

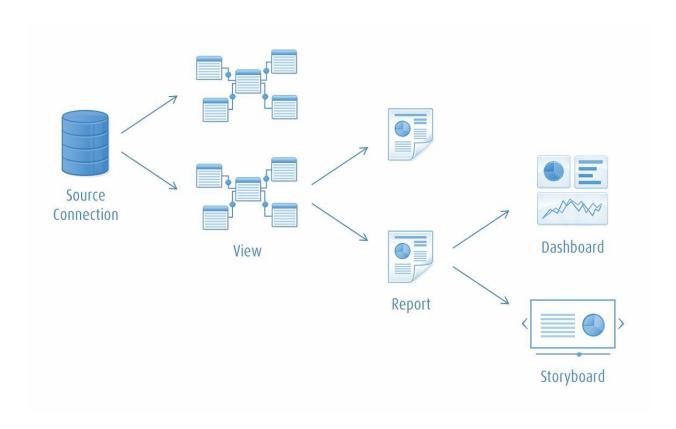
Overview

The purpose of this document is to assist you to undertake a guided tutorial of Yellowfin. The tutorial will make use of the demonstration database which is included as part of the installation process. As a result the tutorial will only concern itself with producing reports from this data source. If you wish to use Yellowfin against alternate data sources then you may wish to use this guide as a starting point.

During this guided tutorial you will explore data source connections, create a view, author and format reports and create a dashboard. If you wish to explore functionality in addition to what is covered in this guide please refer to either the administration or user guides.

Yellowfin Components

Yellowfin is designed to reuse components, such as Source Connections and Views, as much as possible. This model creates a hierarchy of objects within Yellowfin and understanding this hierarchy will assist you with this tutorial.



Source	A source connection stores details of how Yellowfin will connect to an external	
Connections	database that you wish to report from. For every database that you wish to write	
	reports for, you will have to create a single source connection record within	
	Yellowfin. A source connection can have many views.	
Views	Once you have defined a source connection you must create one or more view	
	records that your users can report off. A view is a metadata layer that allows you	
	to define which fields, from which tables in your source database can be made	
	available for reporting. A view can have many reports written against it.	
Reports	Once a view is defined you can write a report against it. A report record is a report	
	definition which defines which columns in your database you want to display and	
	how you want to display them. A report can be used on one or on any number	
	of dashboard tabs.	
Dashboard	Once you have written reports, you can begin to construct your dashboard. You	
Tabs	can place as many reports onto a tab as you wish. You can also create as many	
	tabs as you wish on your own personal dashboard.	
Storyboards	Storyboard is a presentation layer in Yellowfin that allows users to create slide	
	shows with fully functional reports as well as text, images, and videos.	

Pre-Requisites

Prior to starting this tutorial process it is assumed that you have successfully installed Yellowfin database and that you have a valid license key from Yellowfin.

Skills Required

Parts of this guide contain advanced database concepts and assume that you have some understanding of how relational databases work. Although you will not need SQL skills, a basic understanding of SQL would also assist in understanding the concepts covered in this document - especially for the development of database views.

About the Guide

Steps	Description	Learn how to
1	Login	• Login to Yellowfin
2	Source Connections	• Create a connection to external databases
3	Create a View	• Create a simple view by selecting and joining tables together
4	Define Meta Data	Make columns available for reporting
		 Apply meta data to database columns
		Create calculated fields
5	Create Reports	Create table and chart reports
		 Schedule Reports for broadcasting
		 Apply conditional formatting through alerts
6	Create a Dashboard	• Create a new dashboard tab
		• Add reports to tabs

Logging In

An administrator user is created by default during the installation process. The username for this user is "admin@yellowfin.com.au." This user has access to all the functions required for this evaluation including administration and reporting functions. The default password for this user is "test".

Before you log into the yellowfin you can startup the startup.sh in the yellowfin appserver

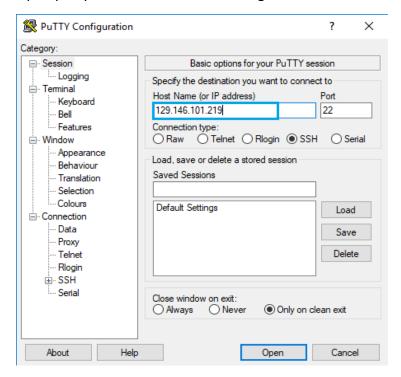
Before you open the link you can Log into your SSH session using client SSH URL provided in test drive launch page.

```
Outputs:

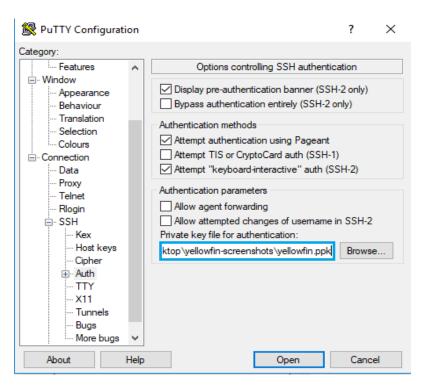
YellowfinVM_Instanceprivate_ip = [
    10.0.0.2
]

YellowfinVM Instancepublic_ip = [
    129.146.101.219
]
PS E:\yellowfin>
```

Open putty and SSH into the VM using the IP address



Click on browse and select the private key you have stored in your local system after then click on open button



