About the author

Rick MacIntosh has developing commercial software for over 20 years. He is the leader of the software development team at Sealogix Inc. that developed the JGrid Joomla Grid Extension in 2009 as a learning tool for the team to explore HTML5 Frameworks and the Open Source Community. Developing on the Sencha HTML Frameworks (EXTJS & Touch) and Joomla Extensions has become a passion. JGrid is a combination of these two open source environments. This book has been written to help the many users that download the free version of JGrid for Joomla daily and the commercial developers that incorporate JGrid in their Customers WEB sites.

Tips for using this book:

This book is for Joomla Administrators who have NO programming Skills and want to install a data grid on their Web Site. All you have is to do is install the JGrid Joomla Extension, and start configuring your custom data grid.

- Have a list of columns you want in each of your data grids

- Follow the **30 Minute Quick Start Guide chapter** to quickly work through each feature that MUST be set up for your grid to operate.
- Then use the **Table of Contents** by Menu, and the back pages **Index by KEYWORD** to quickly find what additional features you want in your Grid.
- This book explains the way that is easiest for new users. You may know other ways to finish a task; be creative. Even advanced users and programmers will find this book a handy shortcut to quickly find what you want to do.

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APPENDIX D: The JGrid Database Schema

Preface

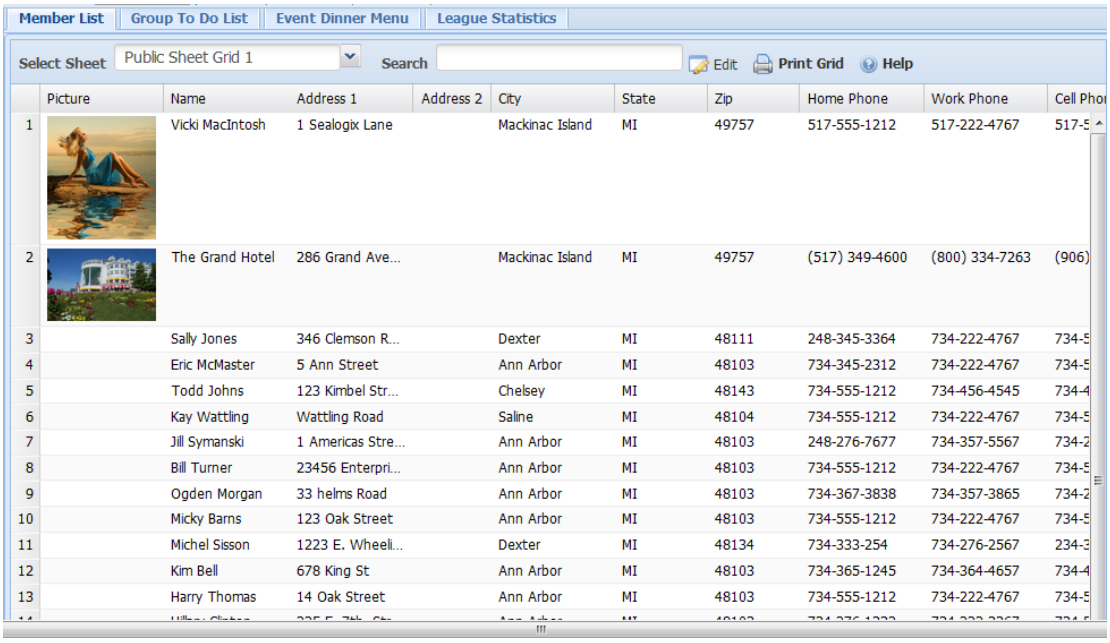
1. Getting Started

1.1. What is Joomla?

"Joomla is an award-winning content management system (CMS), which enables you to build Web sites and powerful online applications. Many aspects, including its ease-of-use and extensibility, have made Joomla the most popular Web site software available. Best of all, Joomla is an open source solution that is freely available to everyone". Reference: http://www.joomla.org/about-joomla.html

1.2. What is JGrid?

The JGrid Joomla Extension provides data Grids within the Joomla Environment as Components (Menu Selections filling the whole WEB page displayed) or Modules (Data Grids as a part of the WEB page displayed). The JGrid component is fully configurable without writing code in the Administrator backend of Joomla.
http://www.datagrids.clubsareus.org/



	Picture	Name	Address 1	Address 2	City	State	Zip	Home Phone	Work Phone	Cell Phor
1		Vicki MacIntosh	1 Sealogix Lane		Mackinac Island	MI	49757	517-555-1212	517-222-4767	517-5
2		The Grand Hotel	286 Grand Ave...		Mackinac Island	MI	49757	(517) 349-4600	(800) 334-7263	(906)
3		Sally Jones	346 Clemson R...		Dexter	MI	48111	248-345-3364	734-222-4767	734-5
4		Eric McMaster	5 Ann Street		Ann Arbor	MI	48103	734-345-2312	734-222-4767	734-5
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11		Michel Sisson	1223 E. Wheeli...		Dexter	MI	48134	734-333-254	734-276-2567	234-3
12		Kim Bell	678 King St		Ann Arbor	MI	48103	734-365-1245	734-364-4657	734-4
13		Harry Thomas	14 Oak Street		Ann Arbor	MI	48103	734-555-1212	734-222-4767	734-5

Figure 1.2.1 JGrid Joomla Front End Tab Panel

Features Include:

Data Grid Frontend - An spreadsheet like data grid capability for Joomla Websites in a TAB PANEL format

- Spreadsheet like user interface for viewing tabulated data
- Edit Row Data
- Sorting by Row
- Grouping Rows
- Paging Rows from Server
- Filtering from Server
- Formulas
- Searching Your Grid Data
- Summary Rows
- Images and Flash Grid Cell Data
- URL's and Email Cell Data Clickable
- Upload and Download Data
- Access Controlled data editing
- Column re-ordering and Hiding
- Custom Popup Tips for Each of your columns to describe data
- Ability to Create, Rename, Delete new Sheets. A "Sheet" is similar to an excel sheet. Grids can have multiple sheets(A good way to provide user specific data).
- Charting of Data (Bar Chart, Line Chart, ...)

- Data Grids of Custom SQL Queries to MYSQL Database

Full Joomla backend capability to create custom data grids with text, number, date, boolean and list box columns

- Create Grids selecting various styles including columns, striped rows, row numbering, grid framing, etc.
- Create Custom Columns
- Manage Various Grid display Settings

ACCESS CONTROL - A complete user access control system to control what individual "users" or group "roles" can do to specific grids, sheets in grids, or columns.

- Control access by Grid, Sheet, Grid/Column, Sheet/Column, Sheet/Column/Row
- Progressive Access Assignments No Access, Viewer, Cell Editor, Row Editor, Add/Delete Rows, Sheet Manager, Access Manager
- Full control from administrator backend, limited control for "Access Managers" in front end for specified Sheets
- Create Roles for Access Management or Manage Access by individual User

LANGUAGE SUPPORT - Designed to Support Joomla Language Packs (English Provided - Language Files available for easily translation to your local language for both front end and backend)

1.3. What Kind of WEB Pages Can You Build With It?

JGrid grids been used to display and provide controlled user editing for all kinds tabular data. Examples include:

- Sports League and Team Scheduling & Results with Flash Highlights
- Real Estate Homes Listings including Images and Flash
- Product Catalogues with Images
- User Updated Membership Lists
- Multi User Updated Issue Lists
- User Updated Dinner Menu Requests
- Financial Results including Charts

1.4. Why is it One of The Best WEB Data Grid Components

JGrid is developed with the Sencha EXTJS Framework. EXTJS is rated as one of the best HTML5 frameworks and the Grid Component in EXTJS superior performance. The underlining EXTJS browser based data store architecture synchronized thru AJAX proxys with the Joomla architecture & SQL database provides a desktop like user experience. The combination of one of the best HTML5 frameworks (EXTJS) with

one of the best WEB Community Builders (Joomla) provides the non-programmer with ability to create WEB pages that only a very experienced HTML5, Javascript, PHP, and SQL capable programmer would attempt. In fact if you look at the JGrid Forum posts you will see that many of the best WEB developer use JGrid to develop their customers WEB sites and rarely have to modify JGrid. But of course JGrid is open source and all improvements are encouraged as long as you share your improvements with the rest of us.

1.5. How do You Configure It

JGrid is fully configurable without programming as a Component in the Joomla Administrator Backend. You just select "jgrid-application-grids" under the Joomla Backend "Component" menu selection and begin configuring your data grids. There are many advanced features but the basics are create some grid names, create some column names, and add the columns to your grids. A Tab Panel of Grids will appear on the User Front End of your Joomla Site with all the built in capability of the EXTJS Grid component.

1.6. How to End Users Use It

Once you have created your Joomla WEB site and added the JGrid extension as a full page component or a module within one of your WEB pages it's time for your users to start using it. The JGrid component allows your users to view, search, sort, and filter similar to a desktop spreadsheet user experience. But if you have enable it thru progressive access control rules, they can also:

- Edit data
- Add rows
- Delete data or rows
- Add images
- Add Flash movies
- Download data
- Download images or Flash movies
- Add new sheets
- Controlling Access Rights for Other Users

and many more multi user access controlled features that are not available by just posting data in a grid on the WEB. The "Creator Type" access rule is especially powerful allowing many users to share the same data grid creating and viewing their own data without seeing the data created by the other users. Then "Roles" and "Views" can be created that allow all or a subset of the data to be viewed as summaries.

2. Quick Install Guide

2.1. Installing Joomla

“There are several ways to install Joomla!.

If you want to **test Joomla!** and you haven't purchased a domain yet, you can install Joomla! on your own computer (without your site appearing on the Internet), you can install it using the XAMPP package. You can also create a working website at demo.joomla.org, which is easy and well-supported.

If you want your site to be **available on the Internet**, make sure that you have an account on a web server. For most people this means signing up with a hosting company and purchasing a domain that will serve as your site's main address.

- **Option One:** One Click Installs. Many hosting companies offer "instant" installation of Joomla!. Follow the instructions your host provides for a one click install.
- **Option Two:** Conventional Installs. This method requires that you copy the Joomla! zip file to your hosting account, unzip, create a database, and then run the installation. Complete instructions can be found in Installation for Joomla 2.5 and Installation for Joomla 3.x and further information atJoomla! Installation Resources. This video takes you through the steps.
- **Option Three:** Demo Site. If you used the Demo Site, you can follow the instructions provided to back up and move the site to your existing host or establish a hosting account at the end of the free 30 day trial. (Note that the Joomla! Project receives a royalty if you choose paid hosting from that site.)” Reference: http://docs.joomla.org/Beginners

For support with installation, you can ask questions in the installation forum.

