# Lightning Conductor App for SharePoint Online

## Manual

1 — Last update: 2015/03/30
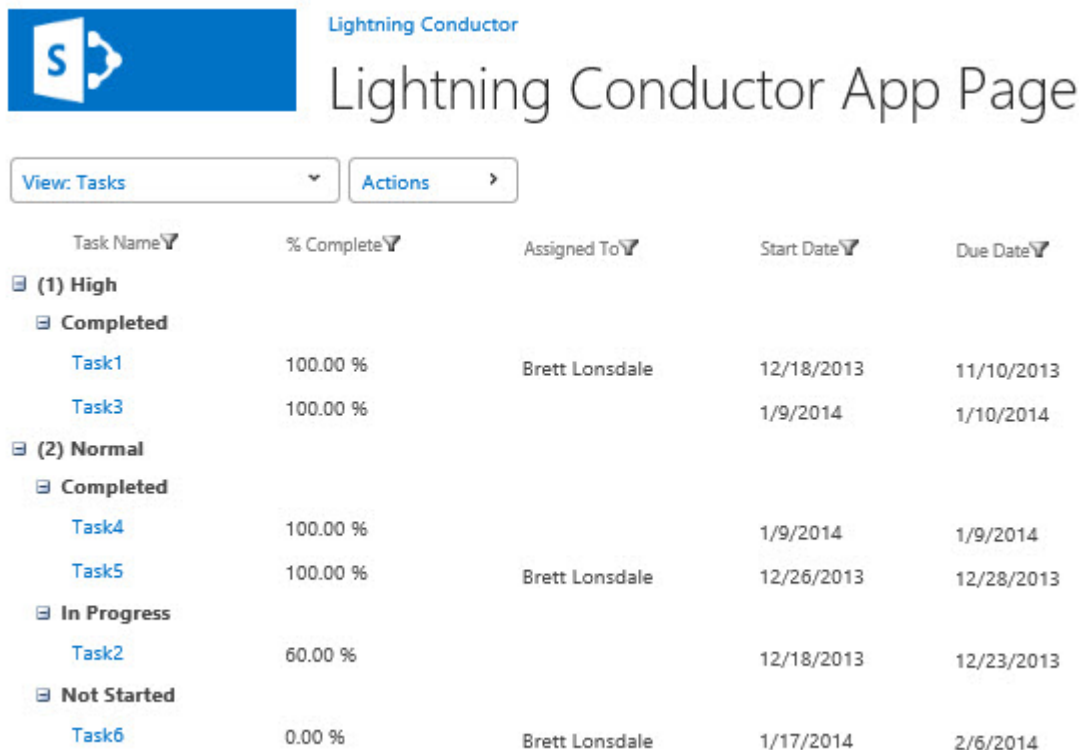
Lightning Tools

# Table of Contents

# Introduction

The Lightning Tools' Lightning Conductor App provides your Office 365™ users with the ability to rollup SharePoint® list content from within a site collection or across site collections, and also to be able to easily configure powerful views. Users can add the App, and then within seconds configure a rollup to list item data with the ability to select the columns that they wish to see, apply data formatting, conditional formatting, grouping, filtering, sorting and to build calculated columns.



The Lightning Conductor App for SharePoint Online is a SharePoint-hosted app and therefore cannot be used on pages that will be accessed by anonymous users.

Using the Lightning Tools' Lightning Conductor App for Office 365™, users can easily configure views using the Display tab. Columns can be re-ordered, column Aliases set (FName = Firstname as an example), columns widths configured, along with sorting and grouping. Formatting options are then configured simply by setting properties such as Bold, Italic and Underline. Conditional Formatting can also be set individually on each column. Conditional formatting allows users to highlight important data such as Tasks that are due

today or past due, Tasks assigned to you, Documents checked out to you, or products with a low stock level.
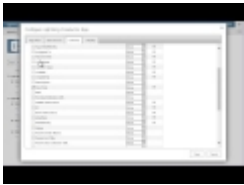


You can easily select columns from your lists to include within your view. With other products, columns need to be added by writing code such as XSLT or HTML. With the Lightning Conductor App, you simply select the column, re-order by dragging the column name up and down, and then also set filters using the filter icon on the right of the column. Filters can also span multiple columns, for example, Tasks Due Today AND Assigned to Brett Lonsdale.

To use the Lightning Conductor app within your Office 365™ tenancy complete the following steps:

1. Install the Lightning Conductor app from the SharePoint Store, which installs a 14-day trial license.
2. Add the a app to a site.
3. Add the Lightning Conductor App Part to a page.
4. Configure the Lightning Conductor App Part.

If you want to continue using the Lightning Conductor app, purchase a Lightning Conductor app license from Lightning Tools and activate the license.

Installation of the App >>

# Installation of the App

This section details how to install the [Lightning Conductor App](#) from [Lightning Tools](#), so it can be used on [Office 365™](#) sites to display aggregated SharePoint® content. By completing the steps on this page, the *Lightning Conductor* app appear on the *Your Apps* page, under *Apps you can add*, for all sites within an [Office 365™](#) tenant.

You install the app by getting the app from the SharePoint Store where it is provided as a free **Unlimited user** 14 day trial. You can then use the Lightning Conductor app by [adding](#) the app to a site, adding the Lightning Conductor App Part to a page, and then [configuring the Lightning Conductor App Part](#). You can purchase a Lightning Conductor app license from [Lightning Tools](#) and then [activating the license](#).

> To use the following method to install the Lightning Conductor app to an Office 365 tenant, you must be an [Office 365 global admin](#). If you have not previously added the Lightning Conductor app to your Office 365 tenant, then you could also add it from the SharePoint Store at a site level.

Use the following steps to install the Lightning Conductor app from the SharePoint Store:

1. Navigate to your [SharePoint admin center](#).

   **Note**: If you are unsure where your [SharePoint admin center](#) site is:
   1. Click the [Apps Launcher](#) 🔲 icon in the top left and then click **Admin** to display the [Office 365 admin center](#).
   2. At the bottom of the Quick Launch, expand **Admin** and then click **SharePoint** to display the *SharePoint admin center*.

2. On the Quick Launch click **apps**, and then click **Purchase Apps**.
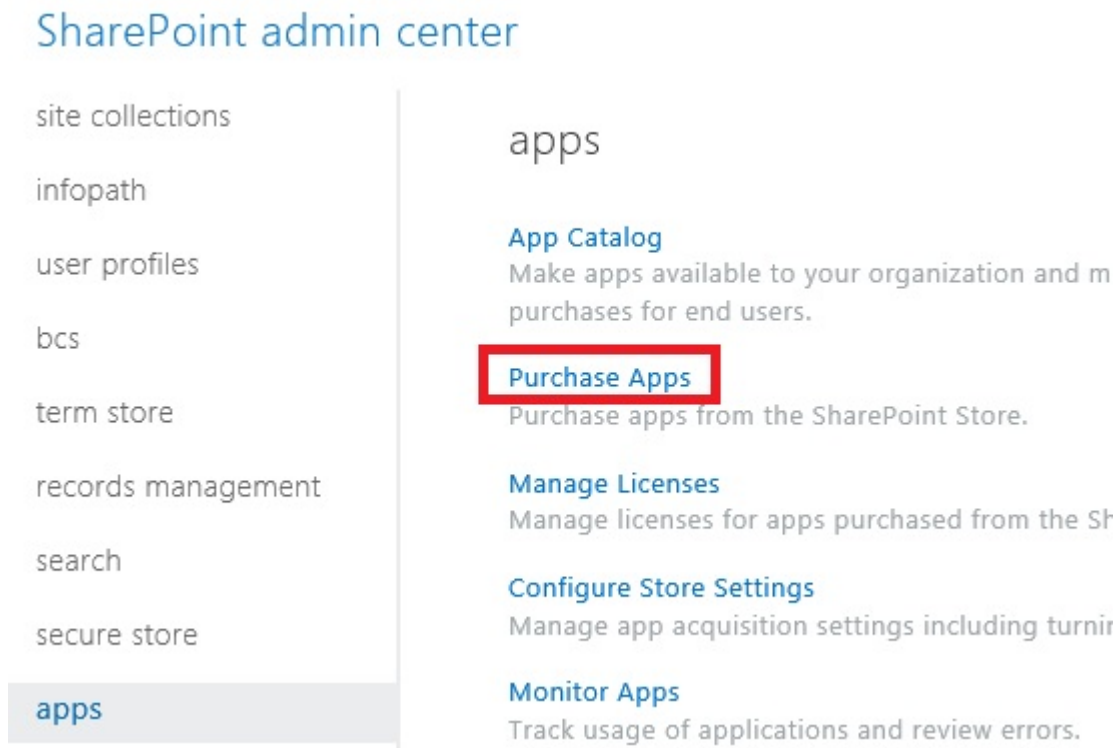


The SharePoint Store is displayed.

3. In **Find an app** search box, type **Lightning Conductor** and press **ENTER**.
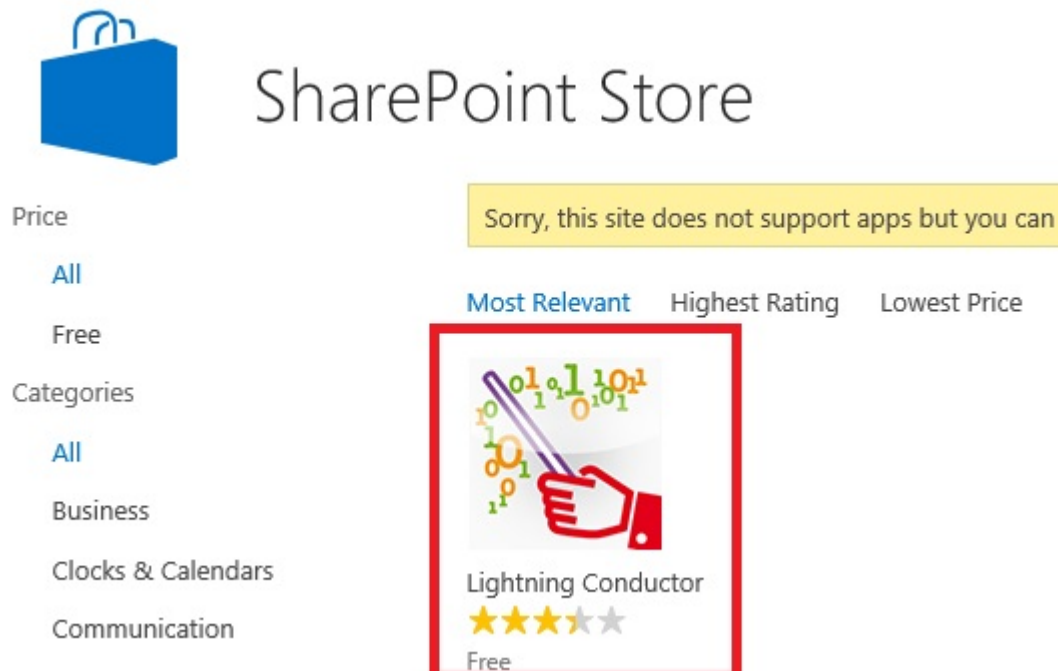
4. Click **Lightning Conductor**.

5. Click **Add It** to display, *you just got this app for everyone in your organization*.



6. Click **Return to site**.

   The Lightning Conductor app is now available for users to add to their Office 365™ site, and then subsequently can be added to a page within that site.


The app will appear under the **Manage Licenses** on the *SharePoint admin center*, which displays information of the **free, Unlimited users** SharePoint Store license. You can monitor the *Lightning Conductor* app on the Monitor Apps page.

Adding the App to a Site >>

# Related Office.com documentation

- Tenancies and deployment scopes for apps for SharePoint →
- Configure settings for the SharePoint Store →
- Monitor apps for your SharePoint Online environment →
- Plan customizations, solutions, and apps for SharePoint Online →
- Assigning Office 365 admin roles

# Adding the App to a Site

To use the Lightning Conductor App Part on a SharePoint® page, you first need to add the Lightning Conductor app to the site, where the page exists. There are many ways of adding an app to a site. The steps in this section, assume that the *Lightning Conductor* app appears under *From Your Organization* in the *App Catalog*. To add the *Lightning Conductor* app to the *App Catalog*, use the steps documented in the Installation of the App Package section of this online manual.

To add the Lightning Conductor app to a site, use the following steps. :

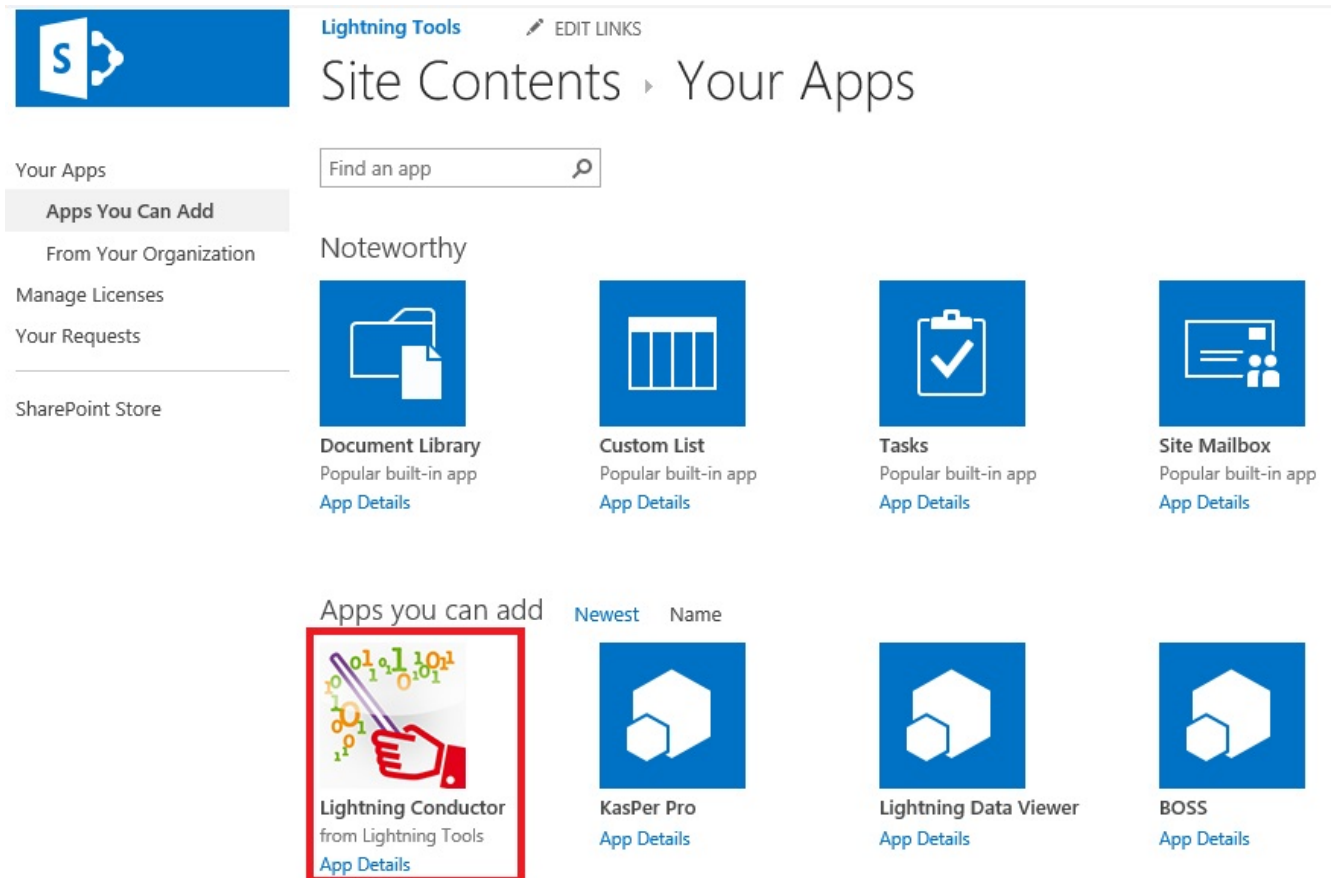> You need to be mapped to the Full Control permission level to complete the following steps. If you are a Site Owner, then you will be mapped to this permission level.