Login as: ubuntu

```
■ ubuntu@ywfine70d-vm: ~

                                                                                 ×
login as: ubuntu
Authenticating with public key "rsa-key-20171009"
Welcome to Ubuntu 16.04.3 LTS (GNU/Linux 4.4.0-97-generic x86 64)
 * Documentation: https://help.ubuntu.com
 * Management:
                  https://landscape.canonical.com
 * Support:
                  https://ubuntu.com/advantage
 Get cloud support with Ubuntu Advantage Cloud Guest:
   http://www.ubuntu.com/business/services/cloud
79 packages can be updated.
32 updates are security updates.
Last login: Mon Dec 11 07:51:03 2017 from 43.225.24.242
ubuntu@ywfine70d-vm:~$
```

Open the appserver from the yellowfin and run startup.sh, it will start the all services of the yellowfin VM.

sh startup.sh

```
t@ywfine70d-vm:/home/ubuntu/yellowfin-installer/appserver/bin# ls
                                Mac OS X - Shutdown.command
                                                                               tcnative-1.dll.x86
 atalina.bat
                                 Mac OS X - Startup (background).command tomcat8.exe
                                Mac OS X - Startup (terminal).command
                                                                              tomcat8.exe.x64
 atalina-tasks.xml
                                setclasspath.bat
                                                                               tomcat8w.exe
              on-native.tar.gz setclasspath.sh
 onfigtest.bat
                                shutdown.bat
configtest.sh
                                 shutdown.sh
                                                                               tool-wrapper.bat
daemon.sh
                                startup.bat
                                                                               tool-wrapper.sh
derby.log
                                 startup.sh
                                 tcnative-1.dll
                                                                               version.sh
digest.sh
root@ywfine70d-vm:/home/ubuntu/yellowfin-installer/appserver/bin# ./startup.sh
Using CATALINA BASE: /home/ubuntu/yellowfin-installer/appserver
Using CATALINA_HOME: /home/ubuntu/yellowfin-installer/appserver
Using CATALINA_TMPDIR: /home/ubuntu/yellowfin-installer/appserver/temp
                    /usr/lib/jvm/java-8-openjdk-amd64/jre
/home/ubuntu/yellowfin-installer/appserver/bin/bootstrap.jar:/home/ubuntu/yellowfin-insta
Using JRE HOME:
Using CLASSPATH:
ller/appserver/bin/tomcat-juli.jar
 oot@ywfine70d-vm:/home/ubuntu/yellowfin-installer/appserver/bin#
```

New stop the firewall services

systemctl stop firewalld.service

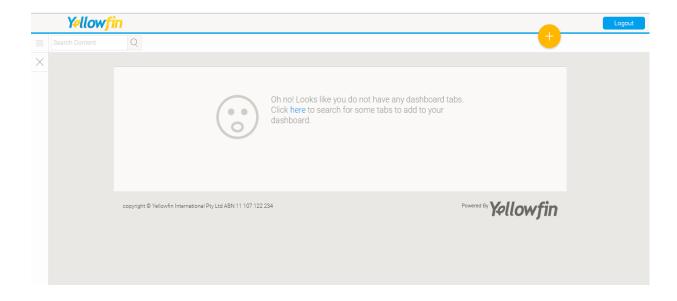
To Logon go to the entry page for your installation of Yellowfin within your web browser, this is usually at http://YourYellowfinServer.

Ex: http://129.146.101.219:7075

Type in the user name in the email address box (admin@yellowfin.com.au), followed by the password (test) in the lower box, and press the login button (we added Yellowfin web server IPAddress 7075).

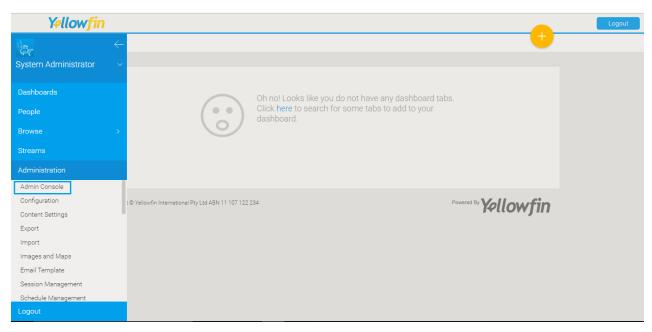


You should now be logged in to Yellowfin and the home page dashboard will load. It will open the empty dashboard as shown in the below screenshot.

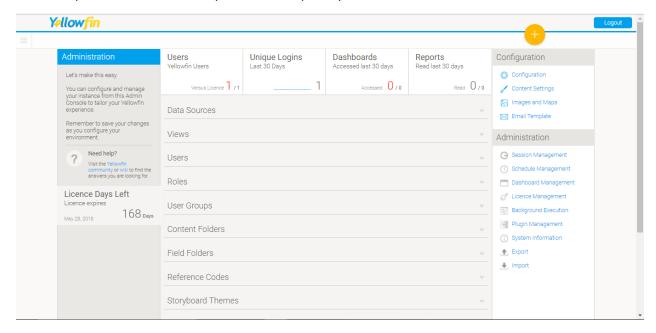


Administration

Click the Administration link on the navigation bar. This will open an administration shortcut menu. If you wish you to go to the main Administration page, click on the Admin Console link.