2.2. Installing the JGrid Joomla Component Extension

- Login to the JGrid Web Site http://www.datagrids.clubsareus.org/
- The Download Tab will appear on the top menu bar. Select the JGrid version that is compatible with your Joomla Version. Download the JGid Component (com_jgrid..) to your local machine as a zip file package.
- From the backend of your Joomla site (administration) select Extensions -> Install/Uninstall.
- Click the Browse button and select the extension package on your local machine “com_jgrid….zip”.
- Click the “Upload & Install” button.

For Joomla Administrator Documentation Reference: http://docs.joomla.org/Administrators

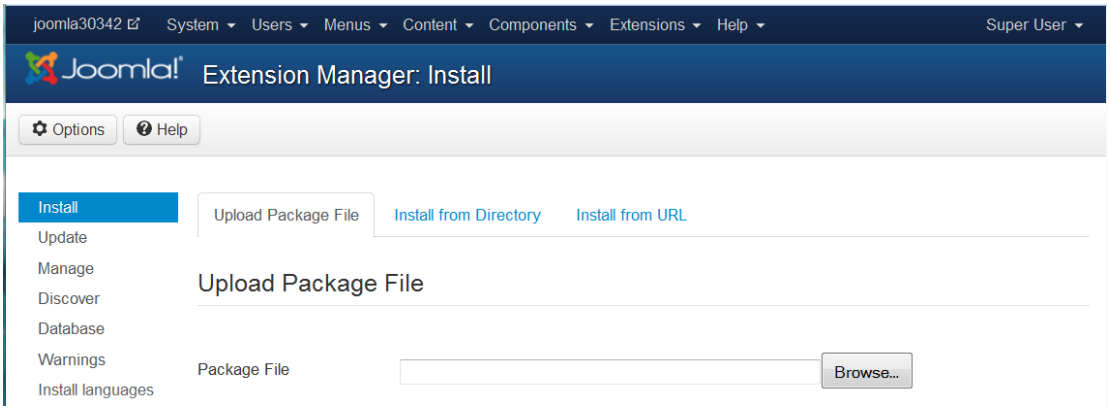


Figure 2.2.1 JGrid Component Installation

Next add the JGrid Component to you Joomla Front End by first selecting the Joomla "Menus" Dropdown List.

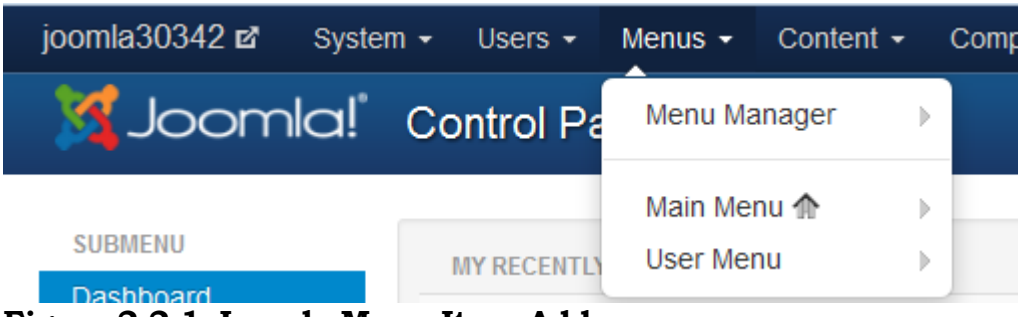


Figure 2.2.1 Joomla Menu Item Add

Select the menu you want to add the JGrid Front End Component Screen to by clicking the arrow to the right of the menu you want to add the JGrid Component to and the setting screen will popup:

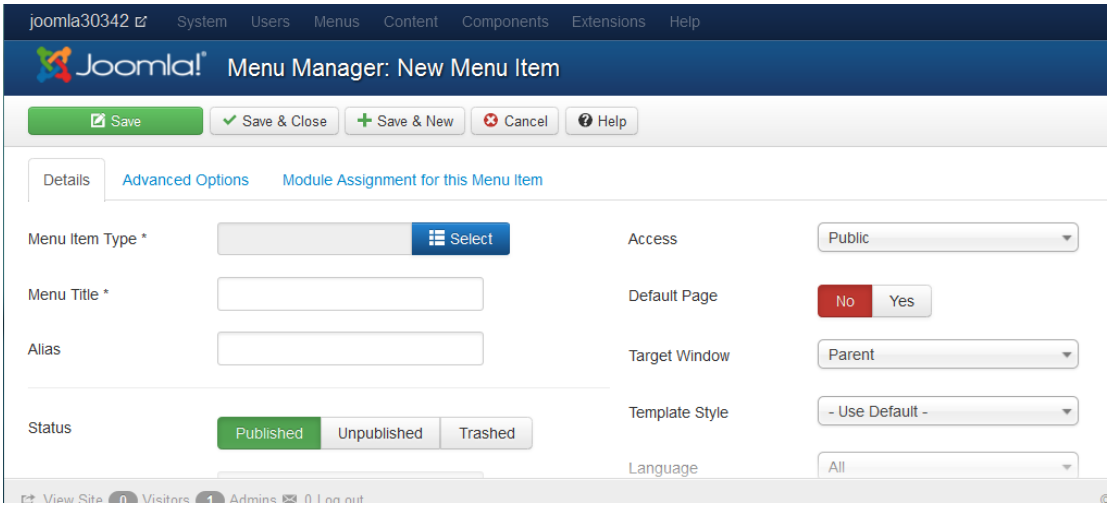


Figure 2.2.2 Joomla Menu Item Settings

Select the "Menu Item Type: select button and the selection list will popup:

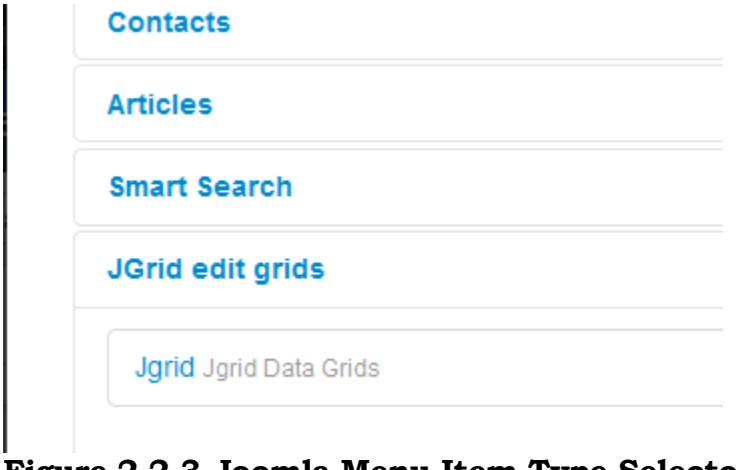


Figure 2.2.3 Joomla Menu Item Type Selector

Select the "JGrid edit grids" type and the "jgrid jgrid Data Grids" sub item to make the new menu item JGrid type. Also add a "Menu Title: to the new Menu Item. In the screen below a title of "Your JGrid Title" has been entered for demonstration purposes. The completed Joomla Menu Screen is shown below:

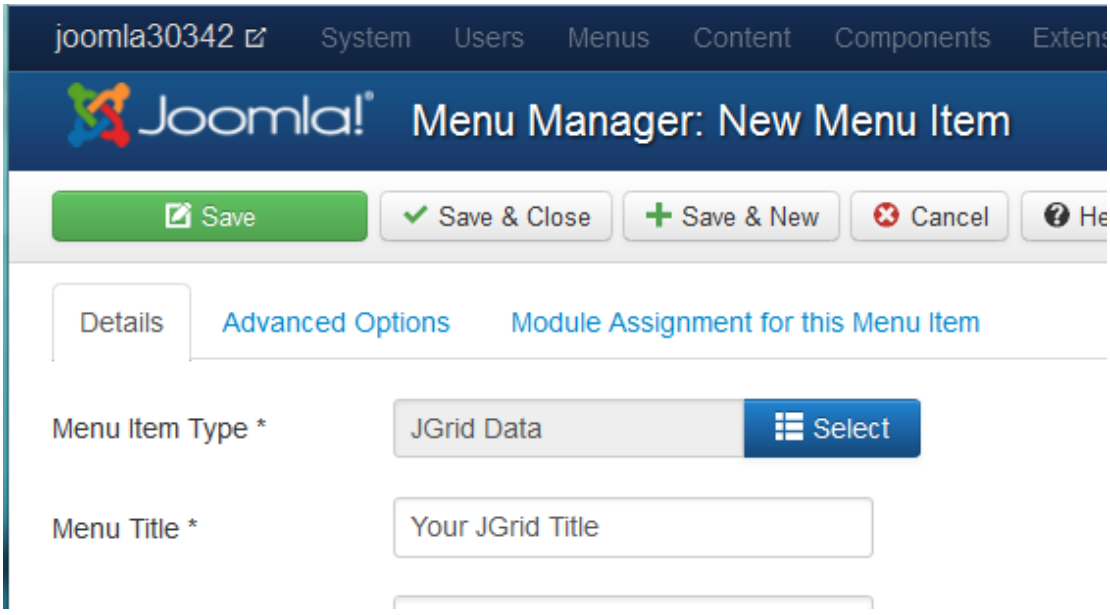
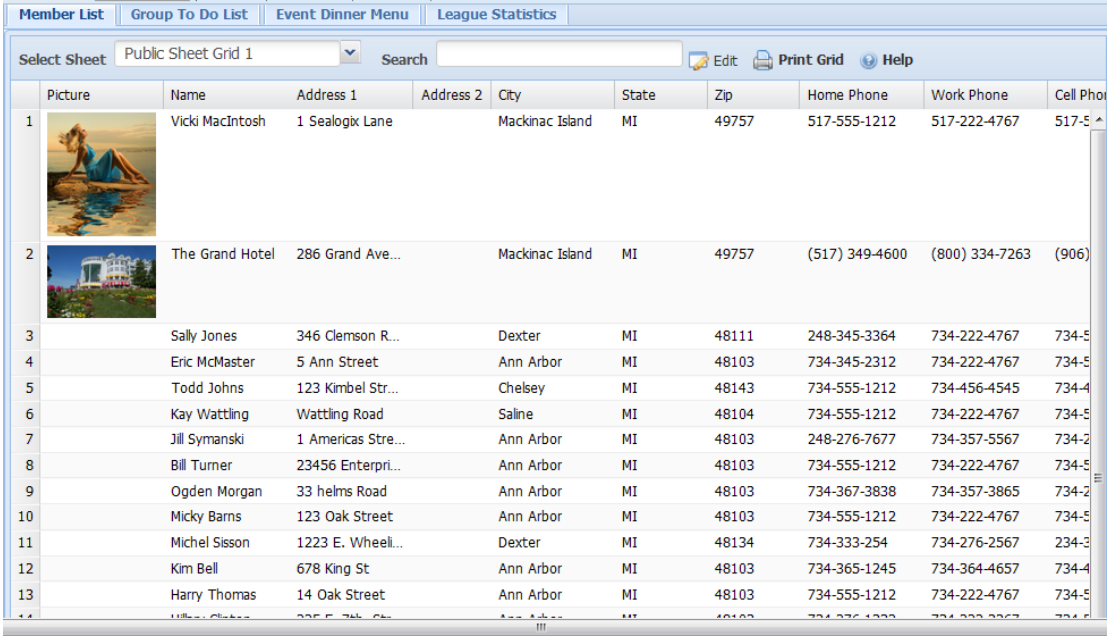


Figure 2.2.4 Completed Joomla Menu Item

The other Joomla Menu Item setting fields are optional. Click the "Save & Close" button. The JGrid sample Tab Panel may now be viewed on the Joomla Front End by selecting the "Your JGrid Title" menu selection.