1.  Navigate to the site where you wish to use the Lightning Conductor App.

2.  Click **Settings**  ⚙  in the top right corner of the team site, and then click **Add an app**.
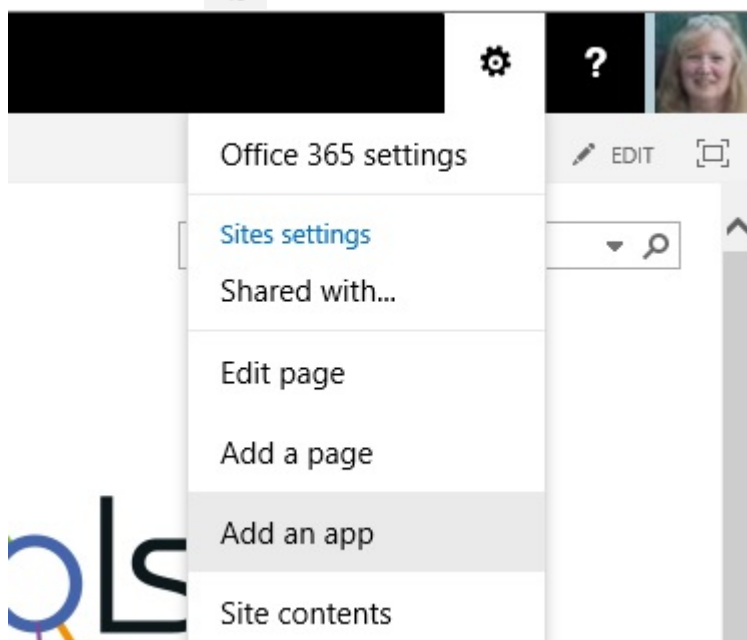


3.  On the **Your Apps** page, under **Apps you can add**, click **Lightning Conductor**.

    **Tip:** In your organization you may find the *Lightning Conductor* app below **Noteworthy**. If your organization has many apps, to quickly find the app, type **Lightning** in the **Find an app** search box.

4. On the **Do you trust Lightning Conductor** dialog, click **Trust It**.

The *Site Contents* page is displayed, and the app will begin to install. It will first appear grayed during the installation, and then when the installation is complete you will see the app as displayed below.



You can now start to use the app, by adding the Lightning Conductor App Part to a page, and configuring the App Part, as described in the in the Configuring the Lightning Conductor section of this online manual.

<< Installation of the App

Displaying an App on a page. >>

# Related Office.com documentation

- Add an app to a site →

- [Monitor apps for a site →](#)
- [Remove an app from a site →](#)
- [Permissions in Office 365 →](#)
- [Introduction: Control user access with permissions →](#)
- [Understanding permission levels →](#)

# Displaying an App on a page.

You can display the [Lightning Conductor](#) app from [Lightning Tools](#) on a SharePoint® page using the Lightning Conductor App Part control.

1. In the browser, navigate to the page where you want to add *Lightning Conductor* App Part.
2. Click **Settings** ⚙ , and then click **Edit page**.
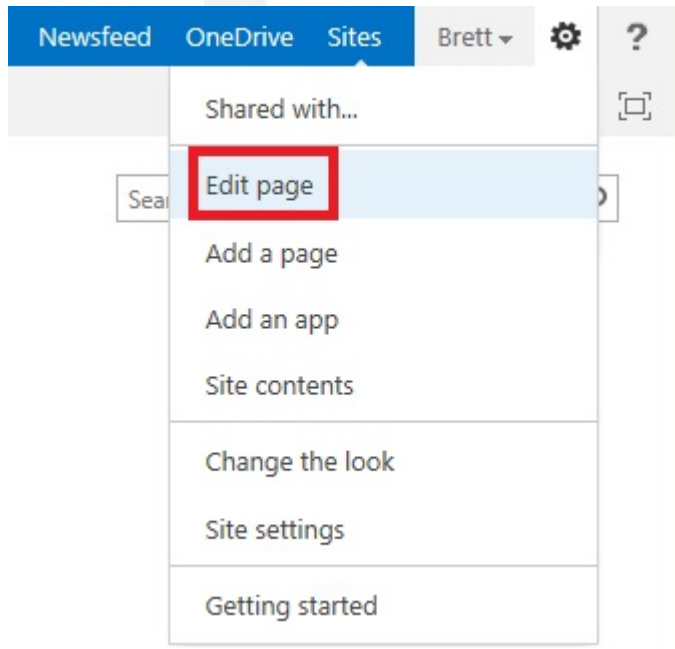


3. If you are using a *Web Part* page, click **Add a Web Part** in the Web Part zone you wish to add the Lightning Conductor App Part
4. On either a *wiki* page, or a *Web Part* page, click the **Insert** ribbon, and then click **App Part** in the **Parts** group.

5. In the **Parts** pane, click **Lightning Conductor** and click **Add**.
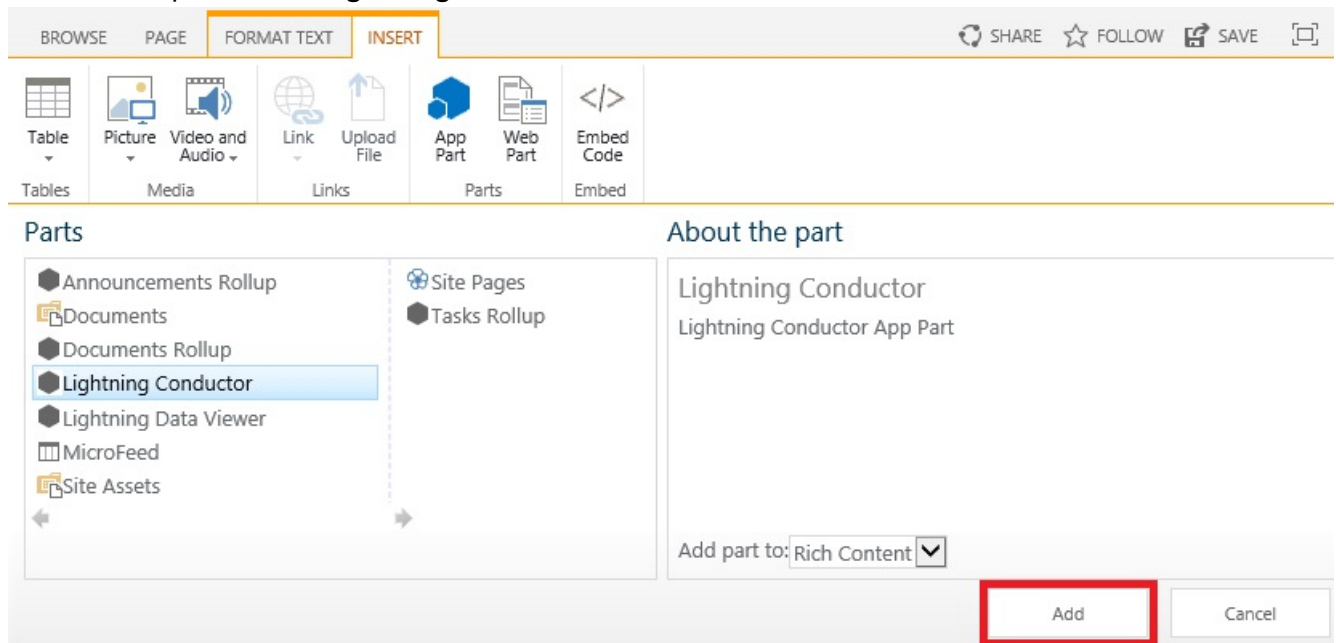


**Tip**: When you add the Lightning Conductor app to your site, not only can you add the Lightning Conductor app part to your page, you can also add preconfigured Lightning Conductor app parts: **Announcements Rollup**, **Documents Rollup** and **Tasks Rollup** app parts. These three app parts use the Object Model Rollup Engine Provider.

6. Configure the app.

**Troubleshooting**: If the **Lightning Conductor** App Part does not appear in the **Parts** pane, the Lightning Conductor app has not been added to the site. Contact your site owner to add the app to your site.

When the app is purchased from the SharePoint Store you will have installed the free (trial) version of the app, which is valid for 14 day upon which the app will need to be licensed. The number of days remaining in your trial will be shown within the app part.
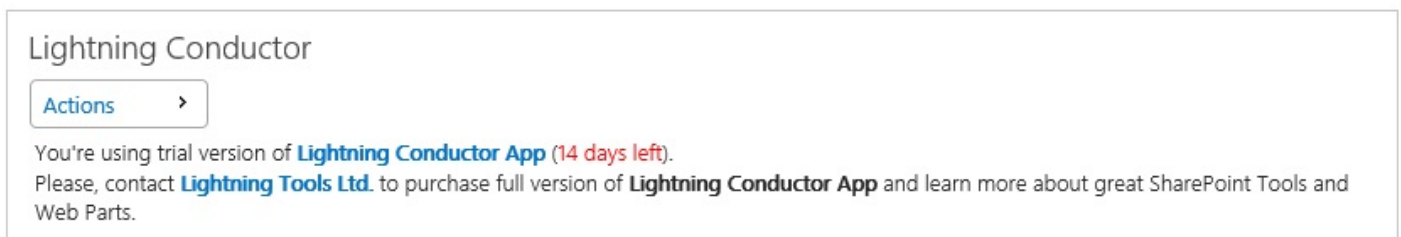


When the 14 day trail period has expired, the app part will display that it is unlicensed and will no longer function until you licensed it. Contact your Office 365 administrator to purchase and activate the license.

# Related Office.com documentation

- [Add an App Part to a page →](#)
- [Move, Minimize, or delete a Web Part from a page →](#)
- [Keyboard shortcuts for Web Part Pages →](#)
- [Troubleshooting using the Web Part Maintenance Page →](#)

# Licensing the App

The Lightning Conductor app for <u>Office 365™</u>, is available from the SharePoint Store as a free **Unlimited users** 14 day trial. You can use the full functionality of the app for 14 days upon which the app will need to be licensed. The number of days remaining in your trial will be shown within the app part when you have added it to the page.
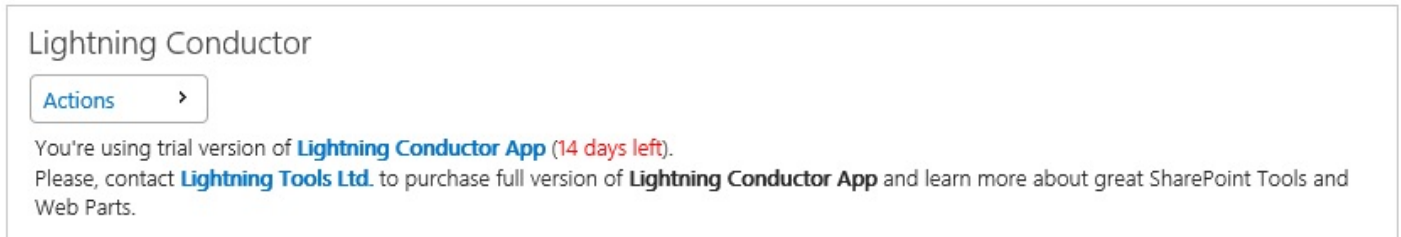


When the 14 day trail period has expired, the app part displays that it is unlicensed and will no longer function until you licensed it.

The Lightning Conductor app license is managed separately from the free **Unlimited users** SharePoint Store license. You need to purchase a Lightning Conductor app license from <u>Lightning Tools</u>. Once you have purchased the Lightning Conductor app and have received the license key, you need to enter the key and activate the app using the **Licensing of Product 'Lightning Conductor App'** dialog, which can be displayed by either:

- Click the **n days left** hyperlink.
  or
- From the **Actions** menu clicking **License information**.
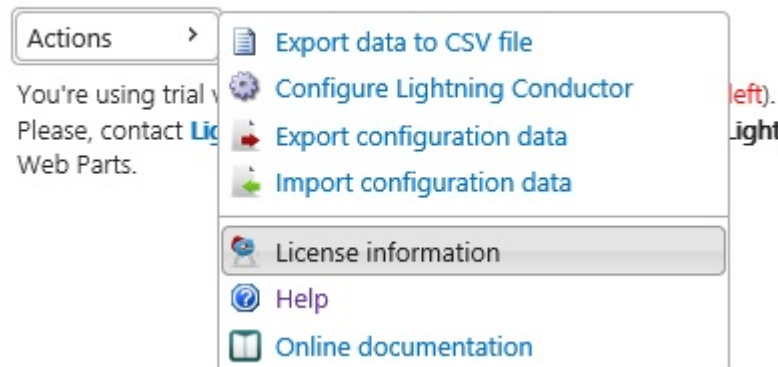


<u><< Displaying an App on a page.</u>
<u>How to tell the version of the app >></u>

# How to tell the version of the app

To tell the version of the Lightning Conductor app complete the following:

1. Navigate to a site where you have added the Lightning Conductor app.
2. Either on the Quick Launch click **Site Contents** or from the **Setting** ⚙ menu, click **Site Contents**.
3. Point to the tile for the Lightning Conductor app, and click the ellipse (**…**) next to the app name.
   A callout displays which contains version information.



The Lightning Conductor callout provides the following links.

- **Help**. Use to display this online documentation.
- **Licenses**. Use to display the **App Licence Management** page.
  **Note**: When you purchase the Lightning Conductor app from the SharePoint Store you add the **Unlimited Free** 14 day trial version of the app. To use the app once the trial version expires then a Lightning Conductor license need to be purchase from Lightning Tools. the Lightning Conductor license is managed separately from the free **Unlimited users** SharePoint Store license. The **App License Management** page only displays the details of the SharePoint Store license and not information of the Lightning Conductor license you have purchased from Lightning Tools. See the Licensing the App section, for more information on licensing Lightning Conductor.
- **About**. Use to display the Lightning Conductor page on the SharePoint Store.
- Ellipse (**…**). Use to display the links:
  - **Details**. Use to display the **App Details** page, which allows a site owner to monitor information about the app, for example you can view information about how often the app has been

launched and how many errors the app has had. For more information of this option, see the Microsoft Office support page, Monitor apps for a Site.

- ◦ **Permissions**. Use to display the permissions of the Lightning Conductor app.
- ◦ **Remove**. Use this link if you no longer need the Lightning Conductor app on your site.
  **Note**: To remove an app, you must have Full Control permissions for the SharePoint site. If you are a Site Owner, you are mapped to this permission level.

<< Licensing the App
Updating the app >>

# Updating the app

Within 24 hours after an updated version of the Lightning Conductor app is accepted at the SharePoint Store, a notification that an update is available appears next to the app on **Site Contents** page of every website where it is installed. There is nothing in the SharePoint Online infrastructure that forces you to update. Updating a SharePoint app is optional. Lightning Tools updates their SharePoint apps to provide fixes to issues and new functionality. If you would like to know the new features an update provides, then submit a support ticket. Please provide the product name: **Lightning Conductor app** and the version number of the app currently installed in your Office 365™ tenant.

This page details how to check if an update is available, and how to install an update.

How to check if an update is available, complete the following steps:

1. Navigate to any site where the Lightning Conductor app has been added.
2. Either, on the Quick Launch, click **Site Content** or from the **Settings** menu, click **Site Content**. If your Lightning Conductor app needs an update, a link to the update appears under the name.

Lightning Conductor
An update for this app is available.
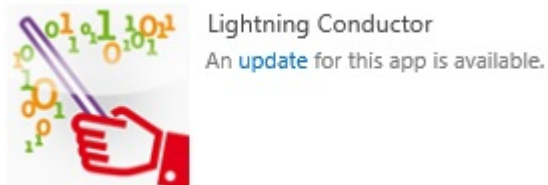
To install an update, complete the following steps:

1. Navigate to any site where the Lightning Conductor app has been added.
2. Either, on the Quick Launch, click **Site Content** or from the **Settings** menu, click **Site Content**.
3. To the right of the Lightning Conductor app tile, click **update**.

Lightning Conductor
An update for this app is available.

The Lightning Conductor dialog from the SharePoint Store is displayed.



4.  Click **Get It**.

    A **Working on it** dialog is displayed, and then a **Do you trust Lightning Conductor** dialog is displayed.



5.  Click **Trust It**.

    The *Site Contents* page is displayed, where the title for the Lightning Conductor app is greyed and states that the update is downloading, then updating.

<< How to tell the version of the app
Configuring the Lightning Conductor >>

# Configuring the Lightning Conductor

The Lightning Conductor App can be configured to rollup SharePoint Online content from either a single site collection or across multiple site collections within the Office 365™ same tenant. This page contains documentation on:

- Lightning Conductor App Parts
- Configuring an App Part
- Using the Configure Lightning Conductor App dialog
- Exporting data to CSV file
- Exporting and Importing an App Part configuration data

## Lightning Conductor App Parts

The Lightning Conductor App provides four App Parts:

- **Lightning Conductor App Part**. Preconfigured to use the Object Model Rollup Engine Provider.
- **Announcements Rollup App Part**. This App Part is preconfigured to aggregate the **Announcements** list type throughout the site collection. It uses the Object Model Rollup Engine Provider, displays the columns: **Title**, **Expires** and **Body** (displayed as HTML), sorted in descending order by the **Created** column, 30 items per page, is enabled for multiple views and has two views:
    ◦ **Announcements** (default).
    ◦ **Recent Announcements**. Uses filters to display announcements where **Expires** is greater than [TODAY] and **Created** within the last 30 days.
- **Documents Rollup App Part**. This App Part is preconfigured to aggregate the **Documents** list type throughout the site collection. It use the Object Model Rollup Engine Provider, displays the columns: **Name**, **Created**, **Modified** and **Modified By**, sorted in descending order by the **Created** column, show item type icon, 30 items per page, is enabled for multiple views and has three views:
    ◦ **My Documents** (default). Uses filters to not display folders, and to display only documents **Created By** the person who views the page [ME].
    ◦ **All Documents**. Grouped by folders with an initial state of expanded.
    ◦ **My Checked Out Documents**. Uses filters to display only documents checked out to the person who views the page [ME] and where the content type is not equal to folders.
- **Tasks Rollup App Part**. This App Part is preconfigured to aggregate **Tasks** list type throughout the site collection. It use the Object Model Rollup Engine Provider, displays the columns: **Assigned To**, **Task Status**, **Priority**, Due Date* and **% Complete**, 30 items per page, is enabled for multiple views and has three views:

◦ **My Tasks** (default). Uses a [filter](#) to display only tasks **Assigned To** the person who views the page, whether it is assigned directly to them or that they are a member of the group it is assigned to.