This will open the administration panel. On this panel you will see a number of administration.



KPI	Description
Users	This monitors the number of registered writers vs. the number of licenced
	writers, allowing the administrator to see how close they are to the licence
	limit.
	When there are less than 5% users left available on the licence, the number
	will be highlighted red.
Unique Logins	This monitors the number of unique user logins in the last 30 days, allowing
	the administrator to see how the system traffic is tracking.
Dashboards	This monitors the number of unique dashboard tabs accessed each day for
	the last 30 days vs. the total number of active tabs available, allowing the
	administrator to see what proportion of tabs are used.
	When less than 50% of dashboards are used, they're highlighted red. When
	more than 75% are used, they're highlighted blue
Reports	This monitors the number of unique reports accessed each day for the last
	30 days vs. the total number of active reports available, allowing the
	administrator to see what proportion of reports are used.

Data Sources

A Data Source record in Yellowfin contains the connection details the system uses to access source data for reporting. Connections are then used by Views to provide tables and fields. Through the Admin Console you will be able to create new data sources and associated views. In addition you will be able to manage the security access to these connections.

Source Types

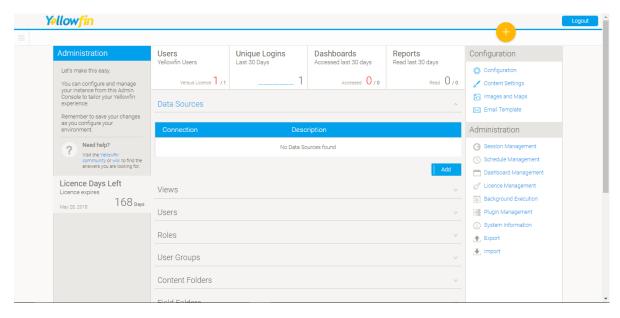
Yellowfin supports numerous data sources for you to report off. These include SQL databases such as DB2, Oracle and SQL Server, Lotus Notes Domino, and Yellowfin In-Memory. As of Yellowfin 7.3, you are also able to connect to a range of sources using third party connectors.

Data Source List

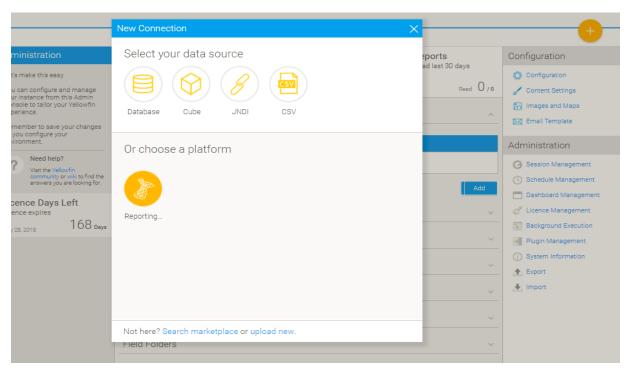
The Data Sources list shows you all the available connections that have been defined in the system. This list is accessed by clicking on **Administration** in the main navigation menu and selecting the **Admin Console** option from the drop down list.

Add Connection

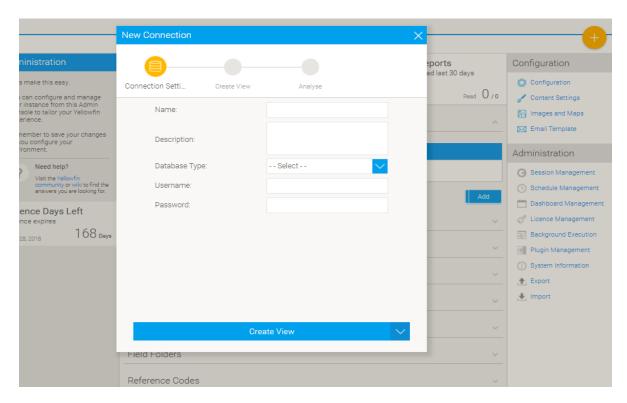
In order to create a new Data Source Connection an administrator will have to click on the **Add** button at the bottom of the Data Sources list in the Admin Console.



When creating a new data source connection, you will need to first specify either the type of source you wish to connect to, or provide/select a third party connector to use.



When creating your new database connection, you will be presented with a basic list of details to complete.



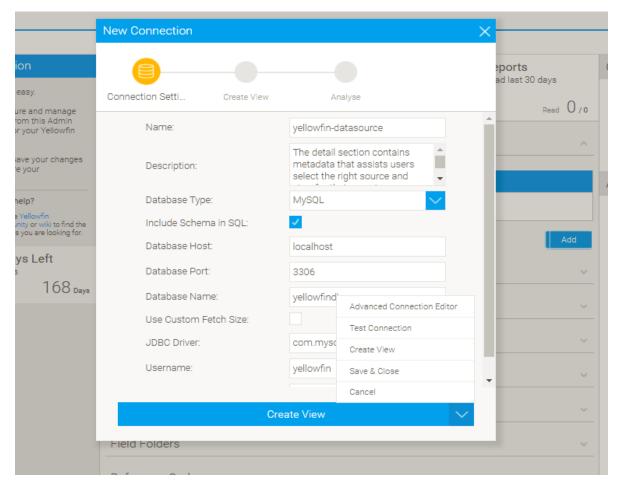
This will include;

- 1. Name
- 2. Description
- 3. Database Type (from the drivers you have available)
- 4. Username
- 5. Password

Once you have selected your database type, you will be prompted to complete options specific to your connection.