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13		Harry Thomas	14 Oak Street		Ann Arbor	MI	48103	734-555-1212	734-222-4767	734-5

Figure 2.2.4 JGrid Sample Data

2.3. Adding JGrid Modules to Your Joomla Pages

Club Members can also add Joomla Modules to their Joomla Web site Pages. From 1 to 12 Module Independent Modules, each with its own tab panel and associated set of Independent Grids. By using the new SQL Query Grid type you can Query data from a Master Grid (For example in the JGrid Component) and Display in one of Your Module Grids. The SQL query Grid Setup is explained in Section 7.1 Below.

To Install a JGrid Module:

- Login to the JGrid Web Site http://www.datagrids.clubsareus.org/
- The Download Tab will appear on the top menu bar. Select the JGrid version that is compatible with your Joomla Version. Download the JGrid Module (mod_jgrid..) and JGrid Module (Joomla…module_pack_unzip_before_loading_to_joomla) (If you plan to use more than one module) to your local machine as a zip file package.
- If you are adding Modules from the Module Pack you must unzip the module pack first and upload the individual modules “mod_jgrid2…zip” etc..
- From the backend of your Joomla site (administration) select Extensions -> Install/Uninstall.
- Click the Browse button and select the extension package on your local machine “mod_jgrid…zip”.
- Click the “Upload & Install” button.

For Joomla Administrator Documentation Reference: http://docs.joomla.org/Administrators

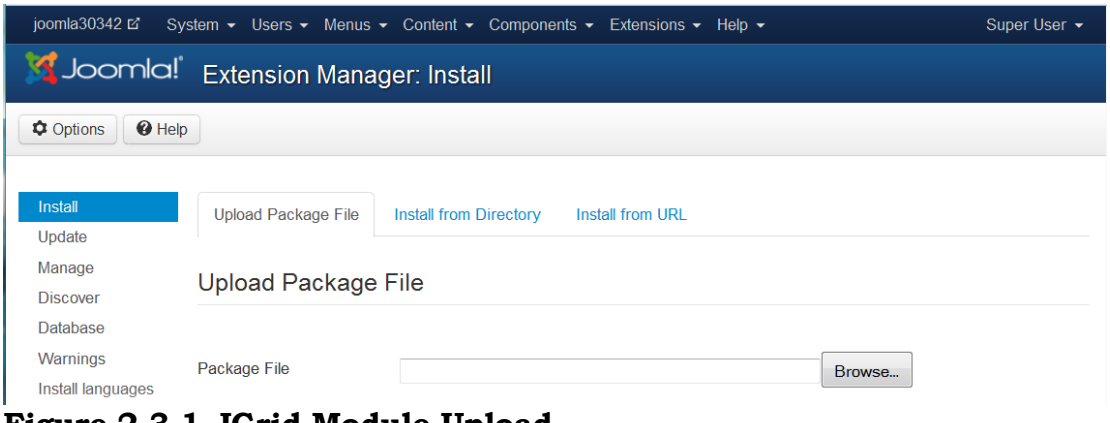


Figure 2.3.1 JGrid Module Upload

You must configure and enable JGrid Modules as shown in the Joomla Documentation http://docs.joomla.org/Modules. But note that you must add at least one grid with at least one column to the JGrid Module or it will cause you Joomla page to error. So do not enable the module for the Joomla front end until you have added at least one grid

and on column to the grid.

3. JGrid 30 Minute Quick Start Guide

3.1. Defining Your Data Grids

Start by logging into the Joomla Administrator Backend and under "Components" select "jgrid-application-grids". The JGrid Configuration Tab Panel will appear.

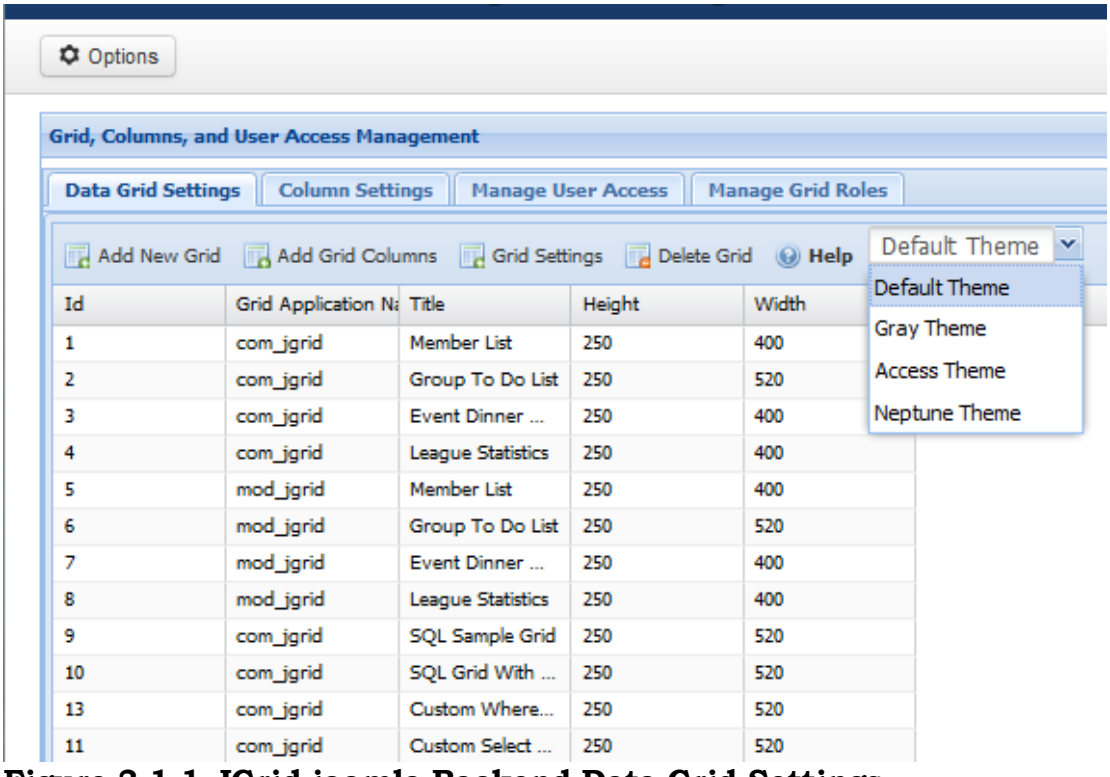


Figure 3.1.1 JGrid joomla Backend Data Grid Settings

The first Tab "Data Grid Settings" will be selected. The sample grids will already be populated. You can either just modify one of these sample grids to re-purpose for your use or click "Add New Grid" on the tool bar to create a new entry at the bottom of the list of grids. If you decide to re-purpose one of the demo grids just double click on the "Title" column cell and type in your grid name. This name will now appear on the front end Tab Panel once you re-query the page. If you decide to add a new grid you must fill out the "Title" column of you new grid. Leave the other columns as default for now. Note the vertical order of the grids defines the left to right order they appear on the front end tab panel. To change the order the tabs will appear just click a grid row and hold down the left mouse key and drag the grid a new

vertical location. Now we are ready to create columns for our new grid.

3.2. Defining Your Grid Columns

Select the “Columns Settings” Tab to define your column templates and the following screen with appear:

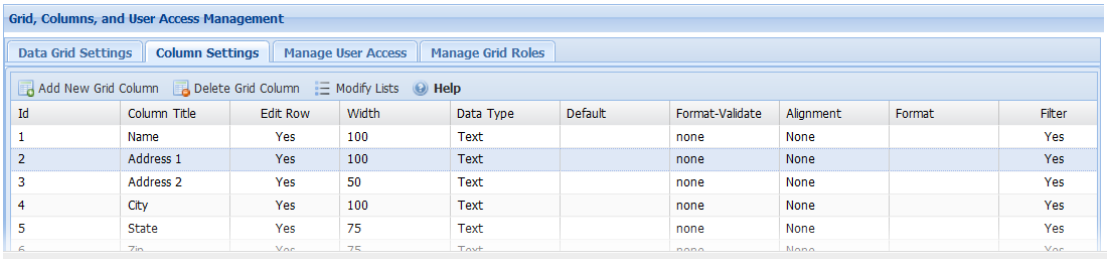


Figure 3.2.1 Column Settings

The sample data columns used in the sample grids are shown. You may either use these sample columns for your grids, edit them and reuse on your grids (However any changes you make will also affect the sample grids), or you can click the “Add New Grid Column” in the toolbar to create a new column template. Double click the column you want to edit and the row editor will come up as shown below in Figure: 3.2.2.

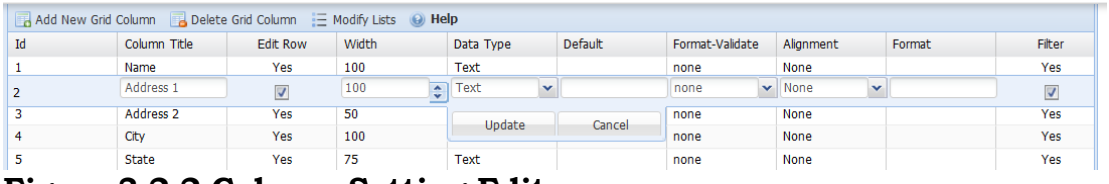


Figure 3.2.2 Column Setting Editor

Update the “Column Title” and accept the default settings or update the “Width”, “Data Type”, “Format-Validate” etc. as your grid requires and click update to save. Detailed descriptions of each column setting are described in section 6.2 below.