◦ **All Tasks**.

◦ **My Overdue Tasks**. Uses [filters](#) to display only tasks **Assigned To** the person who views the page, and the **Due Date** is less than [TODAY]'s date.
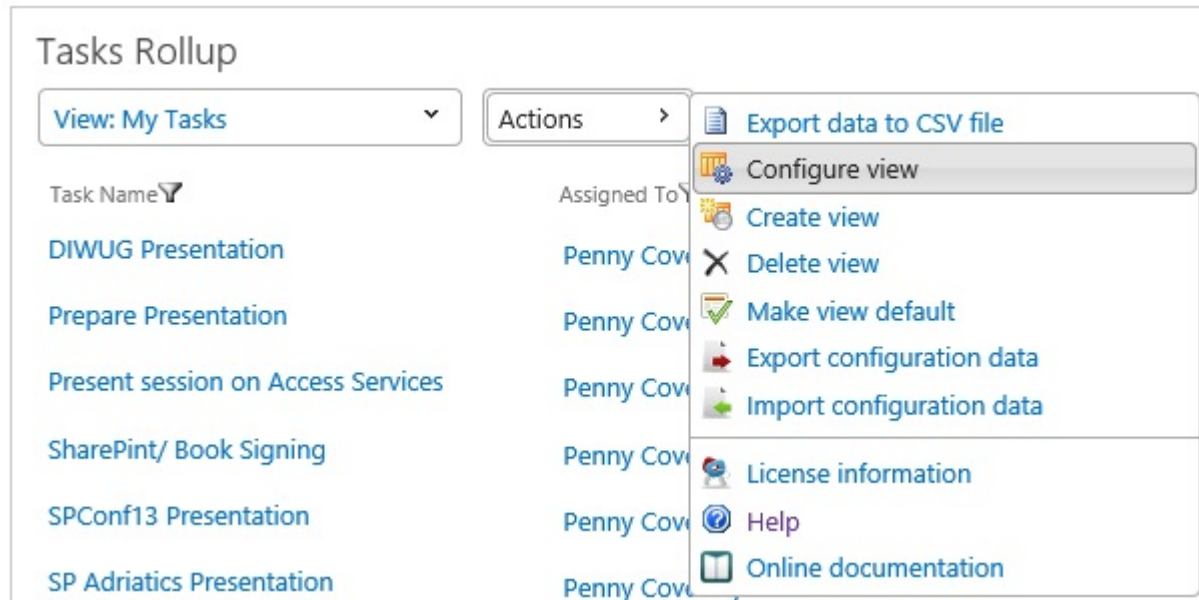
[← Go to top of section](#)

# Configuring an App Part

To configure an App Part:

1. Add an [App Part to the page](#), and then configure the Lightning Conductor app part, using the following steps:

2. When the app part is not configured for Multiple views, from the **Actions** menu click **Configure Lightning Conductor**.
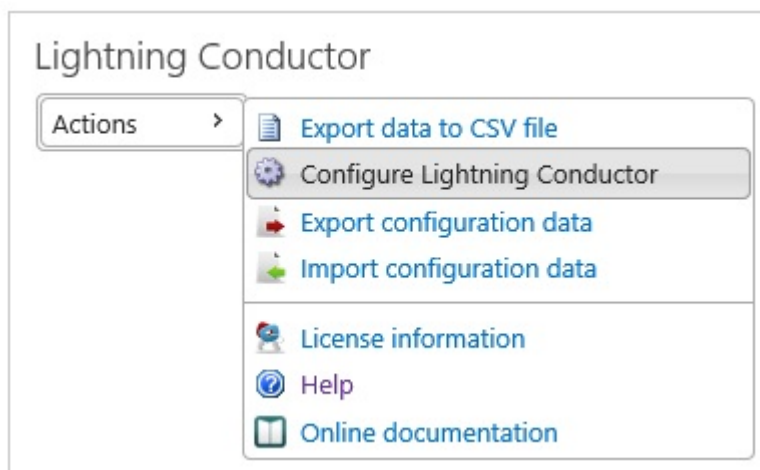


3. Otherwise, from the **View** menu, select the view you wish to configure, and then from the **Actions** menu, click **Configure View**.

The **Configure Lightning Conductor App** dialog is displayed.

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# Using the Configure Lightning Conductor App dialog

The dialog consists of four tabs:

1. [App Part](#)
2. [Data Source](#)
3. [Columns](#)
4. [Display](#)

Once you have configured the app part, chosen the content to aggregate and how to display the content, at the bottom of the **Configure Lightning Conductor App** dialog, click **Save**.

The minimum configuration details you must provide are:

- On the [Data Source](#) tab:
    - In the List/Item Types section, select a list type.
- On the [Columns](#) tab, select at least one column.

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# Exporting data to CSV file

To export the data display from an App Part, from the **Actions** menu click **Export data to CSV file**. If the App Part is configured for multiple views, then you can only export data from one view at a time.

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# Exporting and Importing App Part configuration data

Importing and Exporting of configuration data allows you to export the settings and import them again between different environments. such as, from your staging environment to your production environment.

To export the configuration of an App Part:

1. Add an App Part to the page, and then configure the Lightning Conductor app part.
2. From the **Actions** menu click **Export configuration data**.
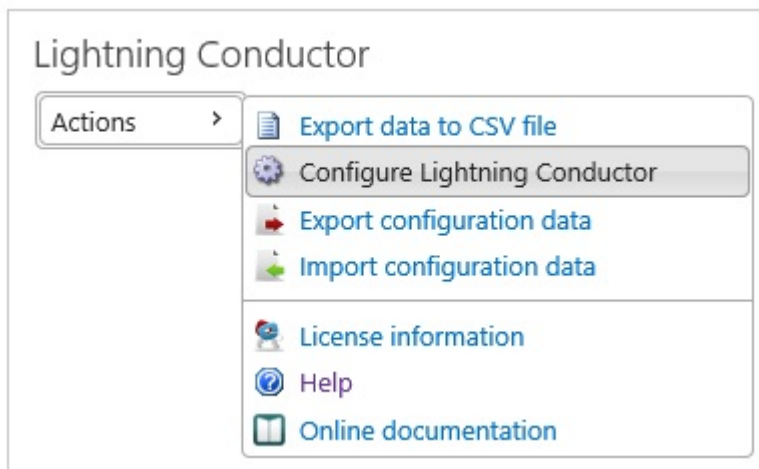


3. When the App Part is configured for multiple views, the **Choose Export Type** dialog is display. To save the configuration data for all views, clear the **Export settings for current view** check box.



    Click **OK**.
    The browser may then ask you to allow pop-up.
4. Save the Lightning Conductor Configuration data file, amending the name of the file to represent how you configured to App Part.

To import the configuration of an App Part:

1. Add an App Part to the page.
2. From the **Actions** menu click **Import configuration data** to display the **Import Configuration Data** dialog.
3. Click **Browse** to display the **Choose File to Upload** dialog box.
4. Navigate to where you save the configuration data file, and then click **Open**.

Import Configuration Data                                                                    ✕

Choose File                    Browse file (max size is 1MB)

Choose file from which         ┌────────────────────────────────────────────┐  ┌──────────┐
configuration data must be     │ D:\Tools\Software\LightningTools\LCWP\Lightning Conductor App\ │  │ Browse... │
imported                       └────────────────────────────────────────────┘  └──────────┘

Choose Import Type             ☑ Import data for current view

Choose whether configuration only
for current view must be imported
or configuration for all views must
be imported.

                                                          ┌────────┐   ┌────────┐
                                                          │ Import │   │ Cancel │
                                                          └────────┘   └────────┘

5. When the App Part is configured for multiple views, then a **Choose Import Type** section is displayed on the **Import Configuration Data** dialog. Clear the **Import data for the current view** check box if you want to import all the views.
6. Click **Import**.

> If the App Part is not configured for multiple views, then you can only import a configuration data file created from a non-view App Part or a configuration file that contains only one view.

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<< Updating the app
Using Multiple Views >>

# Using Multiple Views

You can configure the Lightning Conductor app part to display one view of the data or multiple views. Multiple Views allow you to display content from different data sources or the same data source within the same instance of the app part, so that you do not have to add multiple instances of the app part on the same page. It is common to use views to display data from the same data source, such as, all tasks within a site collection, and apply different filters, for example, **All Tasks**, **My Tasks** and **My Overdue Tasks**. The view that is used when the App Part is first rendered is the default view, and has an icon ✅ to the left of its name.



If you wish to take advantage of multiple views within your Lightning Conductor app part, you must first enable multiple views, which creates one view, named, View1. You can then subsequently create additional views. View names can be changed on the App Part tab of the Configure Lightning Conductor App dialog.

When you enable multiple views on the Lightning Conductor, a **View** menu is added and the following changes are made to the links on the **Actions** menu:

- Links removed:
    - **Configure Lightning Conductor**
- Links added:
    - **Configure view**
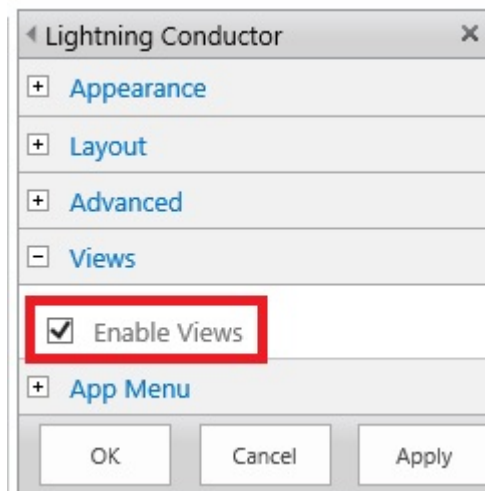    - Create view
    - **Delete view**
    - **Make view default**

# Enable Multiple Views

To enable multiple views, use the following steps:

1. Click **Settings** ⚙ , and then click **Edit page**.
2. From the Web Part menu of the Lightning Conductor app part, click **Edit Web Part**.
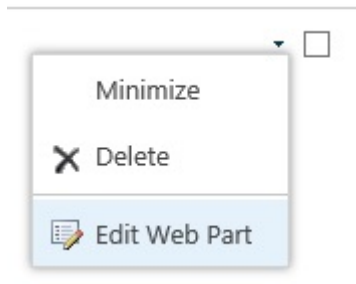


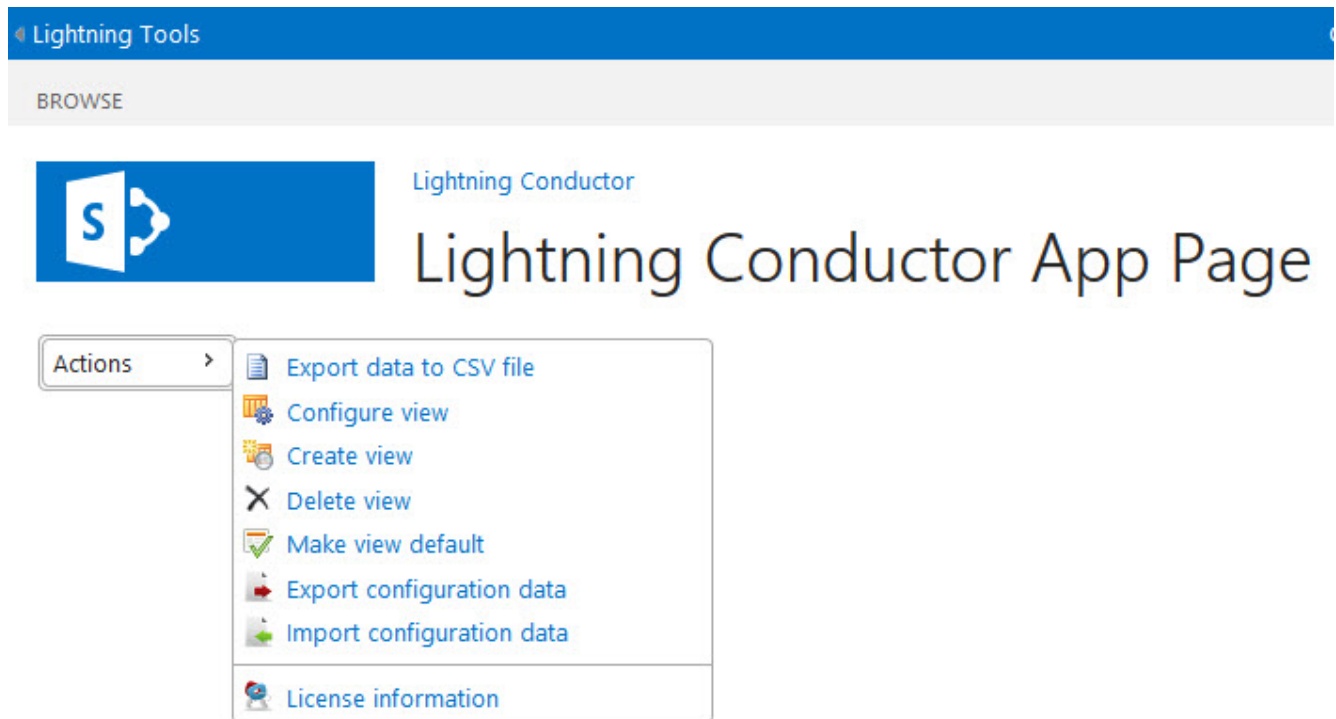3. In the Web Part tool pane, expand the **Views** section and select **Enable Views**.



4. At the bottom of the Web Part tool pane, click **OK**.

> If you clear the **enable multiple views** check box, then all configurations for the App Part are removed. Therefore, before clearing the check box, it may be prudent to export the configuration data.

# Create a View

When views are enabled, a view is automatically created. To create additional views, use the following steps:

1. From the **Actions** menu, click **Create a View**.



2. After you have created a view, you can re-configure the view by selecting **Configure view**.

> **Troubleshooting**: If you cannot see **Create view** on the **Actions** menu, the Enable View check box has not been selected in the **Views** section in Web Part tool pane. Ensure that you have click **OK** or **Apply** at the bottom of the Web Part tool pane once you have selected the check box.

<< Configuring the Lightning Conductor
App Part Tab >>

# App Part Tab

The **App Part** tab is the first tab on the **Configure Lightning Conductor App** dialog and allows you to name the view, choose the data source and display providers, the data refresh interval and enable statistical information, as described below:

# View Title

This section is only visible when multiple views is enabled. In the **View Title** text box, you can type the name of the view that will be shown in the **View** menu. The default name of a view is **Viewn**, where **n** is a number that is auto generated when you create a view. View names must be unique. Some examples would be:

- Tasks
- My Tasks
- Announcements
- Today's Announcements
- Documents

You select the **Set as Default** check box, to set this view as the default view when the page is first loaded.

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# Configure Data Source Provider

There are two data source providers:

- **Object Model Rollup Engine Provider**. Use to aggregate content from the current site collection only. This data source provider is also easier to configure.

- **Search Rollup Engine Provider**. Use when you wish to rollup from across multiple site collections.



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# Configure Display Provider

There is only one display provider: the **Grid View Display Provider**. Future releases of Lightning Conductor will include XSLT Style and JSON providers. The Grid View display provider is often referred to as the no-code or grid like display provider. Use this provider to select columns to display, configure filters, sorting, pagination, column width and formatting, and add calculated columns without the need to write any code.

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# Configure Data Refreshing Interval

Type in the text box the interval of time in seconds that the Lightning Conductor app part fetchs items from the data source and refresh the page. A value of 0 or if you leave the text box empty, then the app part only queries the data source after the initial page load, when the page is manually refreshed. When caching is enabled the value typed into this text box has no affect, that is, if caching is enabled at the refreshing interval the data is obtained from the cache and not from the data source.

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# Configure Statistical Information

Select the **Display Statistical Information** check box to display the number of items that the App Part (view) aggregates and also the time it takes to roll them up. This option should be used in testing only.