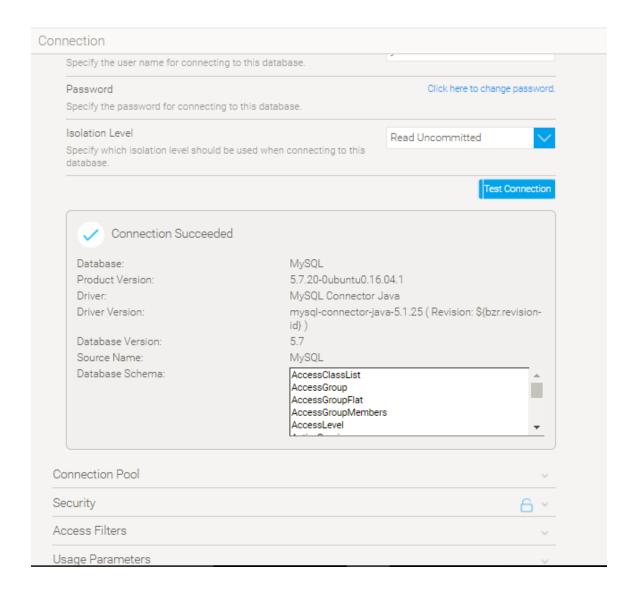
Next Step:

When the basic connection details are complete you will need to choose how you wish to proceed.



Once you fill all the details click on **Save & Close**, this will allow you to save your connection and return to the page you were previously on.

After that **Test Connection**, this will allow Yellowfin to test the connection information provided to ensure that the database can be reached and create the data source.



Views

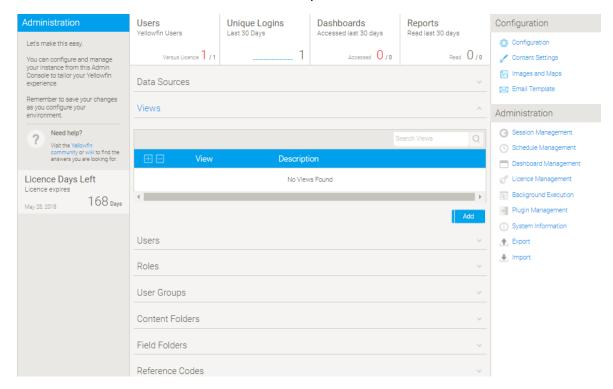
Views within Yellowfin provide the link between users, their reports, and the database. The purpose of the view is to simplify the knowledge required by end users of the source database. This section describes some of the basic view management options available to you.

Multiple Table View

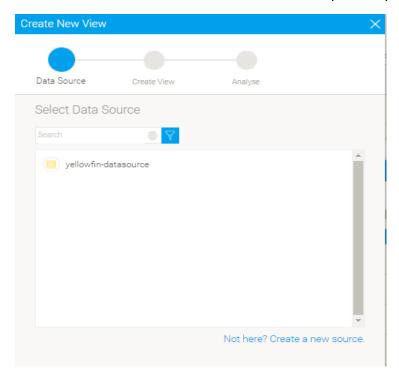
Yellowfin provides you with the capability to create Views of your database through a drag and drop builder or as a straight SQL statement.

This section describes how to use the view builder to create views of your database that end users can access for reporting purposes. These views are built by first creating an entity relationship diagram which joins all required tables together.

Click Add button of the Views section it will open the new window.

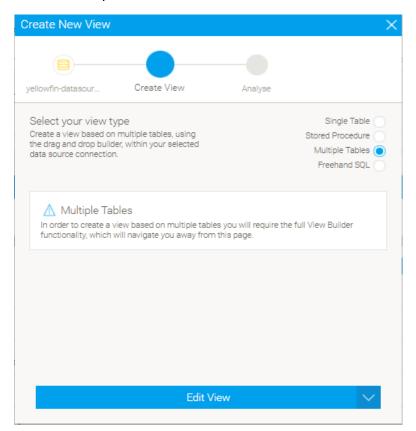


Click on whatever created the data source it as open the popup window.

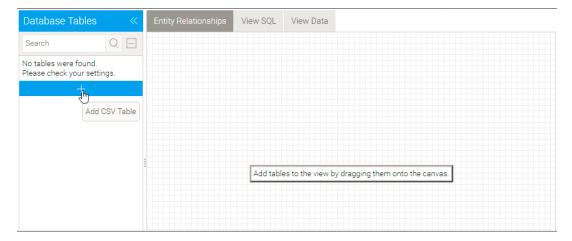


This option allows you to use Yellowfin to simply join multiple tables from a single selected database through a web interface.

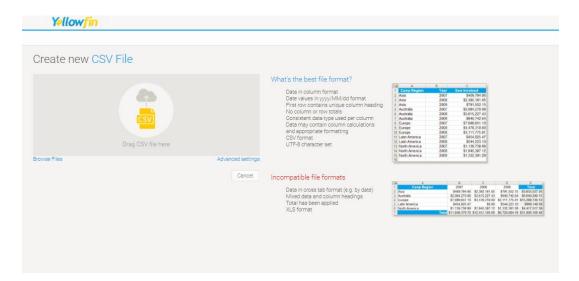
Click on multiple table radio button and Edit view



Click on the Add CSV Table button at the bottom of the Database Tables list on the left.