3.3. Assigning Columns to Grids

Select the “Data Grid Settings” tab. Select a Grid to add column, then select the “Add Grid Columns” button in the toolbar and the add columns window will pop up as shown:

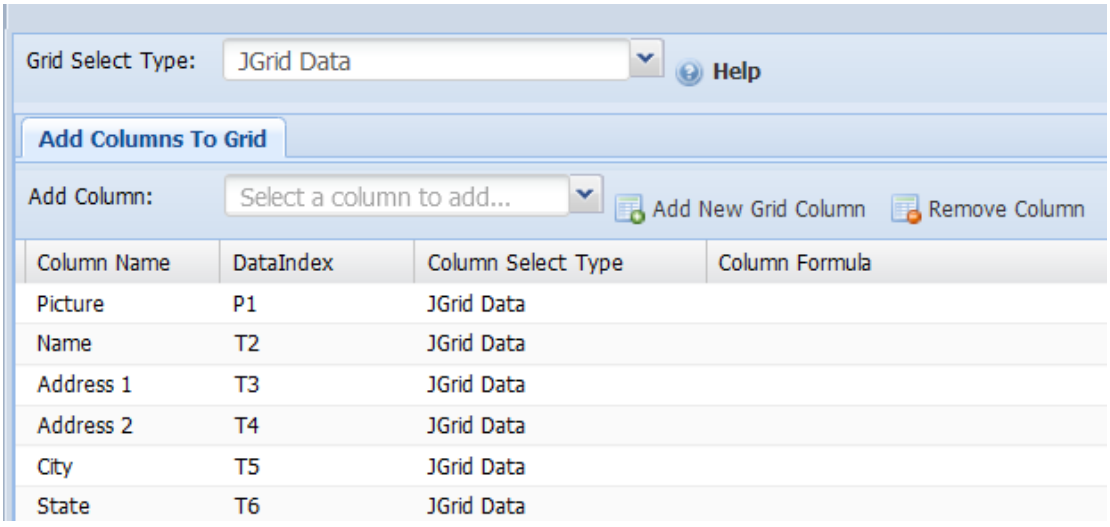


Figure 3.3.1 Add Columns To Grid (JGrid Data Type)

The sample data columns for the "Member List" Sample Grid are shown above. Notice that this sample data is set for Grid Select Type – "JGrid Data". This is the default type. This "Jgrid Data" Grid Select Type allows inputting or importing data you create to the Grid. Selecting Data from the MYSQL database via SQL queries to populate the grid and adding your custom data to the result is described in in Section 7.1 below. To add a new column to the Grid select the "Add Column" selection list box and the following screen with popup:

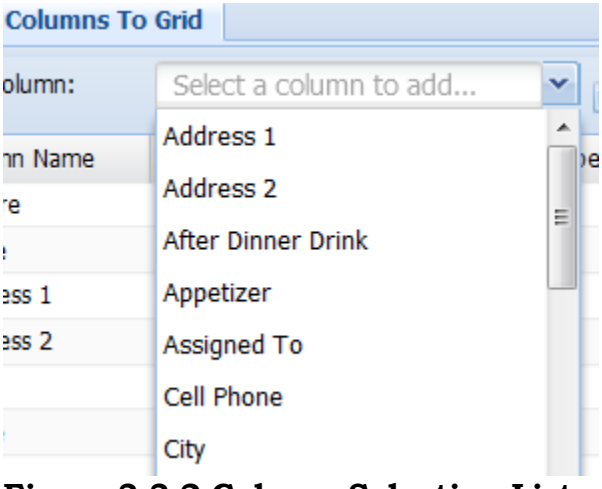


Figure 3.3.2 Column Selection List

Select a column from the list and the list box will collapse and the column name you plan to add with appear in the list box as shown below:

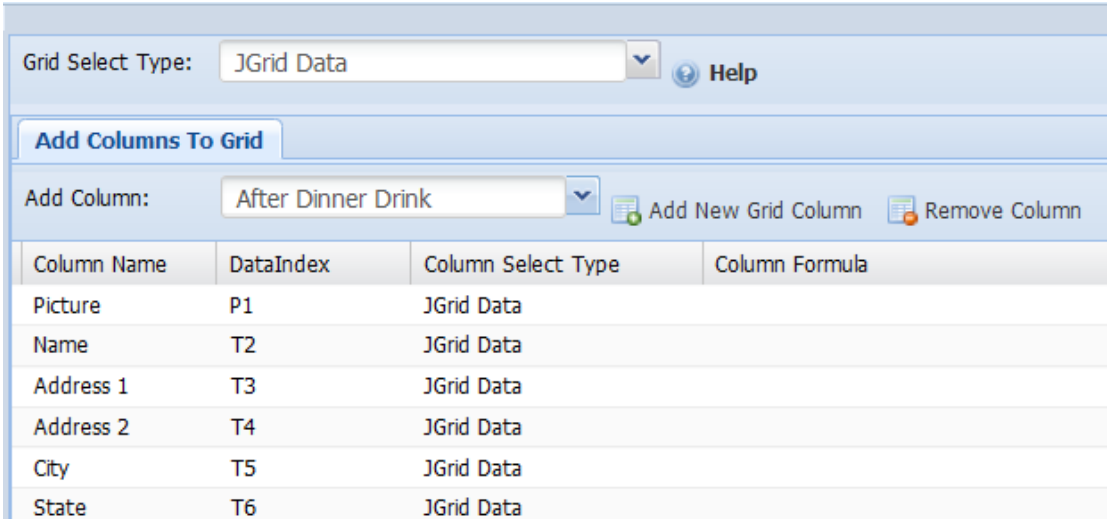


Figure 3.3.3 New Column Selected

Notice the new column "After Dinner Drink" has been selected but not yet added to the grid. Now click the "Add New Grid Column" and the "After Dinner Column" will be added to the grid at the bottom of the column list. The order the columns appear in the list from top to bottom define the order they will be shown in the grid from left to right. To reorder the columns just click with the left mouse key and hold down while you move the column row to a new location. The "Column Select Type" and "Column Formula" Settings are optional and are discussed in Sections 7 and 6 respectively below. You new grid is now ready to test in the Joomla Front End of you Web Site.

3.4. Testing Your New Data Grids on Your Website

Go to the front end of you Joomla Website and click the JGrid Joomla Menu Item you added in Section 2.2 above. Your New Grid should popup with the grids you created in a tab panel similar to the JGrid Sample Tab Panel as shown in Figure 2.2.4 above.

4. Adding Data In Your Grids

4.1. Adding Rows

Log into Joomla as a "Administrator" type user or as a User Type that has been given at least "Add/Delete Row" access to thru the Access Rules backend.

Note: An "Administrator" Type user has full access to all the capabilities of JGrid in the "Free Version" including adding rows, sheets and images to the front end. But to allow other "non-Administrator" users the ability to edit, add rows, or assume full or partial editing rights in the JGrid User front end you will need to buy the "Club" version. The

"Administrator" can then assign progressive access rules to the Joomla default user types as they login, to individual users, or to JGrid created "Roles".

As described above if you are an "Administrative" type user or a user that has been given "Add/Delete Rows" access rights an "EDIT" button will appear in the Tool Bar of your grid. Select this "EDIT" button and the following set of Tool Bar Buttons will appear:

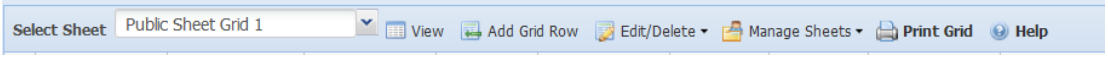


Figure 4.1.1 Data Editing Toolbar

Select the row in your data grid where you want to insert a new row below your selection, next click the "ADD GRID ROW". You may also click the "Edit/Delete" button and the following menu will appear:

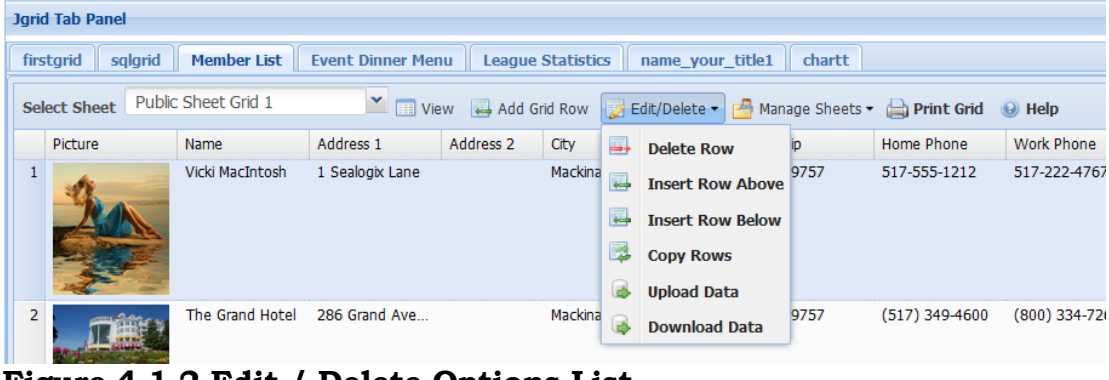


Figure 4.1.2 Edit / Delete Options List

Select the row in your data grid the click the "INSERT ROW ABOVE", "INSERT ROW BELOW", or "DELETE ROW" as you prefer. Continue to add rows until you have enough to get started adding you data as described in 4.2 below.