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<< Using Multiple Views

Data Source Tab >>

# Data Source Tab

The **Data Source** tab is the second tab on the [Configure Lightning Conductor App](#) dialog and allows you to set the scope of your content aggregation, specify the type of data to aggregate, item limits and filter options. The **Data Source** tab displays different options depending the **Data Source** provider select on the [App Part](#) tab:

- [Object Model Rollup Engine Provider](#)
- [Search Rollup Engine Provider](#)

## Object Model Rollup Provider Data Source configuration

When the **Object Model Rollup Engine Provider** is selected on the [App Part](#) tab, then the **Data Source** tab consists:

- One check box, [Show Selection of Lists for Columns](#)
- up to 5 sections:
    - [Rollup Source](#)
    - [Displaying Columns Set](#)
    - [List/Item Types](#)
    - [Filtering Settings](#)
    - [Miscellaneous](#)

# Search Rollup Engine Provider Data Source configuration

When the **Search Rollup Engine Provider** is selected on the Web App tab, the **Data Source** tab consists of two sections:

- Search Query
- Query Template Variables

Select a **Result Source**, such as, **Documents** and optionally refine the search results using the **Query text** list. More information can be found in the Configuring Data Source for the Search engine section of this document.



[<< App Part Tab](#)

[Rollup Source >>](#)

# Rollup Source

The **Rollup Source** section, is the first sections on the Data Source tab when the **Object Model Rollup Engine Provider** is selected on the App Part tab. Use this section to configure the site collection, site(s) or list(s) that you would like to aggregate.

> You cannot use the **Object Model Rollup Engine Provider** to aggregate across site collections. To aggregate across site collection, select **Search Rollup Engine Provider** on the App Part tab and then use the Configuring the Data Source for the Search engine section.

Use the following steps to configure the Rollup Source section:

1. From the **Rollup Source** drop down list, select one of the following options;

   - **Show Items from current site collection**
   - **Show Items from host web**. Use to display list items or files from the site where you are configuring the Lightning Conductor App Part.
   - **Show Items from multiple sites** (selected by default)
   - Show Items from multiple lists
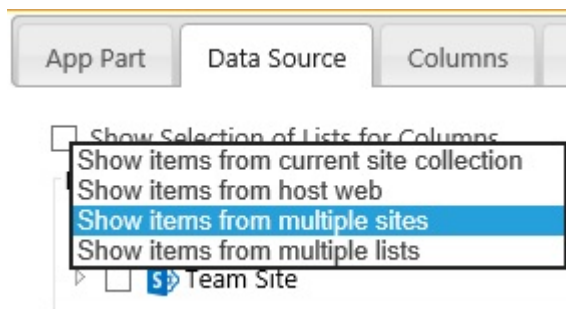


   When you choose **Show Items from multiple sites** or Show Items from multiple lists a tree view is displayed, which you can use to select the data source to aggregate.

5. Expand the tree view(s) by clicking the plus sign ( **+** ).
6. To include a site in your query, select the check box to the left of the data source.

> You will only be able to configure a query based upon the permissions you have. Items returned are security trimmed for all users. Therefore it is recommended to configure the app part with a user id that has permissions to all content in your tenant, thereby allowing you to configure the rollup of content across the tenant.

← Go to top of section

# Show items from multiple lists

Instead of rolling up a list type from multiple sites or site collections, it is also possible to choose individual lists within your query, by selecting **Show items from multiple lists**. To select a list, click the list name. To select multiple list use and keys. For example, you can select *Contacts* from *Site A* and *Contacts* from *Site B*. It is also possible to aggregate *Contacts* from *Site A* and *Tasks* from *Site A* as long as the two or more lists have at least one column in common. If you select individual lists, you will not be prompted for the list type to aggregate from.

← Go to top of section
← Data Source tab
<< Data Source Tab
Show Selection of Lists for Columns >>

# Show Selection of Lists for Columns

On the Data Source tab, when the **Show Selection of Lists for Columns** check box is selected, the **Displaying Columns Set** section is displayed. It is not necessary to use this section. For example, if the lists you have selected in the Rollup Source section have identical columns, that is, they all use the same content type(s), then you do not need to use this section.

You only need to use this section when the lists you have selected, have custom column(s) and you want to use those custom column(s) to decide want to display in the Lightning Conductor app part. You can select more than one list when the custom columns are unique in each list. The columns from the selected lists, are then displayed in the **Columns** section on the Columns tab.

For example, you have two Task lists: *TaskListA* and *TaskListB*. *TaskListB* has a custom column called *MyCustomColumn*. All other columns are the same in both Tasks lists. If you want to display *MyCustomColumn* or use the values in the *MyCustomColumn* to filter what to display in the Lightning Conductor app part, select the check box to the left of *TaskListB* when you have expanded the tree view for that site in the **Displaying Columns Set** section. Complete any other configurations on the Data Source tab, and then on the Columns tab, use the custom columns from each selected list to build what is to be displayed with the Lightning Conductor app part.

<< Rollup Source
List / Item Types >>
Data Source tab →

# List / Item Types

The **List/Item Types** section is displayed on the [Data Source](#) tab when the **Object Model Rollup Engine Provider** is selected on the [App Part](#) tab. Once you have selected the [rollup source](#), you can select the type of list that you would like to aggregate from. For example, you may choose *Tasks* as the selected list type because you want to return all *Tasks lists* from the query you specific. This option is not available if you have chosen to aggregate from specific lists since the list type for them is already defined by your selection.

> You do not need to use this section when **Show items from multiple lists** is selected from the [Rollup Source](#) list or you have selected list(s) in the [Displaying Columns Set](#) section, since you have already selected the list type for your rollup query.

Once you have selected the rollup source, you can then select the type of list.

1. In the **List/Item Types** section, select a list type from the **List Type** list.
   The list types displayed in the list box, includes custom list templates, as well as the out-of-the-box list definitions. For example, select **Tasks** when you want to display items from all tasks lists in your Lightning Conductor app part.
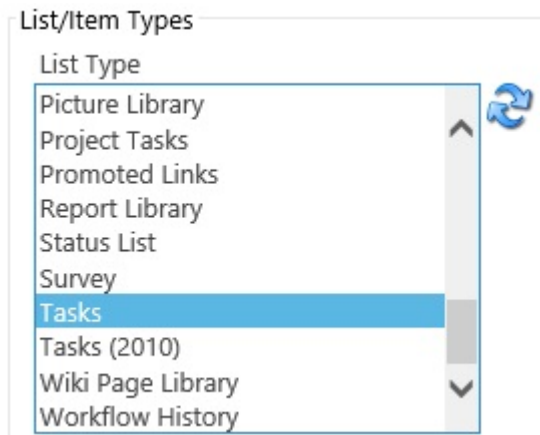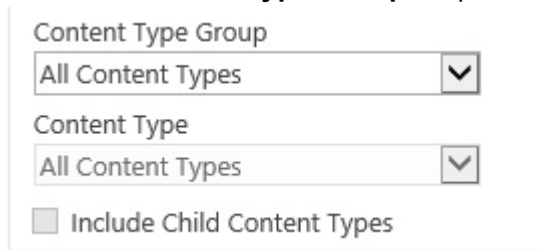


   If the **List Type** list, does not show the set of list types you expected to see, then the specific list template feature may not be activated at the top-level site of the site collection. Only list templates available for the site collection selected in the [Rollup Source](#) section will be displayed in the list box. If you change the source selected in the [Rollup Source](#) section, you should click the refresh icon to the right of the **List Type** list.

2. Optionally select a content type to further refine your query. This is only required if your lists contain multiple Content Types.

- From the **Content Type Group** drop down list, select the required content type group.

Content Type Group

| All Content Types | ∨ |

Content Type

| All Content Types | ∨ |

☐ Include Child Content Types

- From the **Content Type** drop down list, select the required content type.
- If your content type contains child content types, optionally select the **Include Child Content Types** check box, to return items from the child content types.

← Data Source tab
<< Show Selection of Lists for Columns
Filtering Settings >>

# Filtering Settings

The **Filtering Settings** section is displayed on the Data Source tab when the **Object Model Rollup Engine Provider** is selected on the App Part tab.

When using the Lightning Conductor app, there are two different types of filters that you can configure:

- **Persistent**: The persistent filters are set by the Site administrator (or at the very least be mapped to the Design permission level) and are configured on the Display tab of the Configure Lightning Conductor App dialog. Persistent filters limits the items of data that is seen to each user that visits the page. Users can then dynamically filter the items using the columns displayed within the Web Part. It is worth pointing out that you cannot set persistent filter on every column type. This is a Microsoft® SharePoint® restriction and not a restriction of the Lightning Conductor app.
- **Dynamic**. Dynamic filters are used by users using the app's filter icon ▽ . Dynamic filtering is enabled, that is, the filter icon ▽ is displayed, when one of the dynamic filtering radio buttons is selected in the **Filtering Settings** section.

Filtering Settings
- ◯ Use Only Persistent Filters
- ◯ Use Only Dynamic Filters
- ◉ Use Both Persistent And Dynamic Filters
- ◯ Ignore All Filters
- ☐ Ignore filters if column does not exist

The following options are available in the **Filtering Settings** section on the Data Source tab:

1. Select one of the following radio buttons:

   - Select **Use Only Persistent Filters** to allow all users see the same filtered values. Users can not use the dynamic filtering capabilities of the Web Part. This is the default setting.
   - Select **Use Only Dynamic Filters** when you want all items displayed, and that users will then use the Web Part's filter icon ▽ to limit the items displayed on the page, that is, ignore any persistent filter settings selected on the Display tab.
   - Select **Use Both Persistent and Dynamic Filters** to use a combination of persistent filters and dynamic filters. The persistent filter is used first by the Web Part to display a subset of items from the rollup source. The user can then use the Web Part's filter icon ▽ to further limit the items displayed.

- Select **Ignore All Filters** to display all items from the rollup source, that is, the persistent filter settings selected on the [Display tab](#) are ignored and users cannot use dynamic filters.

5. Select the check box to **Ignore filters if the column does not exist**.
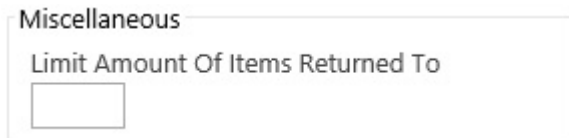
← Data Source tab
<< List / Item Types
Miscellaneous >>

# Miscellaneous

The **Miscellaneous** section is displayed on the Data Source tab when the **Object Model Rollup Engine Provider** is selected on the App Part tab..

Miscellaneous
Limit Amount Of Items Returned To

This section contains one option:

1. Use the **Limit Amount Of Items Return To** text box, to restrict the number of items returned from the data source. Use this option for performance reasons. This limit will be applied to the first X amount retrieved from the data source.

   Pagination on the Display tab can be set to return a specific subset. For example, if you would like to show the "Top Ten latest Announcements", instead of typing a number in the **Limit Amount Of Items Returned To** text box, use the Paging Configuration section on the Display tab, and on the Columns tab, sort by the column, *Created* in descending order.

# Configuring Data Source for the Search engine

When the **Search Rollup Engine Provider** is selected on the Web App tab, then the Data Source tab allows you to create your search query which is used by the search engine to decide the content returned to the app. The results of the search results is the data you manipulate on the Columns and Display tabs to decide what and how the app displays the data on the page.

> The Search Rollup Engine should be selected in Office 365™ when aggregation performance is an issue when using the **Object Model Rollup Engine Provider** or you want to rollup content across site collections. You must select one result source in the Search Query section.

You configure your search query using the two sections:

- Search Query
- Query Template Variables

> You can refine the content returned by the search engine by configuring filters on the Columns tab, however, from a performance perspective, it is better to reduce the amount of content returned from the search engine than to get the Lightning Conductor app to filter the content. However configuring the search query to return the exact source of data your require can be difficult and you may need help from a search expert to create a search query, therefore if performance of the search query is not an issue, refine the search results using the Columns tab.

# Search Query

Use this section to select a **Result Source**, such as, **Documents** and optionally refine the search results using the Query text list to build a search query, and if the **Result Source** has predefined variables, using the Query Template Variables section. You can also use the **Search Query** section to define the Query timeout, use query rules, limit the number of items returned and to disable query stemming.

- **Result source**.
  Result sources define the source or subset of the content that the search query uses to look for results. Result sources replace "search scopes" in previous versions of Microsoft SharePoint®.

When the pre-defined results sources do not meet your requirements, then depending on your permission level, you can create result sources at:

- ◦ To all site collections within the farm using the [SharePoint admin center](SharePoint admin center)
- ◦ To all sites within a site collection using the **Search Result Sources** link under **Site Collection Administration** on the **Site Settings** page, when you are a site collection administrator.
- ◦ To a single site using the **Result Sources** link, under **Search** on the **Site Settings** page, when you are a site owner.

For example, when you want to aggregate only documents, select **Documents** in the **Result source** list or if you want to rollup content associated with a specific content type, select **Items matching a Content Type**. You can also specify the ID of a result source that you have created.

Many result sources allow you to further refine the content returned by configuring query template variables. For example, if you want to return only documents from a specific site, you would select a result source of **Documents** and then in the [Query Template Variables](Query Template Variables) section set the **Scope** variable to the site, or if you want to return only invoice documents, you would select a result source of **Documents** and then in the [Query Template Variables](Query Template Variables) section set the **Tag** variable **Content Type Name**, to, say, **Invoices**. You do not have to use the query template variables. Then all content from the result source is returned.

Office 365™ provides 16 pre-configured result sources:

- ◦ **Conversations** Discussions in microblogs, newsfeed posts, and community sites.
- ◦ **Documents** Microsoft Office documents and PDF documents.
- ◦ **Items matching a content type** Items that match a content type that the incoming query specifies.
- ◦ **Items matching a tag** Documents or list items that match a managed metadata term that the incoming query specifies.
- ◦ **Items related to current user** Documents or list items that are related to the user in a way that the query template specifies.

- **Local People Results** People items from the profile database of the User Profile service application.
- **Local Reports and Data Results** Excel, Office Data Connection (ODC), or Report Definition Language (RDL) items, or items in a report library.
- **Local SharePoint Results** All items from the local SharePoint search index except People items.
- **Local Video Results** Videos.
- **Pages** SharePoint web pages.
- **Pictures** Photos and images.
- **Popular** Documents and list items sorted by view count.
- **Recently changed items** Documents and list items sorted by Modified date.
- **Recommendations** Documents and list items that you recommend for the incoming query.
- **Wiki** SharePoint wiki pages.

**Tip**: You can view details about the pre-defined result sources from the **Manage Result Sources** page, which can be found by navigating to the **SharePoint admin center** and clicking **search** on the Quick Launch.

[← Go to top of section](#)

- **Query text**.
  Use the **Query text** area to further refine the content returned from the search query. By default the **Query text** box contains the search query **(contentclass:STS_ListItem OR IsDocument:True)**, which means that details of all list items and files from the result source are returned in the search results. You can modify this search query by using the **Query text** list and then clicking **Add Query Part** or by typing your own queries into the text box, using [Keyword Query Language](#).

  The **Query text** list displays the query variables: **Name of current user**, **Url of current site collection**, **return only items**, **return only sites**, **return only lists and libraries**.

You can specify other text by clicking **More** to display the **Select Value** dialog:
  ◦ Select a **Value types**: **Query Variable**, **Content Type Name**, **Content Type ID** or **Site URL**.
  ◦ Select a variable from the **Choose variable** list.
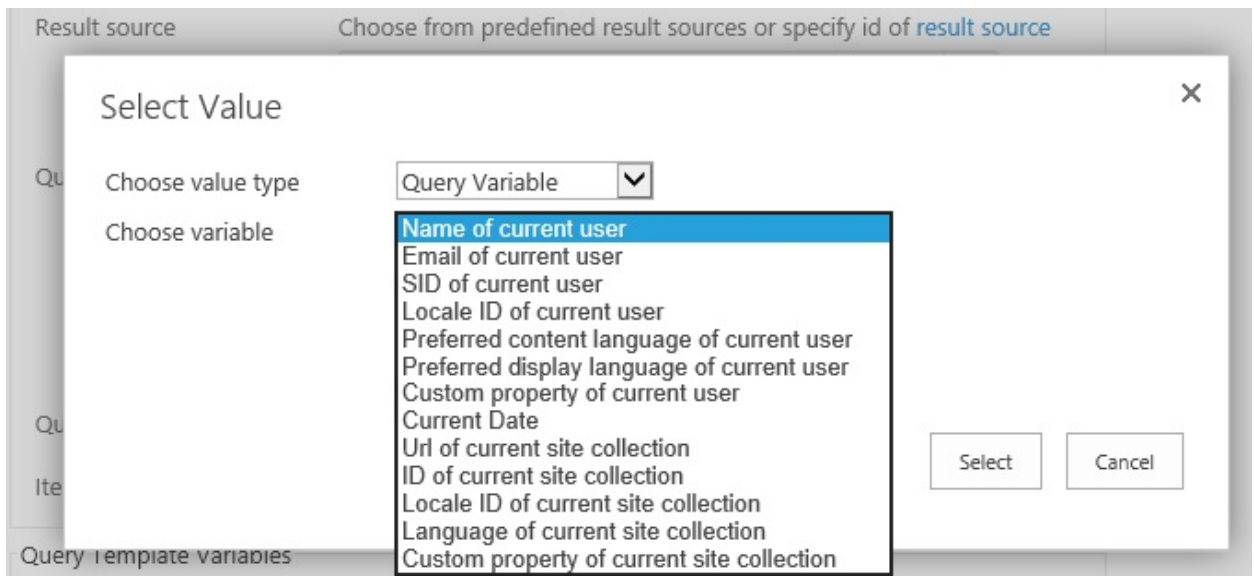


  ◦ Click **Select** to return to the Data Source tab.