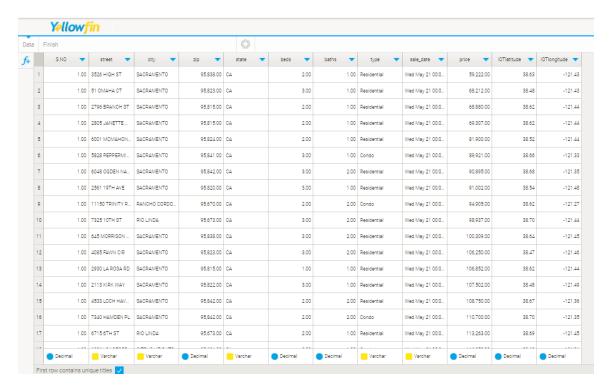
Either click on the **Browse Files** link, or the CSV image to locate your file, or drag your file from the file system onto the grey area.



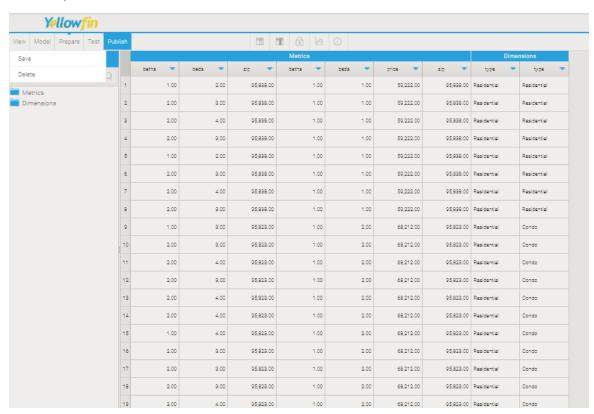
Once selected, Yellowfin will confirm that the file has been uploaded.



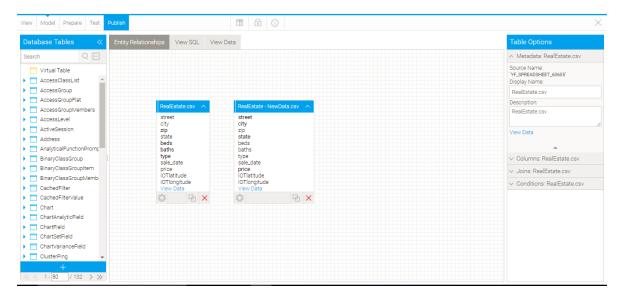
Once you've selected your file, and defined any settings required, you will be taken to the CSV Data step of the process. This is where you will be able to define several things, including Column Titles, CSV Table Settings, and Converted Fields.



Click on publish and Save.



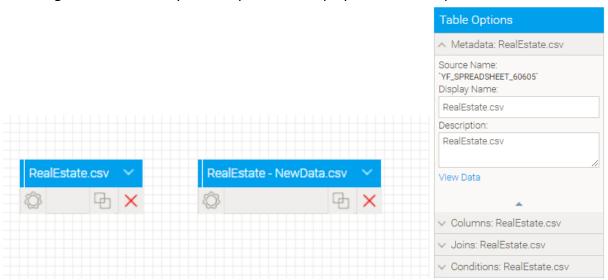
The drag and drop builder is used to build your relationship diagram by dragging tables onto your canvas.



Create Alias:

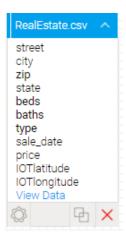
When adding more than one of the same table to a view Yellowfin automatically creates table aliases, since two tables cannot have the same name. An alias is created by updating the table name.

To change the table name you can update the display name in the options menu.

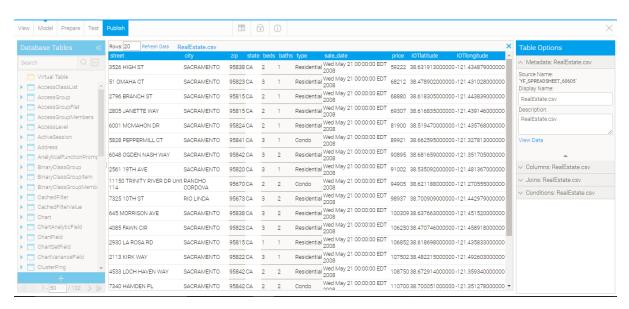


View Sample Data

If you wish to see example data from the table that is currently being updated you can click the view data link located in the main table properties section or on the table within the table on the entity builder.



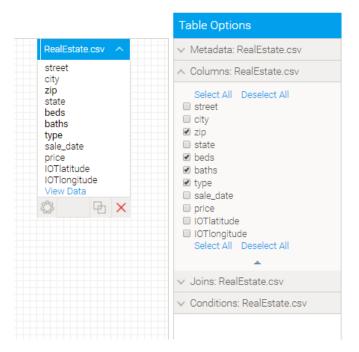
Any conditions that have been applied to the table will be applied to the select statement for the example data. However, if the joins to the table have implied conditions these will not be included in the example select data.



Select Table Columns

When tables are selected and joined together you have the option to add as many or as few of the columns from each of the tables into your view.