4.2. Entering Data

Log into Joomla as an "Administrator" type user or as a User Type that has been given at least "Add/Delete Row" access to thru the Access Rules backend. An "EDIT" button will appear in the Tool Bar of your grid. Select this "EDIT" button and then click on the row you want to edit. Normally the "Row Editing" will be enabled and the following Row Editing Bar will appear:

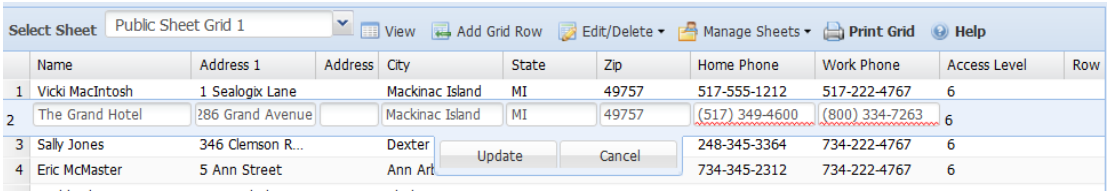


Figure 4.2.1 Row Editor

Add or edit data in each cell. If the column is “Date” type you can enter your dates thru a calendar popup. Various “Data Validators” may apply. For example Email or URL fields will show in red and not let you save until you have the data entered in the correct format. Once you have completed entering data in the row and there are no cells with incorrect formatting or unfilled required entries (red underline). Click “UPDATE” to save the row data to the database or “CANCEL” to cancel your row edits. URL and Email grid cells will turn blue when you return to “View” mode to indicate they are clickable.

URL grid cells allow entry of a description followed by the actual URL value that will be sent to your WEB browser. The format is “Visible Description ^ Actual URL eg http://www.google.com” . You should select this column as a URL type but not format it as a URL in the Administrative setup when using this option.You may also include wildcards in the URL as defined below:

- **@!ROWID** - Will be replaced by the RowId of the grid row the clicked cell is located in.

- **@!T21** – Where T21 is the Grid Column Column ID. The @!T21 will be replaced by the cell value in the column and grid row the clicked cell is located. This allows you to add the values from other cells in the clicked row into your URL to help routing at the WEB server.

4.3. Moving Rows

To move a row, first select the “EDIT” button to enable row editing. Move your mouse curser to the row you want to move and select it and while holding down the left mouse key move the cursor to the new location and release the left mouse key to drop the row into the new location. Note when the cursor changes from a red circle with a line thru it to a green check mark the location you have the cursor on is OK to drop.

To move a continuous group of rows, select the first row in the group then while holding down the “SHIFT” key select the last row in the group. The rows will then all be selected / highlighted. Now select the group while holding down the left mouse key move the cursor to the new location and release the mouse key to drop the group of rows into the new location. Not the cursor with show the number of rows selected.

4.4. Copying Rows

To copy a row, first select the “EDIT” button to enable row editing. Move your mouse curser to the row you want to copy and select it. Then with the row selected press Press the “Copy Rows” button as shown in Figure 4.1.2 above. Now click the selected row again and while holding down the left mouse key move the cursor to the new location and release the left mouse key to drop the copied row into the new location. Note when the cursor changes from a red circle with a line thru it to a green check mark the location you have the cursor on is OK to drop.

To copy a continuous group of rows, select the first row in the group then while holding down the “SHIFT” key select the last row in the group. The rows will then all be selected / highlighted. Then with the group of rows selected press Press the “Copy Rows” button as shown in Figure 4.1.2 above. Now select the group again while holding down the left mouse key move the cursor to the new location and release the mouse key to drop the copied group of rows into the new location. Not the cursor with show the number of rows selected.

4.5 Upload Data

To upload data, first select the “EDIT” button to enable row editing. Move your mouse curser to the row where you want to insert the uploaded data below and select it. Then with the row selected Press the “Upload Data”. See Figure 4.5.1 below:

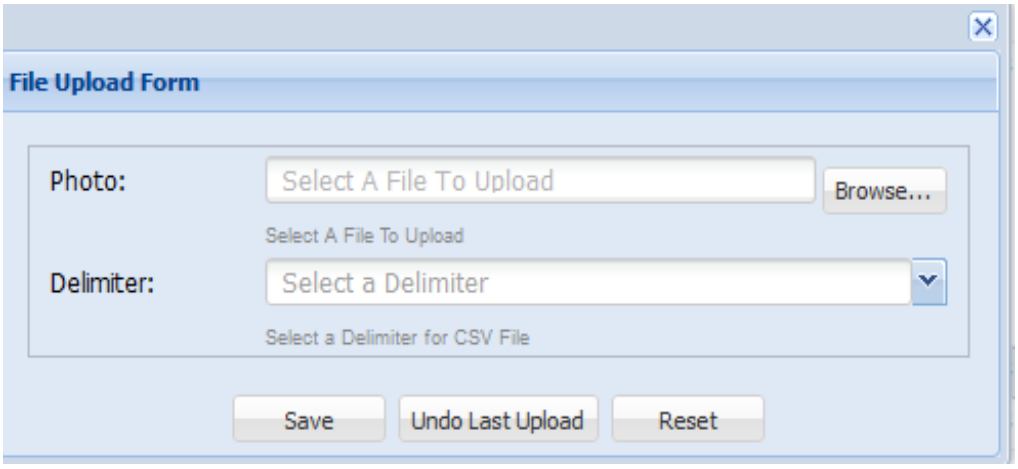


Figure 4.5.1 Upload Data

Browse for the file containing your comma separated Variables (CSV) data. The CSV file must not have title or header text, not have comments, just comma separated data that matches the same number of columns and data types (text, numbers, and dates) as the grid your are inserting the data into. Select the Delimiter used to separate you data as show in Figure 4.5.2 below. Picture can not be uploaded to picture columns and your CSV data can ignore the grid picture columns in the grid count, they will be skipped automatically when uploading. Some special characters will cause the upload to fail, we use the PHP fgetcsv() command to parse the CSV data and PHP command setlocale(LC_ALL,) to set local language. The parameters “LC_ALL”, “CORE_LC”, “CORE_LC2”, “CHARSET”. For example if you are uploading Dutch set parameters in JGRID backend parameter area to:

```
setlocale(LC_ALL, 'en');
define("CORE_LC", 'en');
define("CORE_LC2", 'gb');
define("CHARSET", "utf-8");
```

Search the WEB for settings for your language.

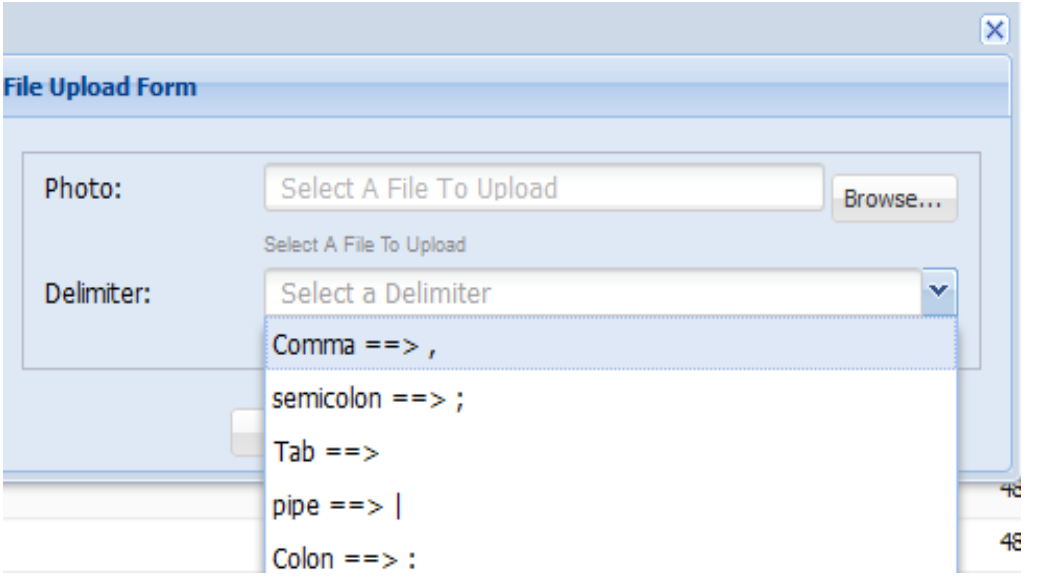


Figure 4.5.2 Upload Data Delimiter Selection

Press the "Save" button to upload your selected CSV file. If you do not like what was uploaded press the "Undo Last Upload" button to remove the last upload from your grid, make corrections to your upload CSV file and try again.

5. The Front End User Experience

5.1. Viewing Data

The main purpose of the JGrid Component is to allow your users to easily view data in a full featured Tab Panel of Custom Data Grids. You can create an almost unlimited number of Grids each with an almost unlimited number of sheets in the format of each grid, each sheet with custom data. As described below Searching, Grouping, Sorting, Filtering, and in the Club version Access Controlled Data Editing as described in 5.5 below. The grid cells my also contain Images or Flash Movies. To access and Image when the Grid is in "View" mode just Double Click the image and the Image popup will appear as shown in Figure 5.1.1 below:

Figure 5.1.1 Image Popup

- Click the “Go To URL” button to go to the URL associated with this image You may enter wildcards in the URL as defined below:

  @!ROWID - Will be replaced by the RowId of the grid row the image is located in.

  @!T21 – Where T21 is the Grid Column Column ID. The @!T21 will be replaced by the cell value in the column and grid row the clicked image cell is located. This allow you to add the values from other cells in the clicked row into your URL. This allows you to add the values from other cells in the clicked row into your URL to help routing at the WEB server

.