Once you have selected an item from the **Query text** list, click **Add Query Part** to add the query to the text box below the **Query text** list, thereby building up your search query.

← Go to top of section

- **Query timeout**.
  Use to set the amount of time before the query request times out.

- **Use query rules**.
  Select this check box if you want the Lightning Conductor app to use query rules. Query rules can improve the relevance of the search results by promoting results, providing result blocks or changing the ranking of the results. By clicking the **query rules** link you will be redirected to the site's Manage Query Rules page. Query rules can be managed at the tenant, site collection or site levels.

- **Item limit**.

  Use to sets the maximum number of items returned in the search results. Using this property you cannot exceed Microsoft's <u>Search limits for SharePoint Online</u>.


- **Disable query stemming**.

  Stemming in SharePoint 2013 is enabled by default. In previous versions of SharePoint the search engine expanded the search query to include nouns and adjectives with different possible inflections, that is, if you search for *run*, it will also look for *running*. However, SharePoint 2013 seems to mostly return plural and singular versions of words.


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# Query Template Variables

This section lists the query template variables that can be used by the result source. Setting variables is optional, and when used reduces the data returned from result source.



The variables that can be used with the pre-configured results sources are automatically displayed in this section. You may need to add variables for result sources created by you or other users. Type a name in the **Variable name** text box, and click the green cross icon .

**Note**: Clicking **Remove** will only delete variables you added.

To set a variable, either type the value of the variable in the text box, or click the ellipse button to display the **Select Value** dialog, which displays different options depending on the type of variable, for example:

- Many of the pre-defined result source use a variable named, **Scope**. The **Select Value** displays a tree view, allowing you to select the scope for the results source.


- When the pre-defined result source use a variable named, **ContentTypeId**, then the **Select Value** dialog provides a list on content types.

For the 16 pre-configured result sources, the query template variables are listed in the following table:

| Result source | Variable name |
| --- | --- |
| Conversations | No variables needed |
| Documents | Scope, Tag |
| Items matching a content type | ContentTypeId, Scope, Tag |
| Items matching a tag | Scope, Tag |
| Items related to current user | ContentTypeId, Scope, Tag, User |
| Items with same keyword as this item | ListItem.Keyphrases, ListItem.QuotedUrl, Scope |
| Local People Results | No variables needed |
| Local Reports and Data Results | No variables needed |
| Local Video Results | Scope, Tag |
| Pages | Scope, Tag |
| Pictures | Scope, Tag |
| Popular | ContentTypeId, Scope, Tag |
| Recently changed items | Scope, Tag |
| Recommended items | ContentTypeId, RecsUrl, Scope |
| Wiki | Scope, Tag |

> **Tip**: When you want to limit the search results to a specific content type, and the **Select Value** dialog box does not show the required content type, then you can quickly find the content type id by clicking Site content types under **Web Designer Galleries** on the **Site Settings** page. Hoover over the content type, for example, **Document**, then in the browser status bar you will see the code:
> `javascript:GoToPage('\u002f_layouts/15/ ManageContentType.aspx?ctype=0x0101');`
> The ContentTypeID for the **Document** content type is **0×0101**.

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# References

- Understanding result sources

- [Understanding result sources for search in SharePoint Server 2013](#)
- [Manage result sources](#)
- [Key Query Language (KQL) syntax reference](#)
- [Understanding query rules](#)
- [Search limits for SharePoint Online](#)

<< Miscellaneous
Columns Tab >>

# Columns Tab

The **Columns** tab, consists of the **Columns** section and potentially one other section, **Sorting Order**. The **Sorting Order** section appears when you have selected either **Ascending** or **Descending** from one of the **Sorting** drop down lists.

The **Columns** tab looks slightly different depending on your choice of **Data Source Provider** on the [App Part](#) tab. You will see the following **Columns** tab screenshot when the **Object Model Rollup Engine Provider** is selected.

The following screen shot show the **Columns** tab when the **Search Rollup Engine Provider** is selected.



Use the **Columns** section to select columns to display within (the view of) the Lightning Conductor app. At the top of this section are:

- Update the Lightning Conductor app part with the columns selected. ♻
- Remove all column configurations. ⊖
- Add calculated column ⊕
- **Managed property name** text box, and **Type** list. This control is only visible when the **Search Rollup Engine Provider** was selected on the App Part tab. When the Lightning Conductor App Part completes the search query specified on the Data Source tab, the **Columns** tab displays only those search Managed Properties it is able to retrieve. If a Managed Property is not displayed, for example, a new managed property created by someone in your company, then type the managed property in the **Managed property name** box, select the appropriate type from the **Type** list and then click the green plus icon ⊕ . An example of how to use Managed Properties can be found in the Walkthrough: Aggregating task items using the search provider.
- Configure Advanced filtering. ▽

Below these controls you configure:

- Columns to be displayed, by selecting the check box to the left of the column **Name**. Above the left checkboxes, there are three icons, which allow you to select all columns ✔ , invert the selection ✔ , and uncheck all columns ✖ . You can set the order of the columns within the **Columns** section, by dragging the columns up or down.

**Tip**: If the columns you expect to see are not displayed, then:

- ◦ If you are using the Object Model Rollup Engine Provider, return to the Data Source tab, and reconfigure the options and then click the **Columns** tab. Also, if the **Columns** section only displays the five columns: **Parent Folder Name**, **Parent List Title**, **Parent Site Collection URL**, **Parent Web Title** and **Parent Web URL**, then there is no list of the type selected on the Data Source tab in the site collection. There must be at least one list of the selected type for the column names of that list type to be displayed in the **Columns** section.
- ◦ If you are using the Search Rollup Engine Provider, then use the **Managed property name** text box, and **Type** list.

- **Sorting**. Use the **Sorting** drop down list to sort the items displayed using that column in ascending or descending order. To improve the performance of a lists or libraries, that contain a large number of items, you can create indexes on the columns you will be sorting on.

- **Filtering**. You can filter the number of items return based on values in one column, by using the **Filtering** icon  , or more columns by clicking the **Advanced filtering** link in the top right of the **Columns** section. Click the **Remove All Filters** icon  , to remove all persistent filters from all columns. More information on filtering can be found in the Column Filtering section later in this documentation.

- **View**  This is only visible when the **Search Rollup Engine Provider** was selected on the App Part tab. When you click the **View**  the **Site Collection Administration – View Managed Property** page for the managed property is displayed.

<< Configuring Data Source for the Search engine

Column Filtering >>

# Related search documentation

- [Overview of the search schema in SharePoint Server 2013](#)
- [Automatically created managed properties in SharePoint Server 2013](#)
- [SharePoint Online search administration overview](#)
- [Manage the search schema in SharePoint Online](#)
- [Manually request crawling and re-indexing of a site, a library or a list](#)

## Column Filtering

You can filter the number of items displayed within the Lightning Conductor App Part, based on one or more conditions using:

- Values in one column using the filtering icon
- Values in more than one columns using the Advanced filtering link.

Both of these options are detailed on this page.

# Filtering icon

Filters can be configured on each column whether the column is displayed or not. Each column type can also provide different filtering options, for example, a Date/Time filter allows you to filter by [TODAY], a People column allows you to filter by [Me], and so on.

You can apply the filter and remove the filter using the **filtering** icon 🔽 , which displays the **Filter Configuration** dialog.

1. Select **And** or **Or** from the first list, and then select the condition from the second list, type or select a value in the third box and then click the green plus icon 🟢 .
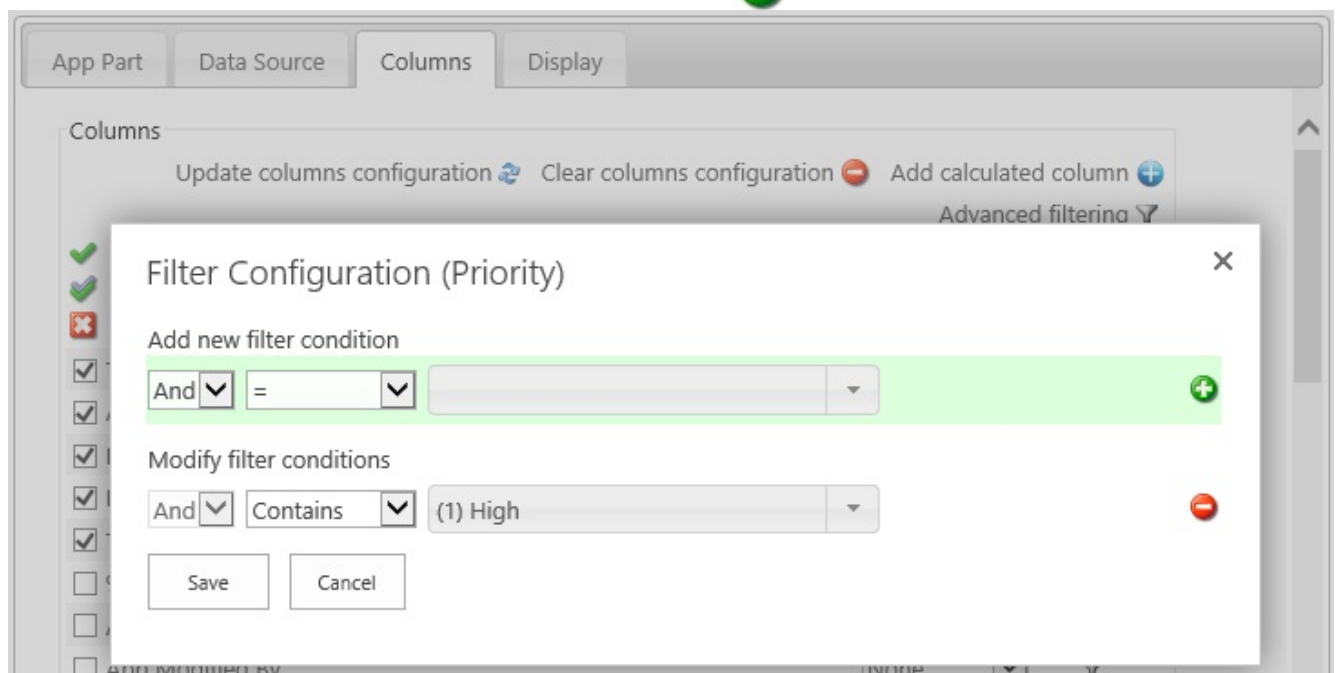
2. Repeat the above step for each filter that you wish to configure.
3. Remove conditions by clicking the **Remove filter condition** 🔴 icon.
4. When you have added all the filters conditions you require, click **Save**.

When a filter has been configured for a column, then to the right of the **Filtering** icon ▽ , is the **Remove Filtering** icon ▽ . This allows you to easily identify columns that are being used to filter the contents returned from the rollup query. To remove all persistent filters, click the **Remove Filtering** ▽ icon, just under the **Filtering** column heading. To modify a filter, click the **Filtering** icon ▽ to display the **Filter Configuration** dialog.

# Advanced Filters

Occasionally, you may want to filter on more than one column using And or Or operators. This can be done with the Lightning Conductor App Part using the **Advanced filtering** icon, which is display in the top right of the **Columns** section of the [Columns tab](#).
.
To filter on more than one column:

1. Click the **Advanced filtering** icon ▽ in the top right hand corner of the **Columns** section on the **Columns** tab.
2. Click the green plus icon ⊕ to add a new level of filtering.
3. Select the column to apply the filter to.
4. Select the operator, such as, **Equals**. The operators displayed depend on the column type.
5. Set the value.
   Some column types contain other options, for example, a Date/Time column type, provide the ability to select today and a positive or negative offset.
6. You can repeat these steps for each column that you wish to filter on.
7. Remove conditions, by clicking the **Remove filter condition** 🔴 icon.

8. When you have configured all filtering conditions, click **Save**.


When an advanced filter has been configured, then to the right of the **Advanced Filtering** icon , is the **Remove Filtering** icon . This allows you to easily identify when advanced filtering is used to filter the contents returned from the rollup query. To remove the advanced filter, click the **Remove Filtering** icon. To modify an advanced filter, click the **Advanced Filtering** icon to display the **Advanced Filtering** dialog.

<< Columns Tab
Calculated Columns >>

## Calculated Columns

With the Lightning Conductor App Part, you can add calculated columns to your Lightning Conductor views.

Microsoft® SharePoint® allows you to add a calculated column to a list or library. By creating a formula in these calculated columns you can include data from other columns and performs functions to calculate dates and times, to perform mathematical equations, or to manipulate text. In calculated columns, formulas are based on Microsoft® Excel® functions and syntax, but there are some limitations on the functions you can use and some subtleties in the syntax. You can find more information about the various kinds of formulas you can use in a SharePoint calculated columns in the Microsoft article Calculated Field Formulas.

Using the Lightning Conductor App Part, you add calculations similar to those you can add to a SharePoint calculated column plus you can add almost any calculation that you want. The advantage of using a Lightning Conductor calculated column is that the calculation is executed every time the page is displayed, whereas with a list / library calculated column, the formula is only executed when the list item or file is modified. Also, the Lightning Conductor calculated column, is not based on Microsoft Excel formulas, but on JavaScript based operators, calculations and functions.

As with other columns, with a Lightning Conductor calculated columns, you can apply conditional formatting on the calculated value, filter on the calculated column as well as sort or group by the result of the calculation. This page contains information on how to add a Lightning Conductor calculated column and information on formulas you can use. Other examples of calculated columns can be found on the Walkthroughs section.

# Adding a Calculated Column

To add a Lightning Conductor calculated column, use the following steps:

1. Click the **Add calculated column** ⊕ icon in the top right hand corner of the **Columns** section on the Columns tab.
   The *Add calculated column* dialog is displayed., which contains three sections:

   - **Column name**: In the text box, type a name for the column.
   - **Column type**: Select one of the following values: **String**, **DateTime**, **Integer**, **Double** or **Boolean**. You must select the data type that is to be calculated. This may not be the same value as the columns involved in the calculation.

- **Expression**: Use this section to create the formula for the calculated column. A formula can contain functions, column references, operators, and constants. To insert a column reference, select the column in the dropdown list and then click **Insert field**.



You must not type the column reference, you should always use the drop down list to insert references to columns. Examples of formulas can be found later on this page.

**Tip**: When the **Search Rollup Engine Provider** is selected on the App Part tab, Managed Properties can be used in the expression, in which case, add the **Managed Property** to the Columns section for it to appear in the **Expression** list.

4. Once you have created finished configuring the formula, click **Save**.

The *Add calculated column* dialog box closes and the new calculated column is displayed at the top of

the columns in the *Columns Configuration* section.

5.  Select the check box to the left of the column if you wish to display the column in the Lightning Conductor App Part. You can then drag-and-drop the column so it appears in the required order in the App Part.

| ☑ Due Date 📝 | Text | Descending ∨ | ✕ |
| ☑ % Complete 📝 | Integer | None          ∨ | ✕ |

6.  To edit the calculated column, click the *Edit calculated column* 📝 icon to the right of the column name.

7.  To delete the calculated column, click the *Remove calculated column* ✕ icon.

← Go to top of section

# Information on calculated column formulas

This section contains examples of formulas you can use in the Lightning Conductor calculated column. These formulas are based on the JavaScript language.

> JavaScript is a case-sensitive scripting language, which means is that the language considers capital letters as different from their lowercase counterparts. Keywords in JavaScript are all lowercase, for example, **while**, **for**, **if** and **else**. On the other hand, methods (properties) use lower CamelCase naming convention, that is, the first word is in lowercase and the first letter of each additional word is capitalized, for example, toLowerCase() and getFullYear().

## Text formulas

You can use formulas to manipulate text, such as combining or concatenating the values from multiple columns, comparing the contents of columns, removing characters or spaces, and repeating characters.

1.  To combine two or more columns, use the addition operator ( **+** ), for example to create a calculated column, *fullname*, which concatenates the columns, *Firstname* and *Lastname*, use the following formula:

    **[Firstname]+" "+[Lastname]**

2. Use String properties, for example, to find the length of the values stored in the *Title* column:
   **[Title].length**

3. Use String methods, for example,

   - To convert a strings stored in the *Title* column to lower case,
     **[Title].toLowerCase()**
   - To retrieve a substring for values stored in the *Title* column, starting from character position 5, for a length of 6 characters, where the first character of a string is position 0,
     **[Title].substr(5,6)**
   - To remove all spaces for values stored in the *Title* column,
     **[Title].replace(" ","")**

## Date and time formulas

JavaScript does not offer extensive date parsing or formatting. This section contains examples of manipulating out of the boxYou can use formulas to perform calculations that are based on dates and times, such as finding the day of the week, calculating the difference between two dates, and converting time to a decimal value.