- 1. To add a field into your view click the table properties link to display the properties in the View Options pane.
- 2. Click the expand icon on the column section
- 3. Select the columns you wish to add (Use the Select All link to select all columns)
- 4. Columns selected will be displayed in bold within the table on the canvas as depicted below.
- 5. You can also add columns from the table data view see above. Simply click on the column to highlight the column these will then be added to your column list.

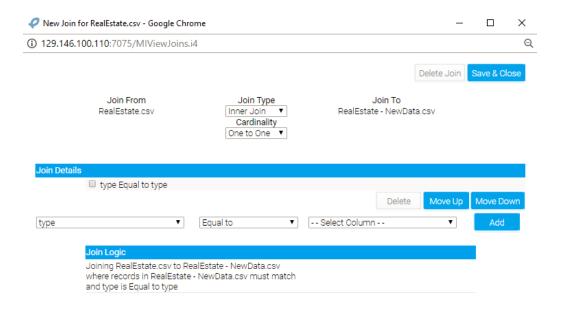


Creating and editing a Join

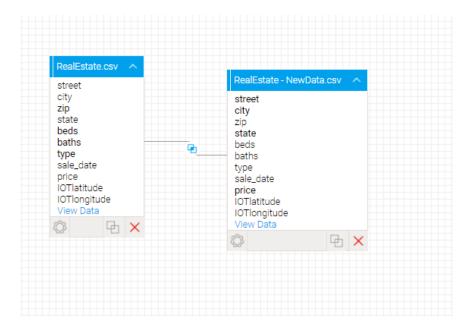
To create a new join click on the Join icon on the table you wish to include in the join.



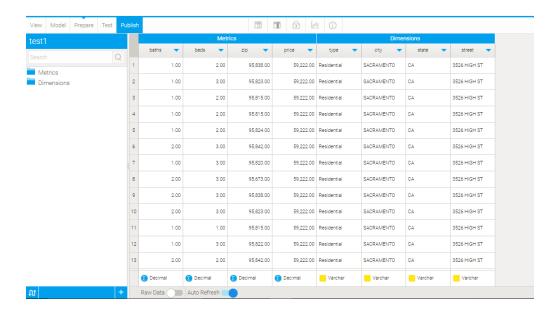
This will open the join popup, Select the join type and the table you wish to join to click Save and Close to save your join and return to the view canvas



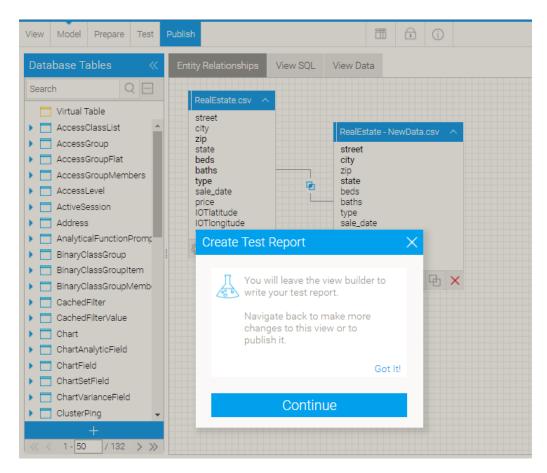
The tables will now have a join displayed as a line between them.



Click on prepare it will prepare the whatever joined data



Once you can click on Test it will open create test report popup window click continue it was navigating to the new window.



Reports

Having created our view we are now ready to create reports using the Report Writer. When creating a new report you will have begin with an initialization step. The step is required for you to select the source system and the view you wish to access, as well as the type of builder you wish to use.

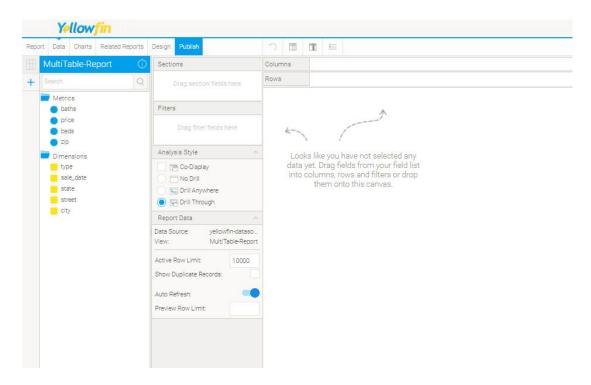
Create

This section walks you through starting the report building process, including selecting the type of builder, and the view.

Data

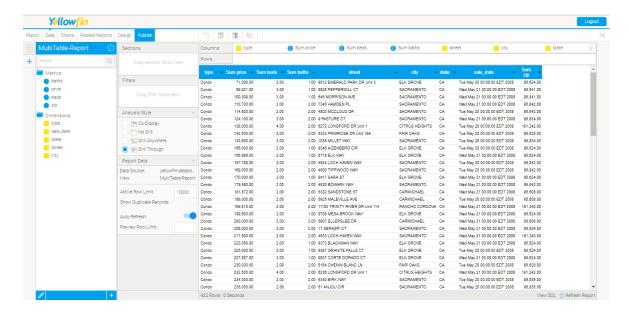
This will walk you through building a basic report.

On the left you will see a list of folders, expand the **Metrics** and **Dimensions** folder in order to access time related fields.



Drag and drop the **Year** field into the preview area, as pictured here.