Click “Go To Email” to Send an Email to the address associated with this Image as shown in Figure 5.1.2 below. Click “Go To Sheet” to switch to another sheet in this Tab Panel associated with this image, or Click “Download Image” to download this image to you local machine as shown in Figure 5.1.3 below:

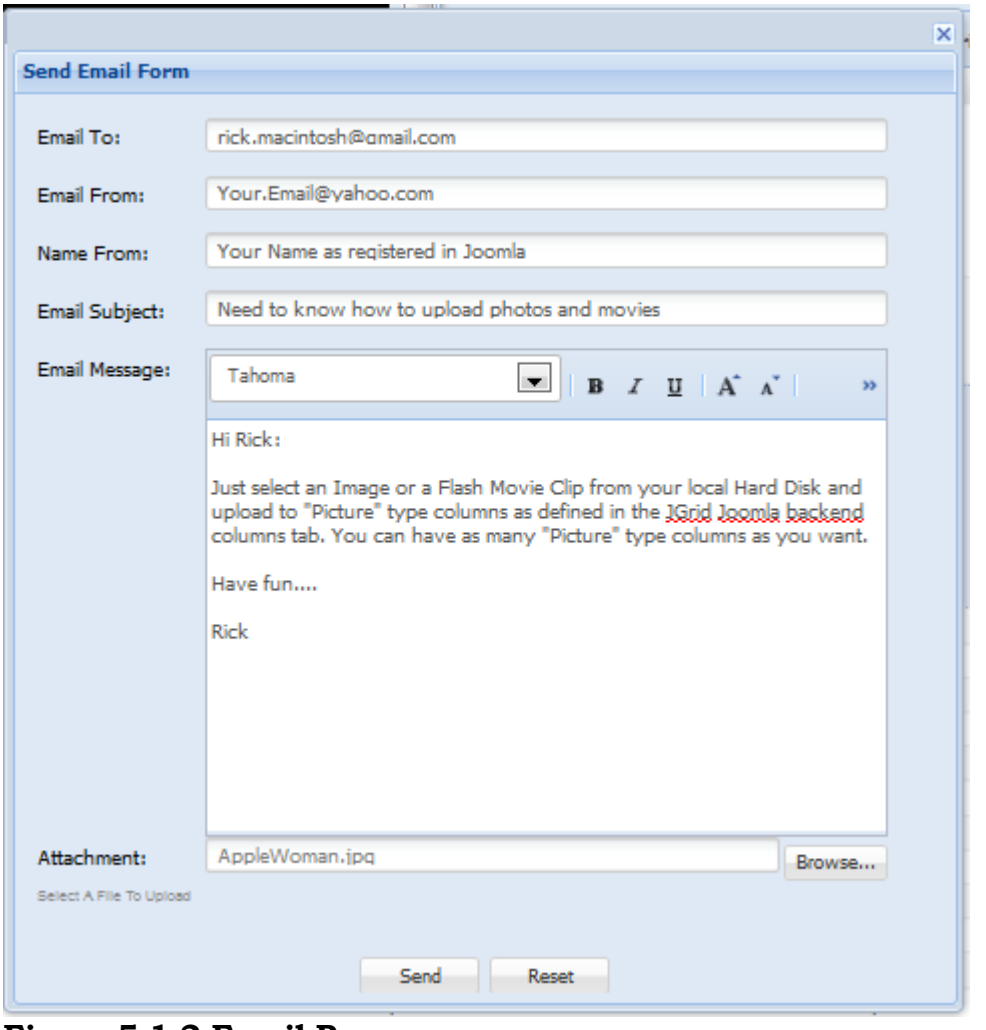


Figure 5.1.2 Email Popup

Enter your Message, attach and image if required and click the “Send” button.

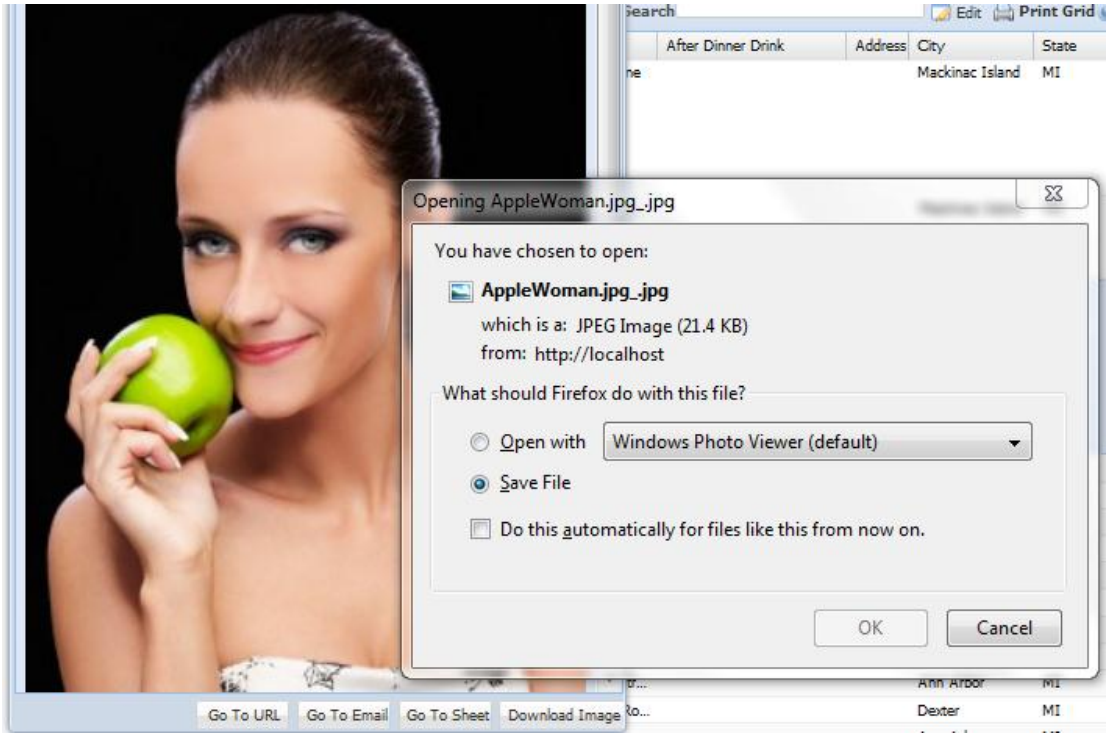


Figure 5.1.3 Image Download

Just click Save and Image will download to your local computer.

The process is similar for Flash Movies / Advertisements, the only difference is that the Flash Movie will plan in the Popup Window, the selections as described above are also available for Flash Movies / Advertisements.

5.2. Searching For Data

To search all cell in your grid enter search words in the "Search" area at the top of the grid. As shown in Figure 5.2.1 below:

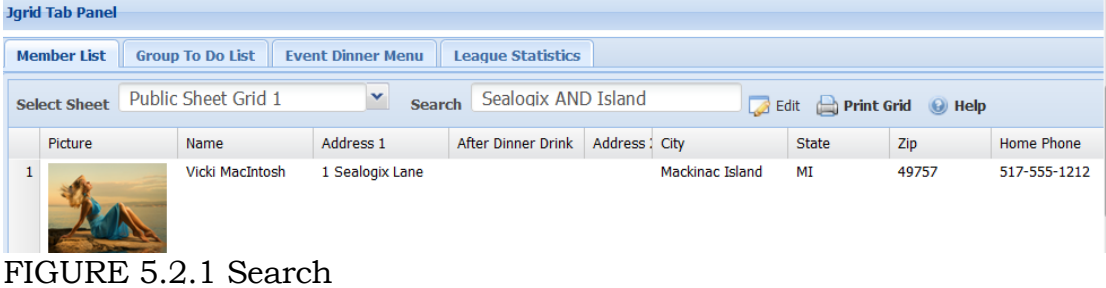


FIGURE 5.2.1 Search

As shown above the words "Sealogix" and "Island" were searched for with the AND operator between. This retrieved one row from the database that contained both. If the "And" had been left out by

default JGrid Search would return all rows with either “Sealogix” OR “Island”. Search supports Boolean expressions using and combination of “AND, OR, NOT, +, -“ including strings of data enclosed by quotes.

5.3. Grouping and Sorting Data

The JGrid grid component allows your users to group or sort data rows by single clicking the arrow on the right hand side of each column as shown in Figure 5.3.1 below:

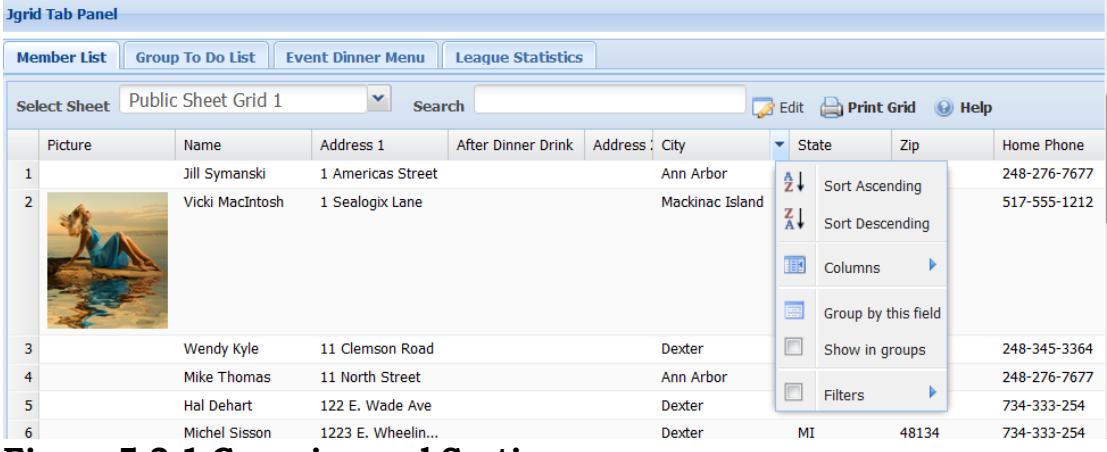


Figure 5.3.1 Grouping and Sorting

As shown above click to sort the rows “sort Ascending” or “sort Descending”. You may also click the “Group by this field”, select a field to group by, then click “Show in groups” and the grid data will show in groups. These selections are user specific and will have to be re-selected by the user each time they reload the JGrid WEB page. The “Joomla Administrator” can define a “Group By Field” and / or a “Sort By Field” that will order the data the each time a user loads the JGrid WEB page as described in Section 6.1 below. Columns my also be hidden or shown by selection the “Columns” tab, but these selections are only active until the user reloads the WEB page.

5.4. Filtering Data

JGrid provided for a full set of User Grid Row Filtering Options. Depending on the column data type, Text, Numeric, Date, and List type filters are supported. This is especially valuable for large data sets to allow the user to page thru just the grid rows that are relevant to them. First Select the Arrow next to the column header you would like to filter and then move you cursor over the filter selection. Just add the filter selection criteria as required to filter for and the data you are looking for. Filters on multiple columns may be

active concurrently. The columns with active filters column name will become bold.