1. Calculate the difference between two dates, use the subtraction operator ( **–** ) and then use Math object methods to present the difference as required, for example, when using a task list, create a calculated column using the following formula to display the number of days to complete a task.
   **Math.floor(Math.abs([DueDate]-[StartDate])/(24*60*60*1000))**

2. The date method, *getMonth*, returns a number that represents a month, for example, *0* is *January*, *1* is *February*. To return the name of the month use the following expression:
   **['January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November', 'December'][([LastModifiedTime].getMonth())]**

3. Many of the out-of-the-box managed properties that represent date values are provided as string in the format: YYYY-MM-DDTHH:MM:SSZ, such as, 2013-11-18T08:00:00Z.

   - To display such managed properties without the characters, *T* and *Z*, use the expression,
     **[DueDateOWSDate].replace(/[TZ]/g," ")**.
   - To convert such values so you can subtract or compare values of a date/time use the formula,
     **Date.parse([DueDateOWSDate])**

# Conditional Formulas

You can use the formulas to test the condition of a statement and return a value. Conditional expressions take the form of a ternary operator called the conditional expression operator, **?:**, which use the following format:

  **(condition)?(evaluate if condition was true):(evaluate if condition was false)**

For example, if you want to create a calculated column that contains either *Before* or *After*, depending on the year the item / file was created, then the formula would look similar to:

  **([DueDate]<[StartTime])?"Before":"After"**

Also, if the Lightning Conductor conditional formatting feature does not satisfy all your need, you can apply formatting as part of your calculated column, for example,

  **([DueDate]<[StartTime])?"<font style='color:red;'>Before</font>":"<font style='color:blue;'>After</font>"**

This would result in a Lightning Conductor Web Part displaying data similar to the following screenshot.



Other examples:

* The following formula, sets the background as red, if the item is overdue, otherwise the background color is green:
    **[DueDate]<Date.now() ? $("<div style='background:red; border-radius: 5px; width: 10px; height: 10px;'></div>"):$("<div style='background:green; border-radius: 5px; width: 10px; height: 10px;'></div>")**
* The following formula adds a clickable button:
    **[ID]%2 ? $("<button onclick='alert("+[ID]+"); return false;'>"+[ID]+"</button>") : [ID]**

# Mathematical Formula

You can use formulas to perform a variety of mathematical calculations, such as adding ( **+** ), subtracting ( **–** ), multiplying ( **\*** ), dividing numbers ( **/** ), remainder after dividing a number by a second number ( **%** ) ; and using the Math object properties and methods, for example,

1. Round values in the *NoTasks* column to the nearest integral value:
   **Math.round([NoTasks])**

2. Calculate the area of a circle when the value of the radius is saved in the *Radius* column:
   **Math.pow([Radius],2)\*Math.PI**

# Display Tab

The **Display** tab contains up to six sections and a text box where you can type the text you want to display if no items were rolled up. The six sections are:

- [Display Columns](#)
- [Header Configuration](#)
- [Grouping and Linking](#)
- [Paging Configuration](#)
- [Summary Rows](#)
- [Grouping Order](#)

Using the display tab, you can build the properties for your view, for example:

- Set the **display format** for each column. for example. **Short Date** for the **Due Date** column.
- Set a **Column Alias** if you wish to rename the column header and set the **Width** of the column in pixels.
- Select the **Group By** option to group by columns. You can group by multiple columns.
- Add **conditional formatting** 📝 or **summarize** ∑ data by clicking the appropriate icon.

Set the **Linked column** property to the **Title** column to enable users to open the list item.

<< Calculated Columns

Display Columns >>

# Display Columns

Use the **Display Columns** section on the [Display tab](#) to select how the column data should be displayed by the Lightning Conductor App Part. Only those columns you selected on the [Columns tab](#) are displayed in this section.

In this section you can configure:

- **Display Format**: Select from the **Display Format** drop down list the format of columns, for example:
  ◦ For a Boolean column type, you can select: **None**, **Yes/No**, **True/False** or **Checkbox**.
  ◦ For numerical columns you can select, **None**, **Currency**, **Decimal**, **Fixed Point**, **General**, **Hexadecimal**, **Number**, **Percent** and **Scientific**.
  ◦ For Date/Time columns, you can select **None**, **Long Date**, **Long Data and Time**, **Long Time**, **Short Date**, **Short Date and Time**, **Short Time** and **Year And Month**. You can also type a [custom date format](#).



- **Alias**: Most column names are not user friendly. In the **Alias** text box, type an alternate name for the column name.

  **Note**: The column Name and Alias name are only displayed when the **Show header** check box is selected in the [Header Configuration](#) section on the [Display tab](#).

- **Column width**: Type in the **Width, px** text box the width of the column in pixels.

- **Grouping**: Select the **Group By** check box to the right of the column to group items by that column. A **Grouping Order** section appears. If you wish to group using multiple columns, you can change the order of the grouping, using the **Grouping Order** section, by dragging columns in group order. The column at the top of the **Grouping Order** section is the first column used to group the returned items.



  By default groups are expanded. To collapse groups when the Lightning Conductor App Part is first displayed, in the Grouping and Linking section, select **Groups Collapsed** from the **Grouping initial state** list. You can also display how many records are in a group by selecting **Show count of Items in groups** check box in the Grouping and Linking section.

- **Display**: You can select whether to show the values in the column not only. When you use the Group By check box for a column, you many not wish to display the column as values from the column are displayed in the group heading.

- **Allow Html**. Some columns contain HTML code, particular those, created from the column type: **Multiple lines of text** when configured to use **Rich text** or **Enhance rich text**. When the **Allow Html** check box is not selected, then the HTML code is displayed as plain text. When the **Allow Html** check box is selected, then your browser will render the text as HTML.

- Conditional Formatting. Conditional formatting can be set per value or per row allowing you to change formatting options only if a condition is true, for example, you could highlight any *Products* that have a *Units in Stock* less than 10 or *Tasks* assigned to you. Click the **formatting** icon 📝 to display the **Configure Conditional Formatting** dialog. Under the **Formatting**, click the **Remove all conditional formatting** icon 🖌 to remove conditional formatting from all columns. Click the **Remove** icon 🖌 to the right of the **formatting** icon 📝 to remove formatting from a column. See the Conditional Formatting section in this documentation for more information.

- Summarizing data. Column values can be summarised, for example, counting the number tasks displayed within the app part. Click the summary Σ icon to display the **Configure Summary Functions** dialog. Under **Summary**, click the **Remove all summary functions** icon 🖌 , to remove all summary configuration from all columns. Click the **Remove summary functions** icon 🖌 to the right of the summary Σ icon to remove the summary configuration from a column. For more information, see the Summarizing data section in this documentation.

<< Display Tab

Conditional Formatting >>

# Conditional Formatting

Formatting can be applied to the content of your [Lightning Conductor App Part](#) based upon a condition being true or false. For example, if you are displaying Task items from a Task list app, you may want to display Tasks that are past their due date in red font rather than black font. It is possible to have multiple conditions using the *And* and *Or* operators.

To apply conditional formatting:

1. On the [Display tab](#), in the [Display Columns](#) section, click the formatting icon 📝 next to the column that contains the value which you want to use for the condition. For example, you would click the formatting icon 📝 to the right of the **UnitsInStock** column, if you wanted to format products that have less than 10 units in stock.
2. Select the **Apply To Entire Row** check box when you want the entire row to be formatted rather than the column value.
3. Select the **Fore Color**, **Back Color**, **Align**, **B** old, *I* talic, **U** nderline options as required.
4. Under **Add New Filter Condition**, set the condition.



5. Click the green plus icon 🟢 , to set the condition. You can modify, delete or add additional conditions.
6. Optionally, click **Add Formatting** to add additional formatting options.
7. Click **Save** to apply the formatting to the Web Part.
   The remove formatting icon 🖌 appears to the right of the formatting icon. 📝 indicating that you have configured conditionally formatting using the UnitsInStock column.

[← Display Tab](#)
[<< Display Columns](#)
[Summarizing data >>](#)

# Summarizing data

The Lightning Conductor app can be configured to summarize the data from the data source, such as, displaying the total number of issues or the total monthly salary paid to employees. Depending on the column type, the summary types available are: count, average, minimum, maximum and sum. You can specify more than one summary type per column. Also you can have summary value for all data, per page and per group.
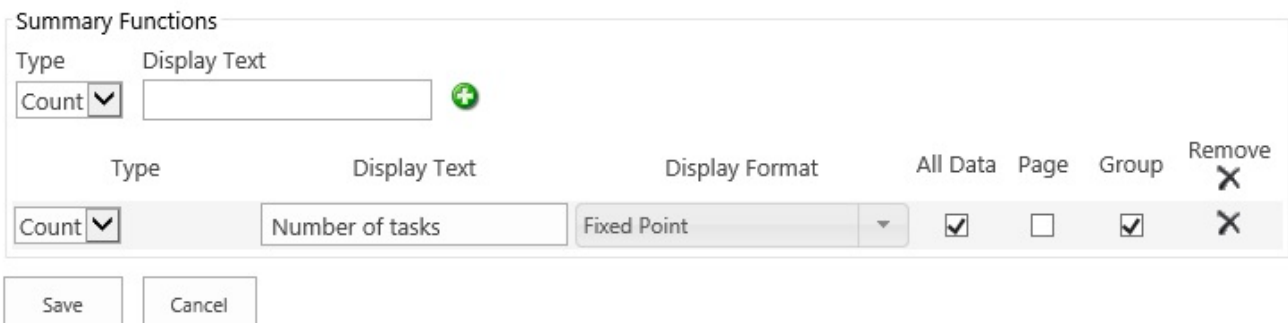
To summarize the data:

1. On the Display tab, in the Display Columns section, click the summary icon ∑ next to the column that contains the value which you want to summarize.
   The **Configure Summary Functions** dialog is displayed.
2. Click the green plus ⊕ icon.
3. In the **Type** list, select a summary type and then in the **Display Text** box, type text that relates to summarised data, such as, **Number of Tasks**. Ensure you leave at least one space after the text you have typed, otherwise the summarised value will concatenate with your text.

Configure Summary Functions (Task Name)                                    ✕

Summary Functions

| Type | Display Text | | | | | |
|---|---|---|---|---|---|---|
| Count ▾ | | ⊕ | | | | |

| Type | Display Text | Display Format | All Data | Page | Group | Remove ✕ |
|---|---|---|---|---|---|---|
| Count ▾ | Number of tasks | Fixed Point ▾ | ☑ | ☐ | ☑ | ✕ |

Save    Cancel

4. From **Display Format** list, select how you want the numerical value formatted. Available options are: **None**, **Currency**, **Decimal**, **Fixed Point**, **General**, **Hexadecimal**, **Number**, **Percent** and **Scientific**.
5. Use the **All Data** check box to summarise all data displayed by the app part, ignoring pagination. The default is to summarise all data.
6. Use the **Page** check box when you want a summary of the values on a per page basis. Pagination within the Lightning Conductor app part is configured in the Page Settings section on the Display tab.
7. Use the **Group** check box to summarise column values for each group. Group summarization only takes effect when the Group By check box is selected. The default is for this checkbox is selected.
8. Click the green plus ⊕ icon to summarise another summary type on the same column, if required.
9. To delete a summary configuration, click the *Remove* ✕ icon.

10. When you have configured all your summary needs for this column, click **Save**.
    The remove 🖌 icon appears to the right of the summary ∑ icon, indicating that you have summarized data using the column.
11. To edit the summary configuration, click the summary ∑ icon.

To control the position of the summarised values use the options in the [Summary Rows](#) section on the [Display](#) tab.

[<< Conditional Formatting](#)
[Header Configuration >>](#)

# Header Configuration

The **Header configuration** section is on the [Display tab](#) of the Configure Lightning Conductor App dialog.



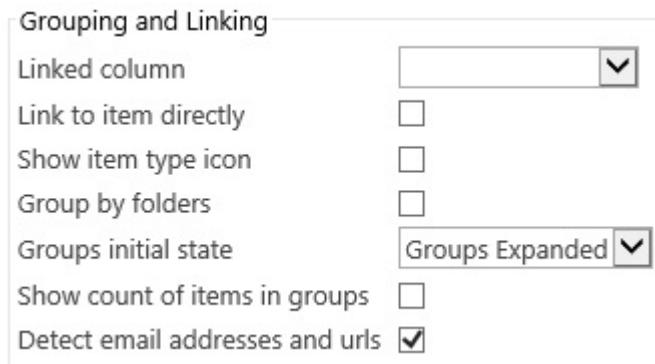Use the options in this section, as described below:

- Select the **Show header** check box to show the column names of the columns selected on the [Columns tab](#). The default is to show column names.

- From the **Header align** drop down list, select **Centre**, **Justify**, **Left**, **Not set** or **Right** to align the column names. The default is **Left**.

- Select the **Hide dynamic filtering** check box to prevent users from dynamically filtering items displayed in the Lightning Conductor App Part. By default the check box is not selected, that is, the filter icon ⧩ is displayed to the right of the column names in the App Part, when dynamic filtering is enabled in the [Filtering Settings](#) section on the [Data Source](#) tab. When this check box is selected, and the dynamic filter option is not selected in the [Filtering Settings](#) section, then the filter icon is not displayed.

[<< Summarizing data](#)
[Grouping and Linking >>](#)

# Grouping and Linking

The **Grouping and Linking** section is on the Display tab, of the **Configure Lightning Conductor App** dialog.



Use this section as described below:

- **Linking column**: When **SPGridView** is selected as the display provider on the Web Part tab, which is the default display provider, you can select one column which becomes a link to the SharePoint list item or document. The column that you want to use as the link, must be selected on the Columns tab, otherwise an error is displayed. Usually you would select the **Title** or **Name** column within a library or list. By default the link, when clicked displays the property page for the item or document. For document libraries, if you want the link to open the file in a program, select the **Link to item directly** check box.

- **Link to item directly**: By default this check box is not selected. This check box is only applicable to libraries and when you have you have selected a column in the **Linking Column** drop down list. This check box is not needed when the **Show Items Submenu** check box is selected. When the **Show Items Submenu** check box is selected, this check box with be inactive (greyed).

- **Show item type icon**: This option is only applicable when you have decided to include document libraries in your rollup query. By default this check box is not selected. Select this check box when you want an icon are displayed to the left of the document to indicate the file type. File types are identified using the file's extension. A blank document icon is displayed for unknown file types.

- **Group by folders**: When lists and libraries contain folders, you can display the folder structure in the Lightning Conductor Web Part by selecting this check box. Ensure that the Parent Folder name

column is chosen on the [Columns tab](#).

- **Grouping Initial State**: From the drop down list select either **Groups Expanded** (default) or **Groups Collapsed**. This option is only available when you have selected the **Group By** check box for at least one column.

- **Show count of Items in groups**: Select this check box if you want a count of items in groups to be displayed. This option is only available when you have selected the **Group By** check box for at least one column.

- **Detect email addresses and urls**: Select this check box (default) if you want text values in columns to become hyperlinks if the text is a web address, that is, it begins with http(s): or in the format of an email address.
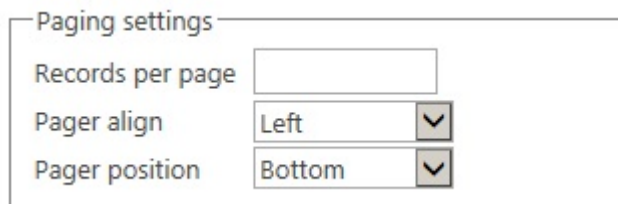
[<< Header Configuration](#)
[Paging Configuration >>](#)

# Paging Configuration

Use **Paging settings** section on the [Display tab](#) of the **Configure Lightning Conductor App** dialog to configure your pagination options. This section contains three options:

- **Records per page**: Type the number of items to display per page within the app part, for example **25**.
- **Pager align**. Select from the drop down list: **Center**, **Justify**, **Left**, **Not set** or **Right**. *Left* is the default.
- **Pager position**. From the drop down list select; **Top**, **Bottom** or **Top and bottom**. *Bottom* is the default.

[<< Grouping and Linking](#)

[Summary Row >>](#)

# Summary Row

On the Display tab, in the Display Columns section each column has a summary ∑ icon that allows you to summarize items. The **Summary Rows** section on the Display tab, allows you to decide where you want the summary values displayed.

```
Summary Rows
All data summary position    Top        ▼
Page summary position        Bottom     ▼
Group summary position       Top        ▼
```

Use the options in the **Summary Rows** section, as described below:

- From **All data summary position** list, select **Bottom**, **Top** or **Top and bottom**.
  The default is **Top**.
- From the **Page summary position** list, select **Bottom**, **Top** or **Top and bottom**.
  The default is **Bottom**.
- From the **Group summary position** list, select **Bottom**, **Top** or **Top and bottom**.
  The default is **Top**.