You could also drag it directly into the **Column** or **Rows** list if you prefer. Dragging into the Columns list creates a Year column that goes down the page, where the Rows creates a Year row that goes across the page. And expand all the fields

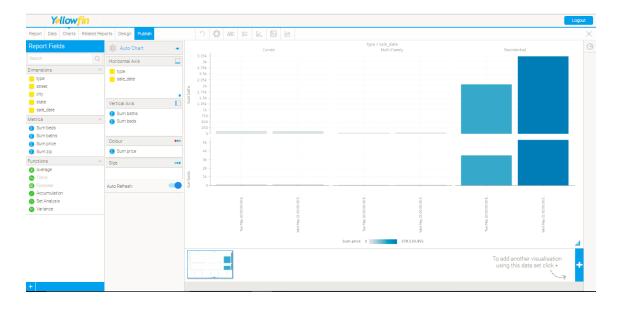


Charts

Click on the Charts link in the main navigation bar in order to progress to the Chart Builder step.

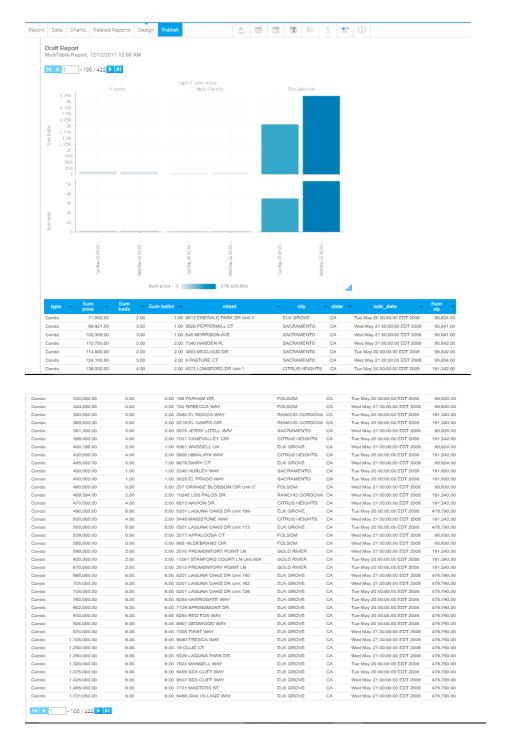
You will now have a list of fields on the left side of the builder that are available from the table you defined on the Data step.

Drag fields into the **Horizontal Axis** component and **Vertical Axis** component of the **Auto Chart** builder.



Design

The Design page allows you to format the report, set up a multi-chart canvas, and other functions.



Before you publish report, you can close report tab, and create Content folder in the Administrator admin console.

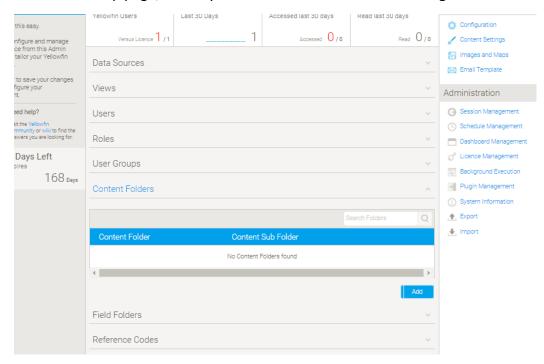
Content Folders

Content is stored within a two tier folder structure of Folders and Sub Folders.

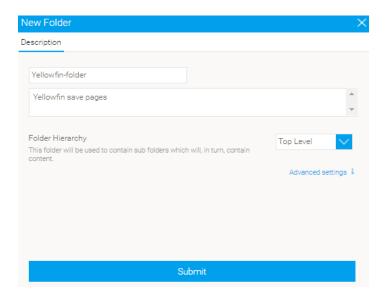
- Folders are used to hold and split Sub Folders into groups. They do not contain content directly.
- **Sub Folders** are located within a defined Folder and are used to store content with specified function and access permissions.

The content types that are stored in this structure are Reports, Dashboard Tabs, and Storyboards.

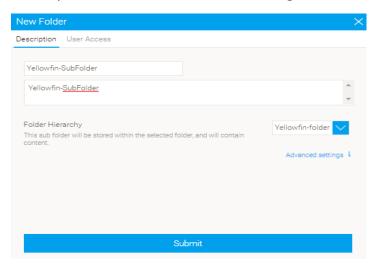
Click the **Add** button under the Content Folders list in the Admin Console. You will now be taken to the Folder setup page, where you will need to define the following:



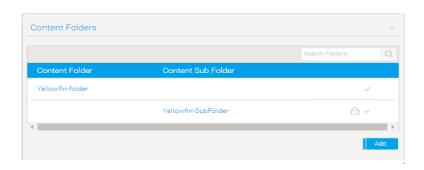
Fill the name, description and select folder hierarchy click on drop down and select top level then Submit.



Once at least one Folder has been created, click the **Add** button under the Content Folders list in the Admin Console to start defining Sub Folders. You will now be taken to the same Folder setup page, where you will need to define the following:

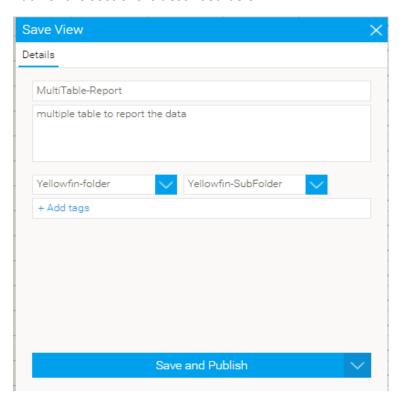


To make changes to a Folder or Sub Folder simply locate it on the Admin Console page and click on its name.