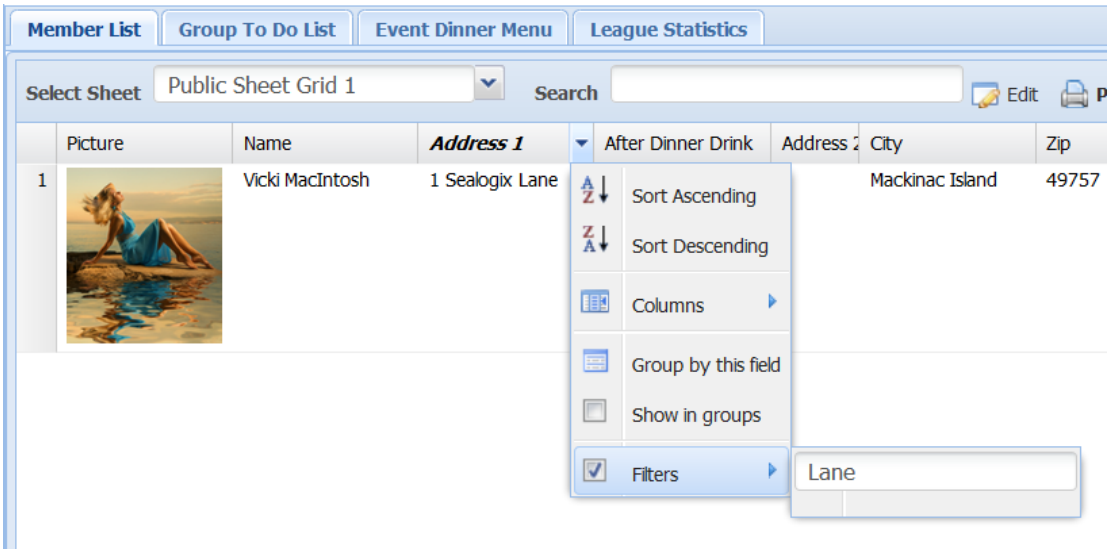


Figure 5.4.1 Text Filter

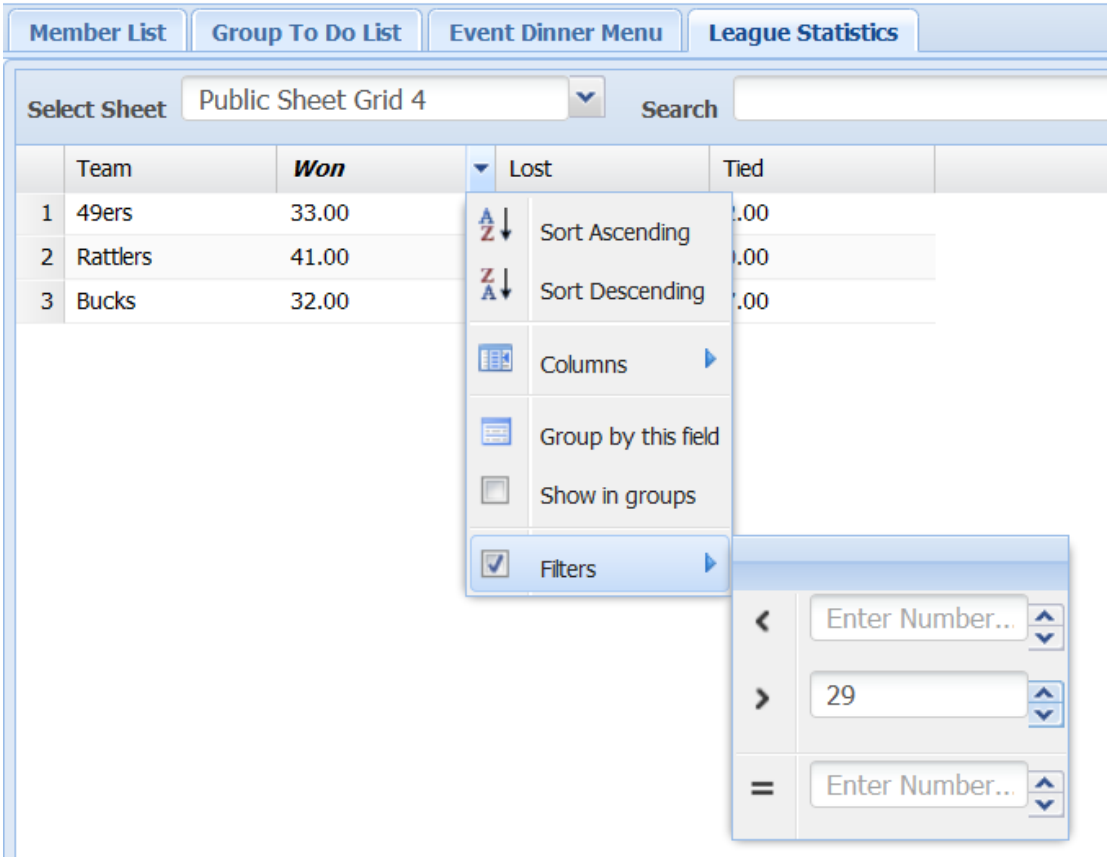


Figure 5.4.2 Numeric Filter

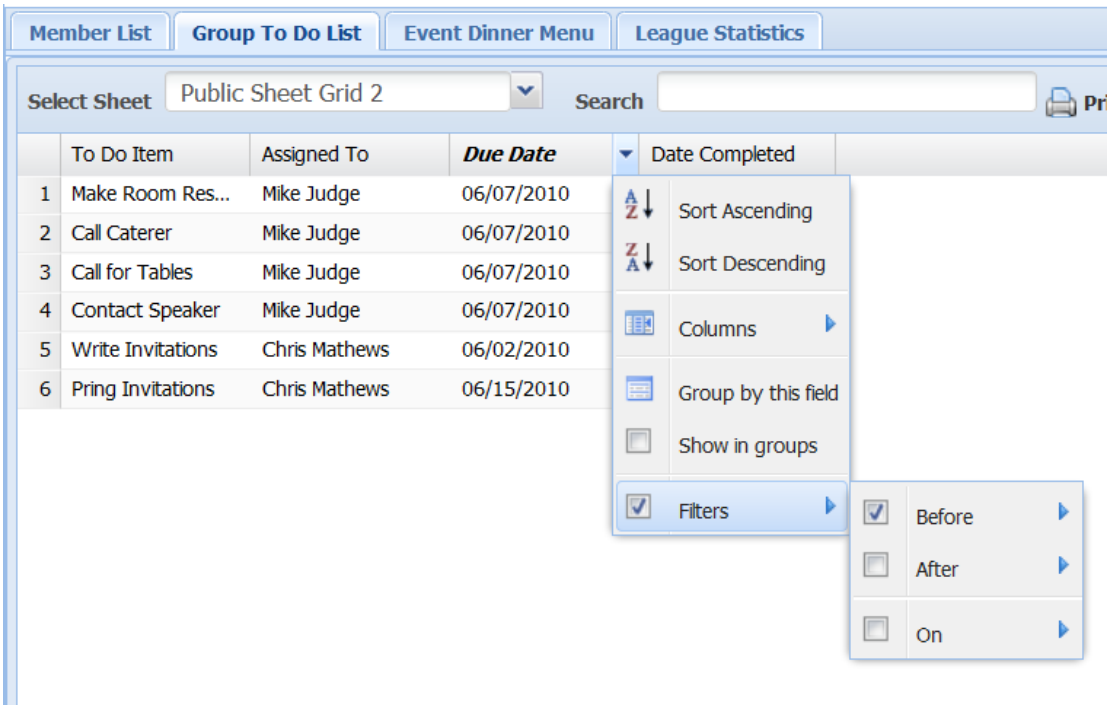


Figure 5.4.3 Date Filter

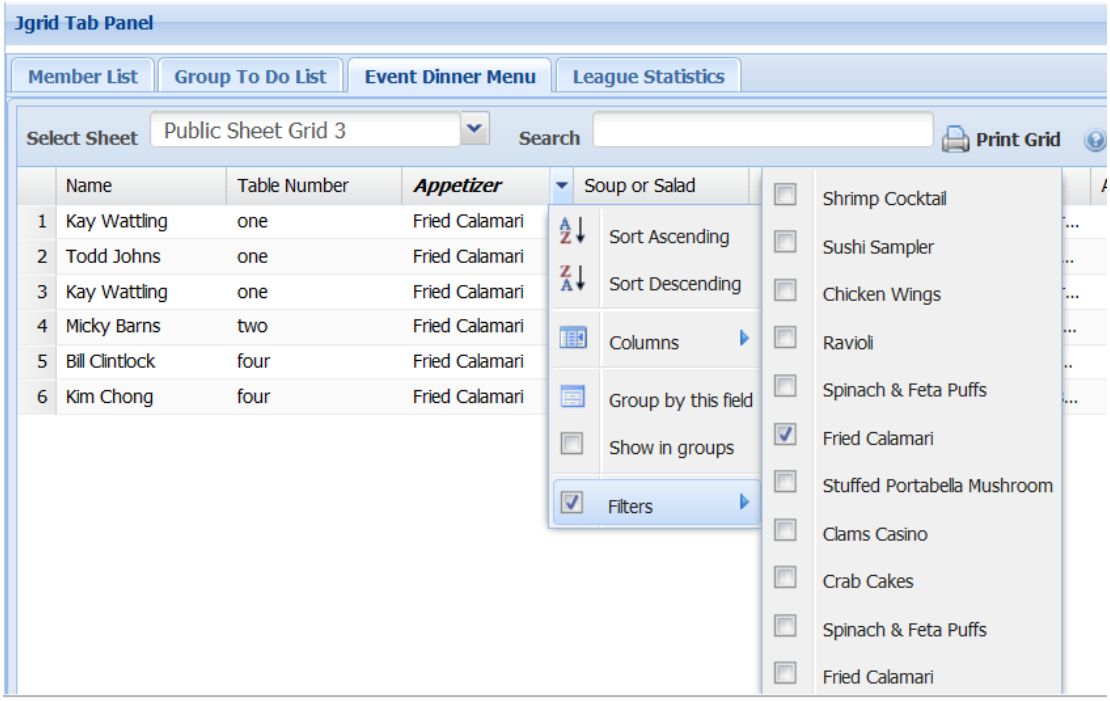


Figure 5.4.4 List Filter

5.5. Editing Data

To edit grid data you need to be logged in as an “Administrator Type User” or if you have the “Club” version the “Joomla Administrator” can assign users various editing rights as described in Section 6.4 below. If you have editing rights the “Edit” button will appear on your grid tab bar. Click this “Edit Button” and the Edition Options will appear on the Tab Bar as shown Below in Figure 5.5.1.