To decide which column values to summarise use the summary ∑ icon within the Display Columns section on the Display tab.

<< Paging Configuration
Grouping >>

# Grouping

On the Display tab, in the Display Columns section each column has a **Group By** option that allows you to group the items. You can then decide whether to initially show items expanded or collapsed within the group using the **Groups initial state** list in the Grouping and Linking section.

An example would be to group by the **Status** column inside a **Tasks** list, as shown in the following figure.

Lightning Conductor

View ▸ All Tasks ▾

| | Task Name | Assigned To | Due Date | Priority | Task Status |
|---|---|---|---|---|---|
| ⊟ **In Progress** | | | | | |
| | Task2 | SP2013\brett | 4/4/2013 | (2) Normal | In Progress |
| | Task3 | SP2013\brett | 5/5/2013 | (2) Normal | In Progress |
| | Task4 | Zoe | 6/6/2013 | (2) Normal | In Progress |
| ⊟ **Not Started** | | | | | |
| | Task1 | SP2013\brett | 1/4/2013 | (2) Normal | Not Started |
| | Task5 | SP2013\brett | 7/7/2013 | (2) Normal | Not Started |

If you wish to group using multiple columns, you can change the order of the grouping, using the **Grouping Order** section, by dragging columns into group order. The column at the top of the **Grouping Order** section is the first column used to group the returned items.

Grouping Order

Task Status

Priority

<< Summary Row
Walkthroughs >>

# Walkthroughs

The following walkthroughs detail how to create solutions using Lightning Conductor from LightningTools. You can use these walkthroughs to customize a Lightning Conductor App Part or should you want to read the document without having hands on access to the Lightning Conductor, then the walkthroughs have sufficient screenshots for you to follow the steps.

1. Walkthrough: Aggregating task items for a site collection, using the Object Model Rollup Engine Provider. This walkthrough uses:
    • filtering,
    • sorting,
    • grouping,
    • conditional formatting,
    • column linking and
    • paging.
7. Walkthrough: Aggregating task items from multiple site collections using the Search Rollup Engine Provider. This walkthrough uses:
    • calculated columns
    • Managed Properties and
    • conditional formatting (multiple conditions for same column).

# Aggregating task items using object model provider

This walkthrough demonstrates how to configure the Lightning Conductor App Part, to rollup not completed task items, assigned to the person viewing the page, across the current collection using the Object Model rollup engine provider as shown in the following screenshot.

| Task Name | Assigned To | Task Status | Priority | Due Date | % Complete |
|---|---|---|---|---|---|
| **☐ (1) High** | | | | | |
| SPConf13 Presentation | Penny Coventry | In Progress | (1) High | 11/20/2013 | 30.00 % |
| **☐ (2) Normal** | | | | | |
| DIWUG Presentation | Penny Coventry | Not Started | (2) Normal | 11/18/2013 | 0.00 % |
| Prepare Presentation | Penny Coventry | In Progress | (2) Normal | 11/18/2013 | 10.00 % |
| Subtask11 | Penny Coventry | Not Started | (2) Normal | 2/9/2015 | 0.00 % |
| Task1 | Penny Coventry | Not Started | (2) Normal | 4/13/2015 | 0.00 % |
| Prepare Access Services slides Evolutions conference | Penny Coventry | Not Started | (2) Normal | 4/17/2015 | 0.00 % |
| **☐ (3) Low** | | | | | |
| Task 3 | Penny Coventry | Not Started | (3) Low | 4/1/2015 | 0.00 % |

If you have any questions please submit them on our web site page: Support Request.

This walkthrough demonstrates the following tasks:

- Selecting the object model rollup engine provider.
- Limiting the App Part to display only task items.
- Select the columns you wish to display in the App Part and filter to display only tasks assigned to the person viewing the page.
- Configure how you wish to display the data from the task columns.

## Prerequisites

You need the following components to complete this walkthrough:

- An Office 365™ tenant.
- Lightning Conductor app.

If you have not already done so, complete the following steps:

1. Add the Lightning Conductor app to your site.
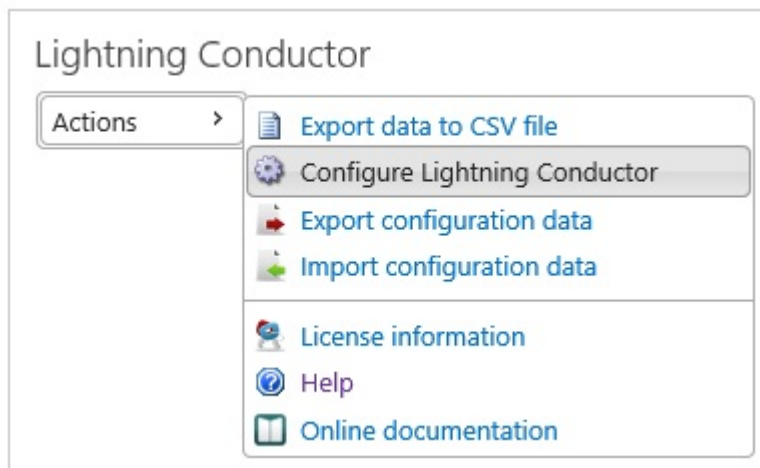2. Add the Lightning Conductor App Part to a page.

# Requirements

The Lightning Conductor App Part should be configured to:

1. Display only task items that are not completed in the current site collection and are assigned to the person displaying the page.
2. The columns to be displayed are (in order): **Task Name**, **Assigned To**, **Task Status**, **Priority**, **Due Date** and **% Complete**
3. Task items are ordered to display those tasks that are not completed with the due date is the oldest is listed first. Where the due date is the same for more than one task item, they should be listed in **% Completed** order, where the task item which is least completed appears first.
4. Task items are grouped by **Priority**, with **(1) High** priority task items displayed first.
5. The values in the **% Complete** column should be aligned to the right.
6. Any task whose due date has passed, all values in the entire task item row should have a font color of red.
7. The **Task Name** column should be linked to the task item's property page.
8. No more than 30 task items should be displayed in the App Part.

# Select the Object Model Rollup Engine Provider

1. From the **Actions** menu, select either **Configure Lightning Conductor**, or if you have enabled multiple views, select **Configure view**.



The **Configure Lightning Conductor App** dialog is displayed.

2. On the App Part tab, in the **Configure Data Source Provider** section, select **Object Module Rollup Engine Provider**, if not already selected.
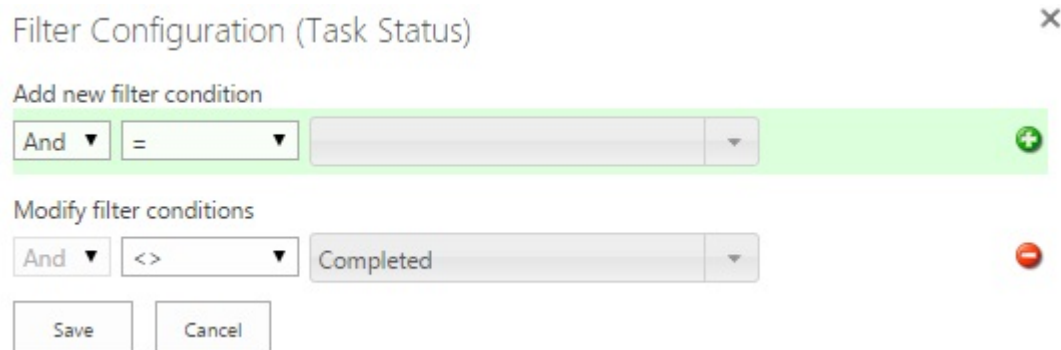


# Return task items

1. Click the Data Source tab.
2. From the Rollup Source list, select **Show items from current site collection**.
3. In the List/Item Types section, select **Tasks** in the **List Type** list.

# Select Columns to display and filter to show only my task items

1. Click the Columns tab.
2. Click the check boxes to the left of the following columns:
    - **Task Name**
    - **Assigned To**
    - **Task Status**
    - **Priority**
    - **Due Date**
    - **% Complete**
7. Drag and drop so the columns are in the order of the above list.

8. To the right of the **Task Status** column, click the filtering icon ▽ , to display the **Filtering Configuration** dialog.
9. Under **Add new filter condition**:
    - In the second list box, select **<>**.
    - In the third list box, select **Completed**.
    - Click the green plus icon ⊕ .

Filter Configuration (Task Status)                                    ✕

Add new filter condition

| And ▼ | = ▼ |                                        ▼ | ⊕ |

Modify filter conditions

| And ▼ | <> ▼ | Completed                        ▼ | ⊖ |

| Save | Cancel |

10. Click **Save** to save your filtering configurations and close the **Filtering Configuration** dialog.

11. To the right of the **Assigned To** column, click the filtering icon ▽ , to display the **Filtering Configuration** dialog.
12. Under **Add new filter condition**:
    - In second list box, select **Includes Member**.
    - Select the check box to the left of **Me**.
    - Click the green plus icon ⊕ .
13. Under **Add new filter condition**:

- In the first list box, select **Or**.
- In the second list box, select **=**, if not already selected.
- Select the check box to the left of **Me**.
- Click the green plus icon 🟢 .

**Filter Configuration (Assigned To)**                                    ✕
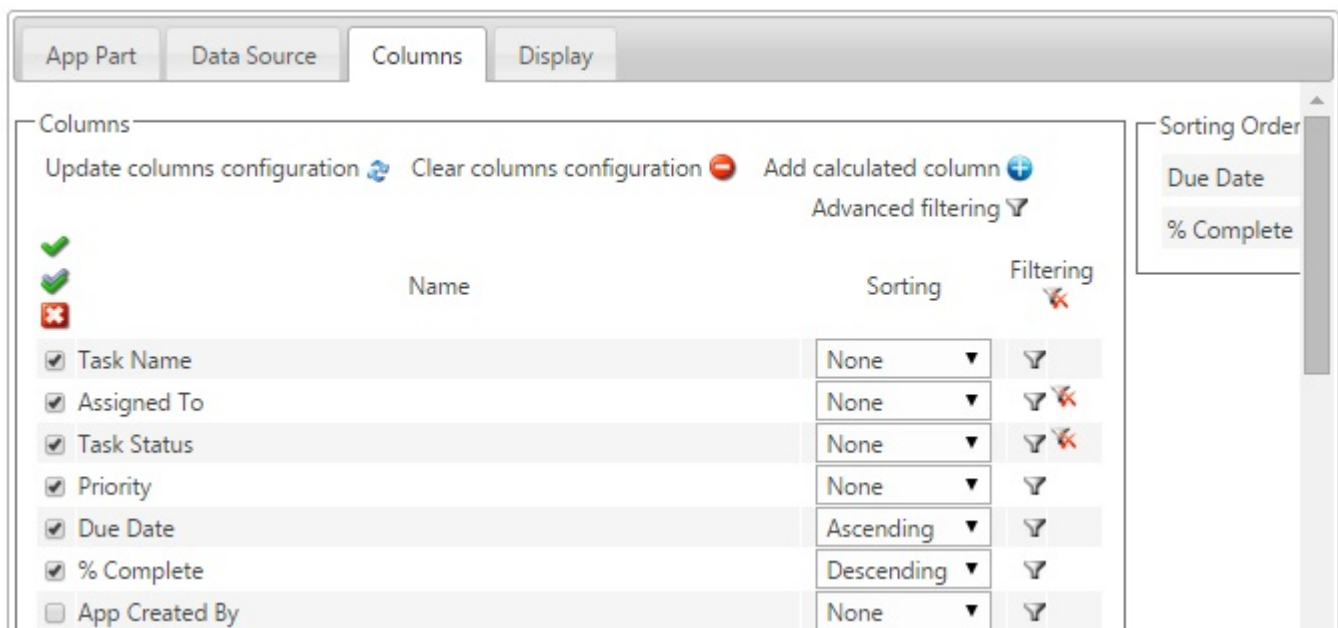
Add new filter condition

| And ▾ | = ▾ | | ☐ Me 🟢 |

Modify filter conditions

| And ▾ | Includes Member ▾ | | ☑ Me 🔴 |
| Or ▾ | = ▾ | | ☑ Me 🔴 |

| Save | Cancel |

14. Click **Save** to save your filtering configurations and close the **Filtering Configuration** dialog.

15. To the right of **Due Date**, in the **Sorting** list, select **Ascending**.
16. To the right of **% Complete**, in the **Sorting** list, select **Descending**.
17. In the **Sorting Order** section ensure that the order of the sorting columns is **Due Date**, **% Complete**.

Your **Columns** tab should look similar to the following screenshot.

| App Part | Data Source | Columns | Display |

Columns

Update columns configuration 🔄   Clear columns configuration 🔴   Add calculated column ➕
Advanced filtering ▼

Sorting Order

Due Date

% Complete

| | Name | Sorting | Filtering 🔻 |
|---|---|---|---|
| ☑ Task Name | | None ▾ | ▼ |
| ☑ Assigned To | | None ▾ | ▼ 🔻 |
| ☑ Task Status | | None ▾ | ▼ 🔻 |
| ☑ Priority | | None ▾ | ▼ |
| ☑ Due Date | | Ascending ▾ | ▼ |
| ☑ % Complete | | Descending ▾ | ▼ |
| ☐ App Created By | | None ▾ | ▼ |

# Format column data

1. Click the Display tab.
2. In the **Display Format** column, format the following columns:
    - **Assigned To**, select **User Page**.
    - **Due Date**, select **Short Date**.
    - **% Complete**, select **Percent**.

4. Click the Formatting 📝 icon for the **Due Date** column to display the **Configure Conditional Formatting** dialog.
    - Select **Apply to Entire Row**.
    - In the **Fore Color** text box, type, **FF0000**.
    - In the list, to the right of **Due Date**, select the operation **<=**, and select the check box to the right of **Today**.

    Configure Conditional Formatting (Due Date) ✕

    ⊟ Apply To Entire Row ☑  Fore Color `FF0000`  Back Color `FFFFFF`  Align `Not set ▼`  B ☐ I ☐ U ☐  ✕

    `And ▼`                                                                             ➕ ➕

       `Due Date ▼` `<= ▼` [                ] 📅 Today ☑ Days offset [    ] Negative ☐ ⛔

    [ Add Formatting ]  [ Save ]  [ Cancel ]

    - Click **Save** to close the dialog.

5. Click the Formatting 📝 icon for the **% Complete** column to display the **Configure Conditional Formatting** dialog.
    - In the **Align** list, select **Right**.
    - In the list, to the right of **% Complete**, select the operation **Is Not Null**.

    Configure Conditional Formatting (% Complete) ✕

    ⊟ Apply To Entire Row ☐  Fore Color `000000`  Back Color `FFFFFF`  Align `Right ▼`  B ☐ I ☐ U ☐  ✕

    `And ▼`                                      ➕ ➕

       `% Complete ▼` `Is Not Null ▼` [                ] ⛔

    [ Add Formatting ]  [ Save ]  [ Cancel ]

    - Click **Save** to close the dialog.

6. Select the Group By check box to the right of the **Priority** column.

7. In the Grouping and Linking section, from the **Linked column** list, select **Task Name**.

8. In the Page Configuration section, type **30** in the **Records per page** text box.

The **Display** tab should look similar to the following screenshot.



9. Click **Save** to close the **Configure Lightning Conductor App** dialog. This completes the configuration of the Lightning Conductor App Part.

# Aggregating task items using search provider

This walkthrough demonstrates how to configure the Lightning Conductor App Part to rollup all not completed task items, assigned to the person viewing the page, across all site collections using the search rollup engine provider.

| Task Name▼ | Priority▼ | Due Date▼ | % Complete▼ | Last Modified▼ |
|---|---|---|---|---|
| Task 3 | (3) Low | 2015-02-27 08:00:00 | 0.00 % | 3/9/2015 |
| Task1 | (2) Normal | 2015-02-13 08:00:00 | 0.00 % | 2/6/2015 |
| Subtask11 | (2) Normal | 2015-02-09 08:00:00 | 0.00 % | 2/6/2015 |
| SPConf13 Presentation | (1) High | 2013-11-20 08:00:00 | 30.00 % | 3/9/2015 |
| DIWUG Presentation | (2) Normal | 2013-11-18 08:00:00 | 0.00 % | 11/13/2013 |
| Prepare Presentation | (2) Normal | 2013-11-18 08:00:00 | 10.00 % | 11/13/2013 |
| Present session on Access Services | (2) Normal | 2013-11-18 08:00:00 | 0.00 % | 11/13/2013 |

If you have any questions please submit them on our web site page: Support Request.

This walkthrough demonstrates the following tasks:

- Selecting the search rollup engine provider.
- Limiting the App Part to display only my active task items.
- Select the columns you wish to display in the App Part.
- Configure how you wish to display the data from the task columns.