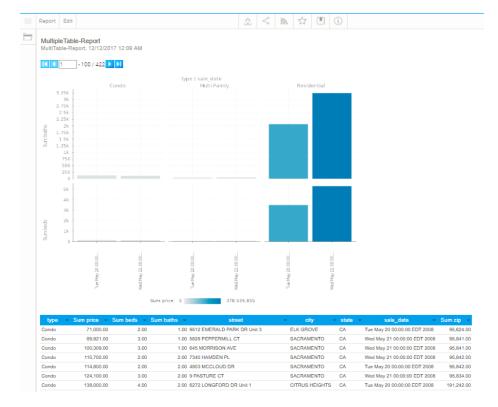


Saving a Report

Each of the sections is described below



The Report Save menu has a range of settings that can be applied to the report.

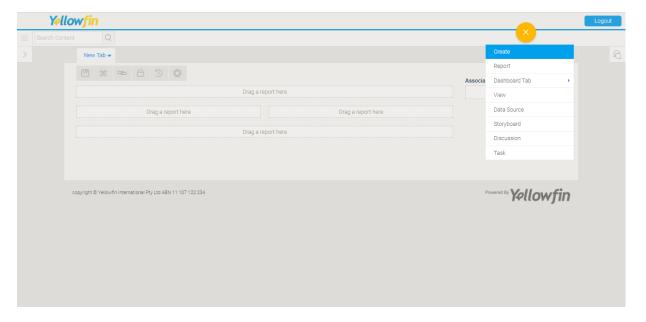


Dashboard

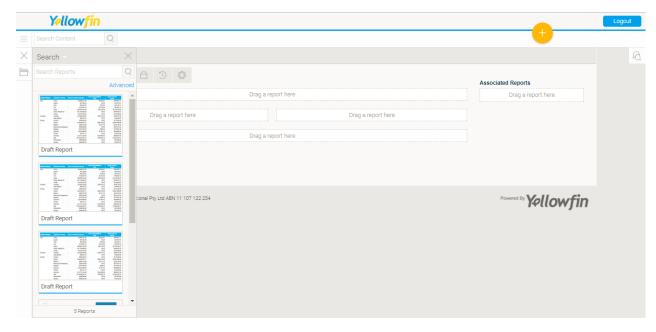
Once your reports have been built you will be able to create a new dashboard tab and add them to it. A dashboard is a way to present reports to users in a way that lets them quickly scan all their key metrics without having to open each report individually. As such when designing a dashboard deciding what gets displayed is critical to providing users with dashboards that help them in their jobs.

Create

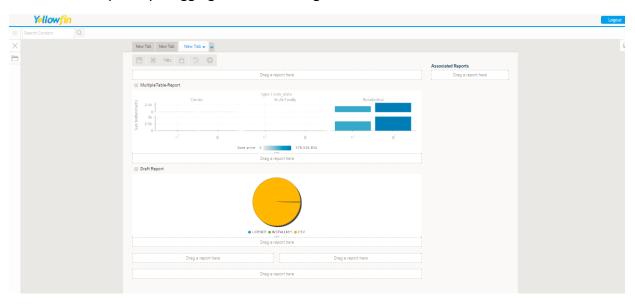
- 1. To create a new dashboard tab click the Create item in the main navigation bar of the system, and select Dashboard Tab.
- 2. This will open a menu of tab types from which you should choose a Stan-dard Tab.



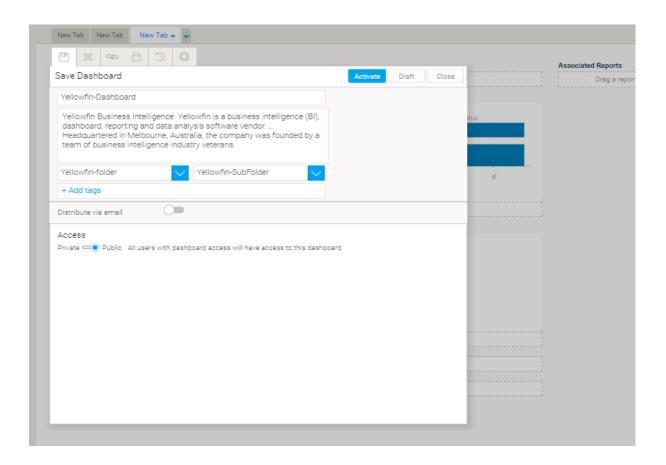
- 3. You will now see a blank tab. Search for Pie in the Report Search panel on the left.
- 4. Drag the report to the top portlet area on your tab, as demonstrated here.



- 5. Your chart will now appear on the dashboard tab.
- 6. Resize the report by dragging the bottom edge of it downward until the data is easier to read.



- 7. Click the Save button to save this Dashboard tab. Type in **Tutorial** as the name of the tab and change the sub category to **Tutorial**.
- 8. After that click **Activate** to save and activate the tab.



9. The Tutorial tab is now published and ready for day to day use.

