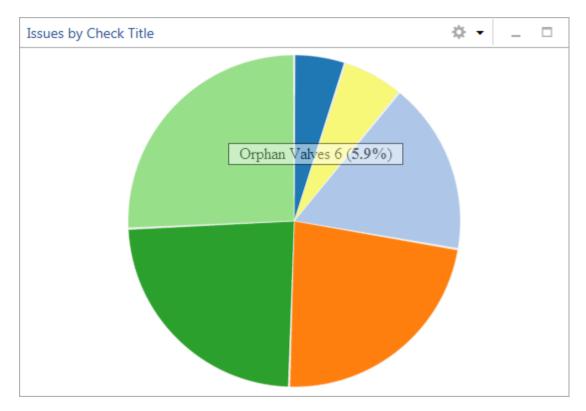
For example, this widget can be configured to display the count of issues found by severity.



- 1. Click Edit, and click Edit Operation View.
- 2. Click Widget and then click Add Widget.
- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL.
- 8. In the Query tab, choose the desired variable from the Data Reviewer Variable dropdown.
- 9. Choose any filters if applicable from the filter dropdowns.
- 10. Click the **Appearance** tab.
- 11. Choose the appropriate label options and/or enable **Grid Lines** if necessary.
- 12. Choose a color ramp or a single color fill for the chart.
- 13. Choose a **Map Selection Field** from the dropdown if applicable to your chart.
- 14. Optionally, choose to use a single color or color ramp for your chart.
- 15. When you're satisfied with the preview, click **OK** to finish configuring the widget.

### Configure a Data Reviewer Pie Widget

This widget allows you to view a Data Reviewer table attribute as proportions of a pie. For example, a pie chart can be used to show the number of issues found by the type of check run.



- 1. Click Edit, and click Edit Operation View.
- 2. Click Widget and then click Add Widget.
- 3. Choose the type of widget and click **OK.** To update settings for an existing widget, click **Settings**, and click **Configure** on the widget's window.
- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL.
- 8. In the Query tab, choose the desired variable from the Data Reviewer Variable dropdown.
- 9. Choose any filters if applicable from the filter dropdowns.
- 10. Click the **Appearance** tab.
- 11. Choose either **Wedge Hover** or **Around Pie** as your label placement option.
- 12. Choose a Map Selection Field from the dropdown if applicable to your chart.
- 13. Optionally, change the color ramp for your chart.
- 14. When you're satisfied with the preview, click **OK** to finish configuring the widget.

#### Configure a Data Reviewer Indicator

This widget can be configured to create a two or three way indicator to show different thresholds of caution for Data Reviewer workspace variables.

For example, a manager can set up a two way widget to indicate when there are too many errors in a particular session. This session contains errors that pertain to quality control for building polygons.

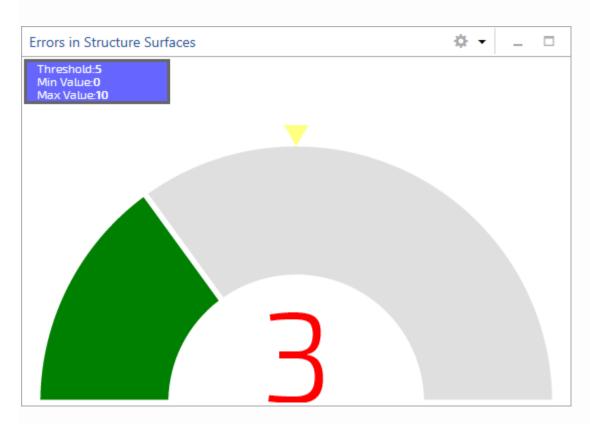


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- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL.
- 8. In the Query tab, choose the desired variable from the Data Reviewer Variable dropdown.
- 9. Choose the desired **Operation.** NOTE: No Operation will provide a count of records.
- 10. Choose any filters if applicable from the filter dropdowns.
- 11. Click the **Appearance** tab.
- 12. Choose either a **Two or Three State Indicator** from the dropdown.
- 13. Choose the threshold value(s) depending on the type of indicator.
- 14. Choose the desired symbols and colors to indicate each state.
- 15. When you're satisfied with the preview, click **OK** to finish configuring the widget.

#### Configure a Data Reviewer Gauge Chart

A Data Reviewer gauge widget depicts the value of a certain attribute or a count of features as a percentage of a target value.

In many cases, gauges are more informative when the highlighted value depicted by the gauge is below or exceeds a threshold value; for example, a gauge that depicts the amount of errors in a certain feature class, where the color of the gauge's graphic and value text is displayed in a different color when the value is below this threshold. This is useful for drawing your attention when the information depicted by the gauge reaches some critical level.



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- 4. Click the **Data Source** drop-down arrow, and choose the item that will provide the map selection capability for this widget.
- 5. In the **Title** box, type a title that will be displayed in the widget's window.
- 6. In the **Description** box, type a caption that will be displayed below the widget.
- 7. If you need to change the service connection, click the **Connection** tab and insert the appropriate URL.
- 8. In the Query tab, choose the desired variable from the Data Reviewer Variable dropdown.
- 9. Choose any filters if applicable from the filter dropdowns.
- 10. Click the **Appearance** tab.
- 11. Choose either **Average** or **Count** as the intended operation.
- 12. Choose a Minimum Value and Maximum Value depending on your data.
- 13. Optionally, enable a Threshold Value by toggling the box and enter a critical value.
- 14. Optionally, choose the color or colors for your gauge depending on if you have a Threshold Value.
- 15. When you're satisfied with the preview, click **OK** to finish configuring the widget.