# Prerequisites

You need the following components to complete this walkthrough:

- An Office 365™ tenant.
- Lightning Conductor app.

If you have not already done so, complete the following steps:

1. Add the Lightning Conductor app to your site.
2. Add the Lightning Conductor App Part to a page.

# Requirements

The Lightning Conductor App Part should be configured to:

1. Display only task items that are not completed throughout the Office 365 tenant and are assigned to the person displaying the page.
2. The columns to be displayed are (in order): **Task Name**, **Priority**, **Due Date**, **% Complete** and **Last Modified**.
3. Task items are ordered with the oldest due date listed first.
4. The **Priority** column values will be conditionally formatted so that the value, **(1) High** is display as a red font and **(2) Normal** as green font.
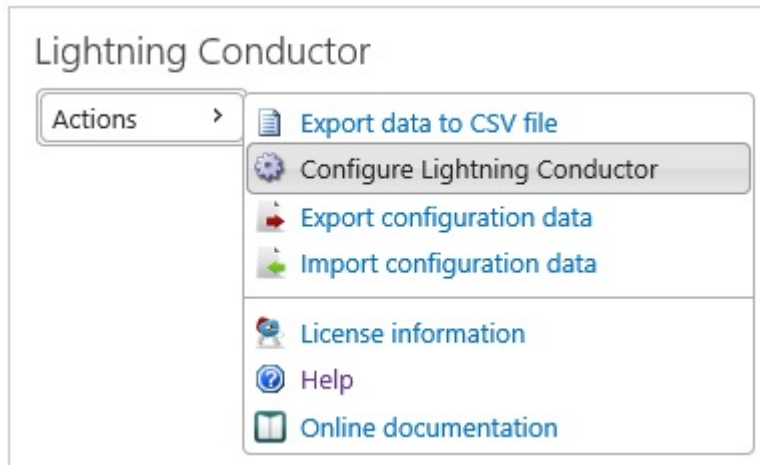
> When using the Search Rollup Engine Provider most of the columns a list uses are not automatically displayed on the **Configuring Lightning Conductor Columns** tab and therefore you will need to use the equivalent Manage Properties. In this walkthrough you will use the managed properties:
>     * **Priority** for the **Priority** column values.
>     * **DueDateOWSDATE** for the **Due Date** column values.
>     * **PercentCompleteOWSNMBR** for the **% Complete** column values.
> Unfortunately many managed properties are of type Text, and therefore to achieve some of the requirements it is necessary to manipulate the managed properties using Calculated Columns formulas. Alteratively you could create additional Manage Properties of the required type, yourself or rename one of the unused managed properties using an *Alias* .

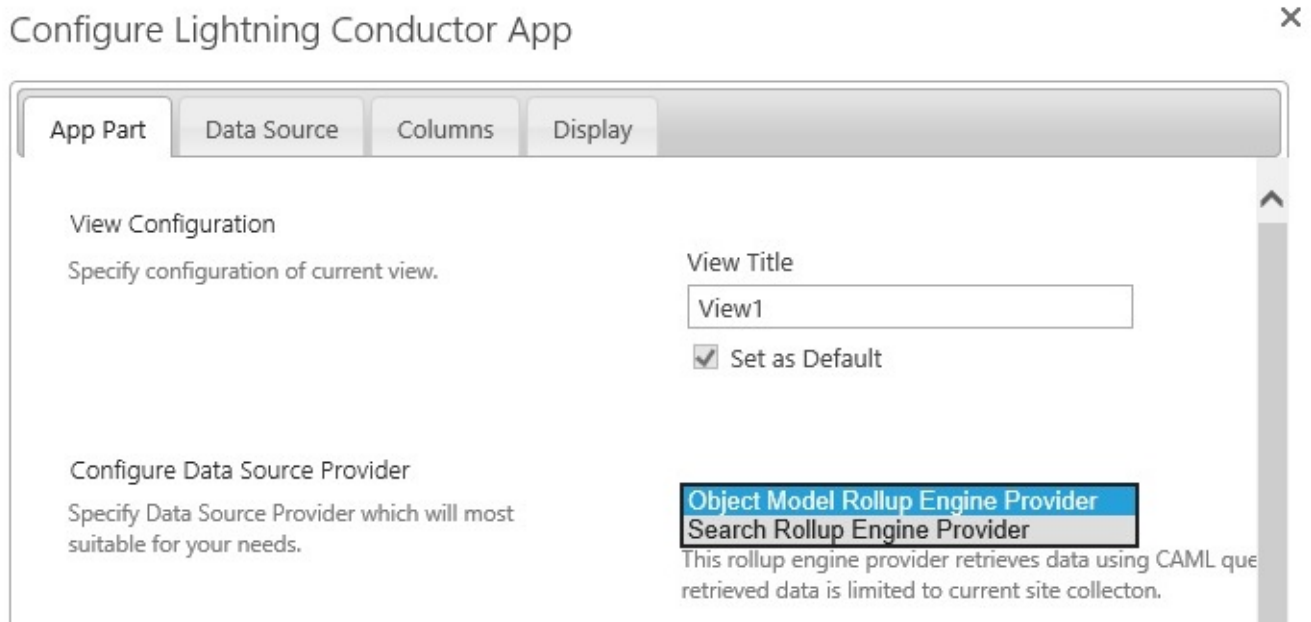# Select the Search Rollup Engine Provider

1. From the **Actions** menu, select either **Configure Lightning Conductor**, or if you have enabled multiple views, select **Configure view**.

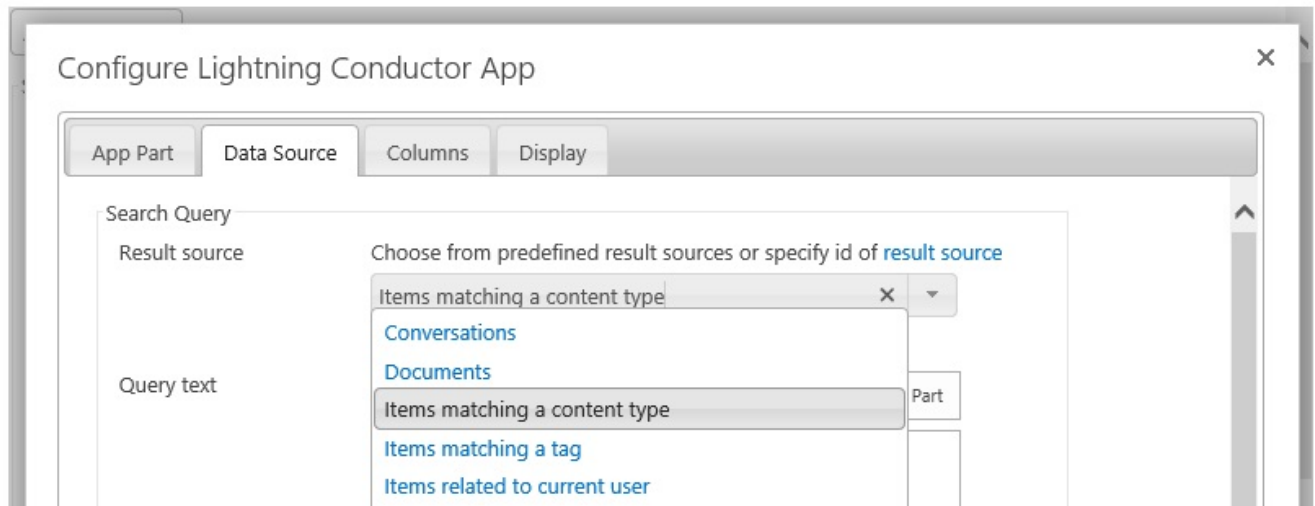The **Configure Lightning Conductor App** dialog is displayed.

2. On the App Part tab, in the **Configure Data Source Provider** section, select **Search Rollup Engine Provider**.



# Return only my active task items

1. Click the Data Source tab.

2. In the **Search Query** section, select **Items matching a content type** from the **Result source** list.

Lightning Conductor

Configure Lightning Conductor App                                                      ✕

| App Part | Data Source | Columns | Display |

Search Query

Result source        Choose from predefined result sources or specify id of result source

Items matching a content type                    ✕    ▾

Conversations

Documents

Items matching a content type

Query text                                                                    Part

Items matching a tag

Items related to current user

3. Modify the contents of the **Query Text** box so it contains the search query:

**(contentclass:STS_ListItem AssignedTo:{User.Name}**
**PercentCompleteOWSNMBR<>1.00000000000000)**

Search Query

Result source          Choose from predefined result sources or specify id of result source

Items matching a content type             ▾

Results with a given content type.

Query text          Name of current user          ▾          Add Query Part

(contentclass:STS_ListItem AssignedTo:{User.Name}
PercentCompleteOWSNMBR<>1.00000000000000)

Query timeout                           Use query rules          ☐
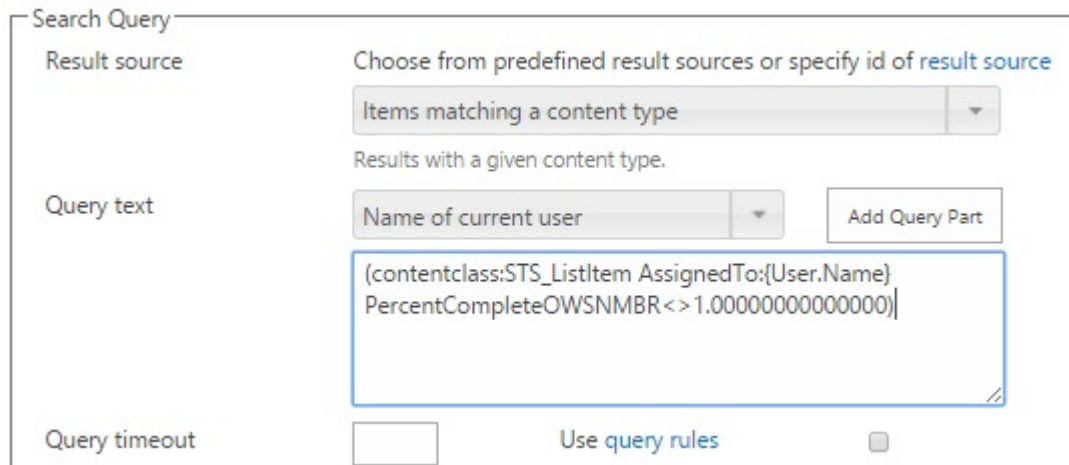
4. In the **Query Template Variables** section, to the right of the **ContentTypeId** text box, select the ellipses (**…**).

The **Select Value** dialog is displayed.

5.  From the **Choose content type** list, select **Task**.

Select Value                                                        ✕

Choose content type        | Task                              ⌄ |

                                                    | Select |  | Cancel |

6.  Click **Select** to save your selection and close the *Select Value* dialog.

    The *ContentTypeId* text box, contains the value *0×0108\**.

Query Template Variables

Variable name

[                              ]  ⊕

          Name                              Value                        Remove
                                                                            ✕

ContentTypeId        | 0x0108*                          |  [ … ]

Scope                  |                                  |  [ … ]

Tag                    |                                  |  [ … ]
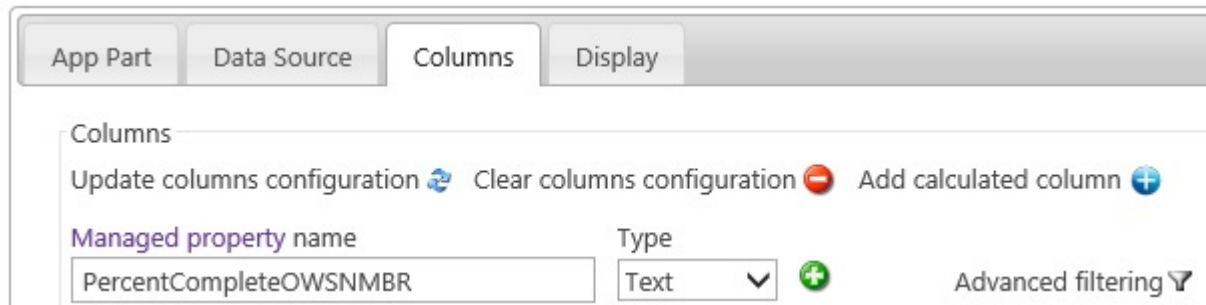
> **Tip**: When you want to limit the search results to a specific content type, and the **Select Value** dialog box does not show the required content type, then you can quickly find the content type id by clicking Site content types under **Web Designer Galleries** on the **Site Settings** page. Hoover over the content type, for example, **Document**, then in the browser status bar you will see the code:
> ```
> javascript:GoToPage('\u002f_layouts/15/
> ManageContentType.aspx?ctype=0x0101');
> ```

# Select Columns to display

1.  Click the Columns tab.
2.  Click the check boxes to the left of the following columns:
    *   **Title**
    *   **LastModifiedTime**

3. In the **Managed property** text box, type **PercentCompleteOWSNMBR** and then click the green plus icon



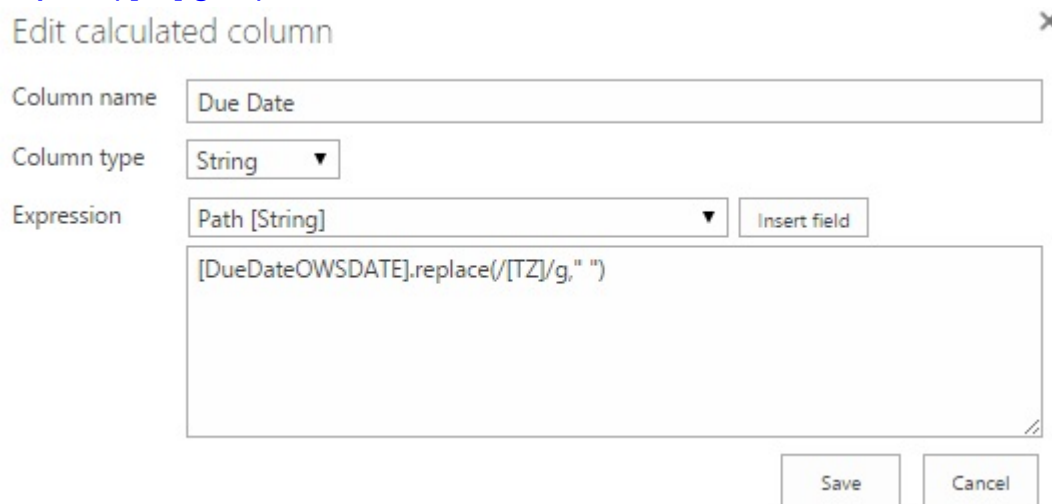4. Repeat the above step to add the managed properties.
   - **Priority**
   - **DueDateOWSDATE**
5. Click the check box to the left of the **Priority** and **PercentCompleteOWSNMBR**.
6. At the top right of the **Columns** section, click the Add calculated column icon.

   The **Edit calculated column** dialog is displayed.
   - In the **Column name** text box, type, **Due Date**
   - From the **Column type** list, select **String**, if it is not already selected.
   - In the **Expression** list select **DueDateOWSDATE [String]**, and then in the **Expression** append **.replace(/[TZ]/g," ")**.



   - Click **Save** to close the *Edit calculated column* dialog.
7. At the top right of the **Columns** section, click the Add calculated column icon.

   The **Edit calculated column** dialog is displayed.
   - In the **Column name** text box, type, **% Complete**
   - From the **Column type** list, select **Integer**.

- In the **Expression** list select **PercentCompleteOWSNMBR [String]**, and then in the **Expression** append **\*1**.



- Click **Save** to close the *Edit calculated column* dialog.
8. For the **Due Date** column, select **Descending** from the **Sorting** list.
9. Drag and drop so the columns are in the order **Title**, **Priority**, **Due Date**, **% Complete**, **LastModifiedTime** and **PercentCompleteOWSNMBR**, as shown in the following screenshot.



# Format column data

1. Click the Display tab.
2. In the **Display Format** column, format the following columns:
   - **% Complete**, select **Percent**.
   - **LastModifiedTime**, select **Short Date**.
3. In the **Alias** column, type the alias for the following columns:
   - **Title**, type, **Task Name**.
   - **LastModifiedTime**, type, **Last Modified**.
4. Clear the **Display** checkbox for **PercentCompleteOWSNMBR**.

5. Click the Formatting ⊞ icon for the **Priority** column to display the **Configure Conditional Formatting** dialog.
   - In the **Fore Color** text box, type, **FF0000**, select the operation **=**, and type **(1) High**.
   - Click **Add Formatting**.
   - In the newly added **Apply To Entire Row** section, in the **Fore Color** text box, type, **00FF00**.
   - Expand the newly added section – **+** to the left of **Apply**, select the operation **=**, and type **(2) Normal**.



   - Click **Save** to close the dialog.

6. Click **Save** to close the **Configure Lightning Conductor App** dialog.