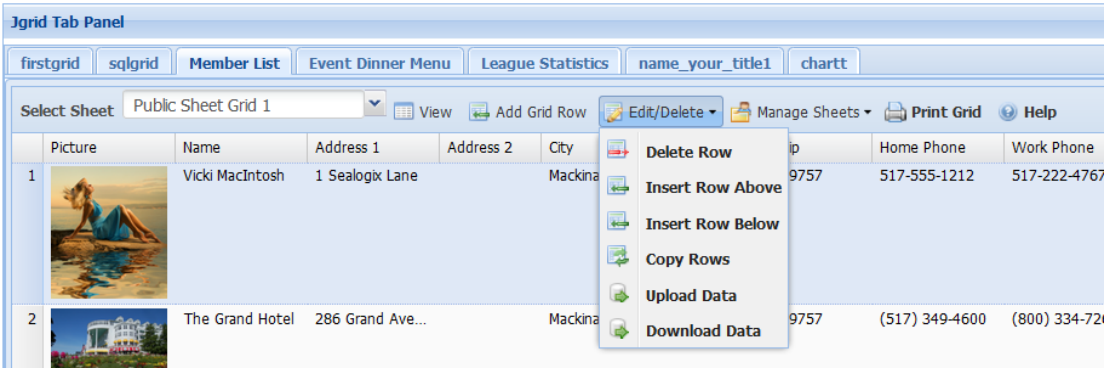


Figure 5.5.1 Editing Menus

Hitting the "View" button will return you to viewing the grid. To Add a row to the grid first select an existing grid row, then either click "Add Grid Row" from the toolbar, which will insert a row below your selection, or select either "Insert Row Above" or "Insert Row Below" to insert a row with respect to the row you have selected. You may also it the "Delete Row" button to delete the row or rows you have selected. To Edit data double click on a text cell and the row editor will appear:

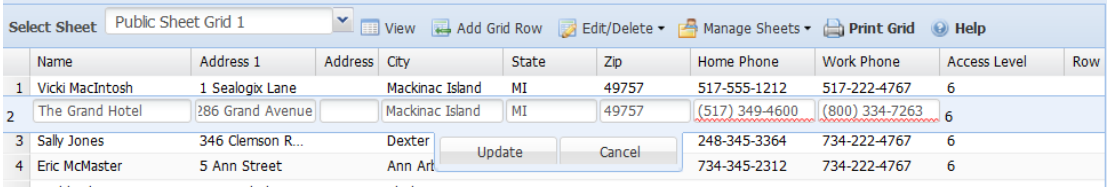


Figure 5.5.2 Row Editor

Add or edit data in each cell. If the column is "Date" type you can enter your dates thru a calendar popup. Various "Data Validators" may apply. For example Email or URL fields will show in red and not let you save until you have the data entered in the correct format. Once you have completed entering data in the row and there are no cells with incorrect formatting or unfilled required entries (red underline). Click "UPDATE" to save the row data to the database or "CANCEL" to cancel your row edits.

To add an Image or a Flash Movie double click on a Picture Type Column and the following popup will appear as shown in Figure 5.5.3 below:

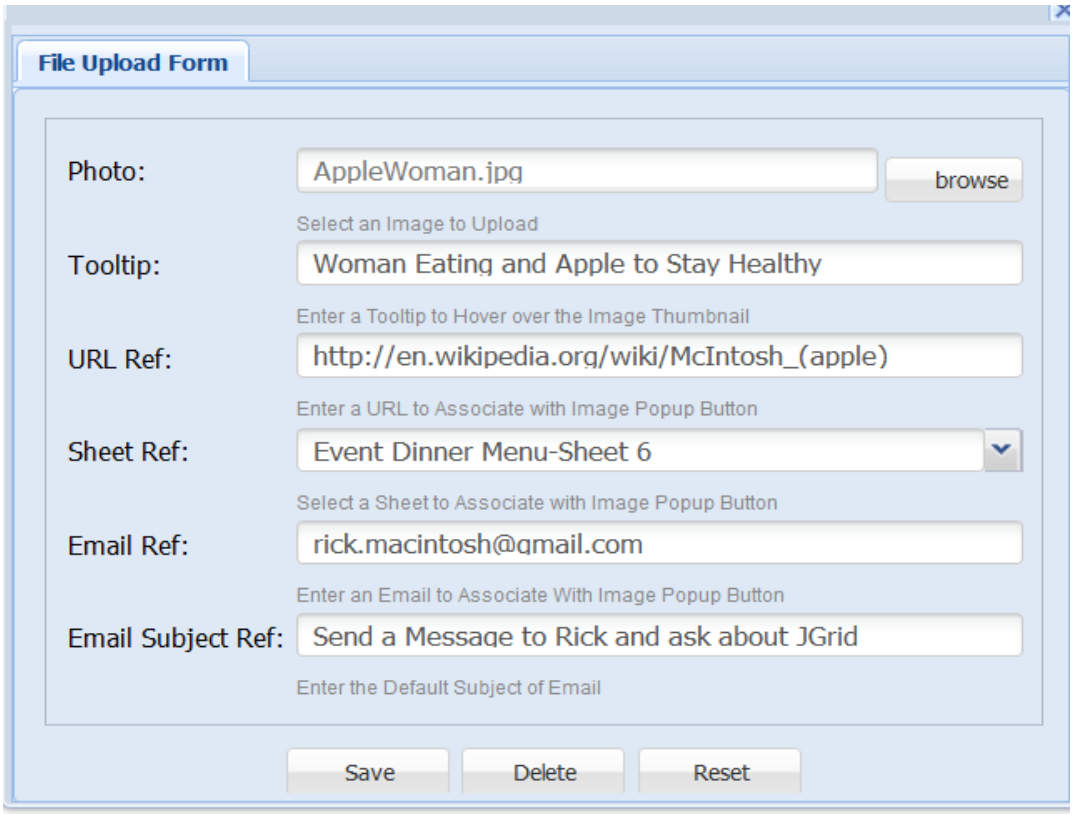


Figure 5.5.3 Image Upload

Fill out the Popup window data as described below. Only fill only the Photo image location is required:

- **Photo:** Select the "Browse" button and select the Image file from your local hard disk to upload to the selected Grid "Picture" column cell.
- **Tooltip:** Enter a tool tip that will display when a user hovers the cursor over the image when the grid is in "View" mode.
- **URL Ref:** Enter a URL to associate with this picture. URL will be selectable from the Image popup when grid is in "View" mode.
- **Sheet Ref:** Enter a Grid Sheet from the selection list by selecting the arrow on the right to associate with this picture. Any Grid in this Tab Panel will be selectable in the list. This sheet will then be selectable from the Image popup when grid is in "View" mode.
- **Email Ref:** Enter an Email Address to associate with this Picture. Email address will be selectable from the Image popup when grid is in "View" mode. When selected it will popup an

Email window addressed to this address.

- **Email Subject Ref:** Enter the Subject that will default into the Email as addressed above.

Once completed click save: To edit an existing Image Just Double Click the existing image and the above popup will appear. Edit the data fields and save.

To enter a Flash Movie (.swf) file into a grid cell the process is similar except both the link to the Flash.swf file and if desired an image file to display in the cell to describe/advertise the flash movie must be entered as shown below in Figures 5.5.4 and 5.5.5. If no image is entered the cell will default to the Flash Movie Icon:

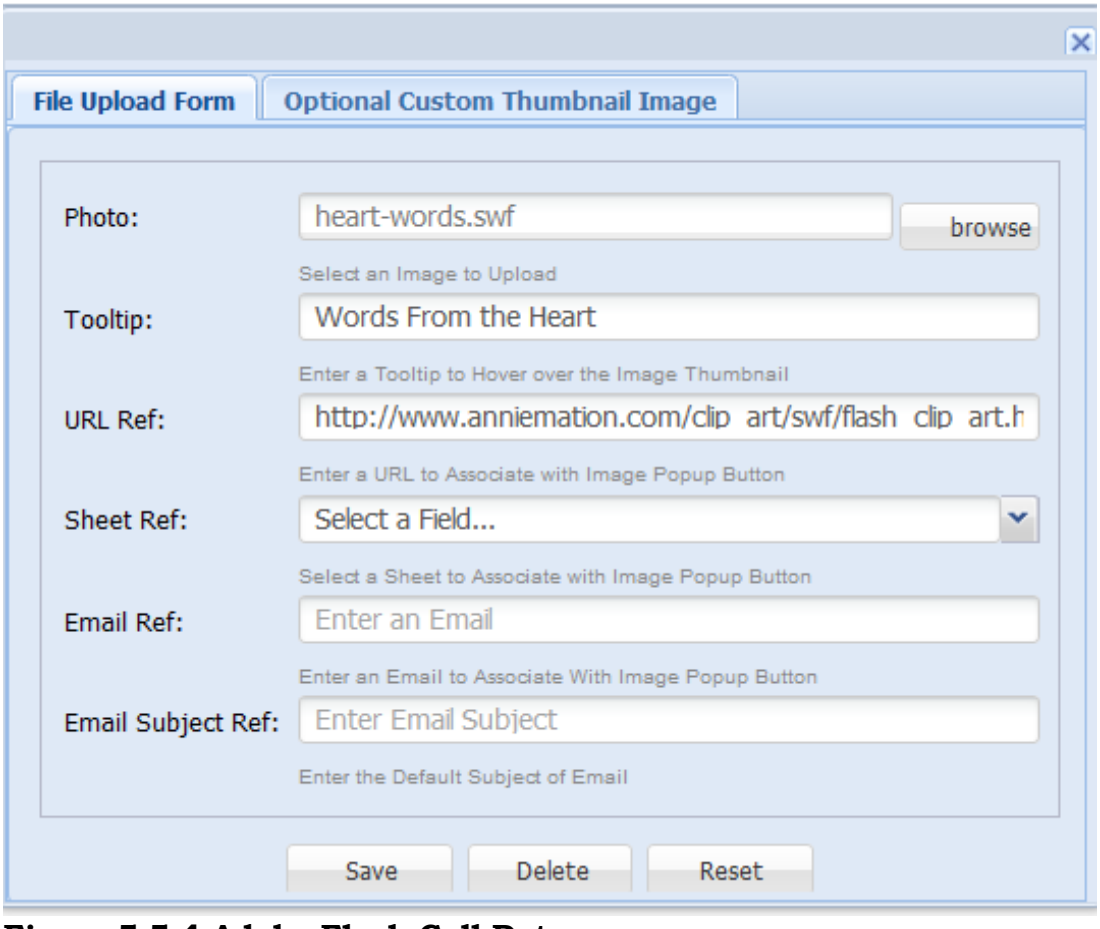


Figure 5.5.4 Adobe Flash Cell Data

Click the Photo “Browse” button and select an “SWF” type Adobe Flash Movie file to upload. All other fields are optional and the same as described above for an Image file. Notice when you select a type ‘SWF. File an additional Tab appears “Optional Custom Thumbnail Image”. Click this tab to add an Image that will appear in the cell to Describe / Advertise the Flash Image that will play when the cell image is selected with the grid is in “View” mode. See Figure 5.5.5 below:

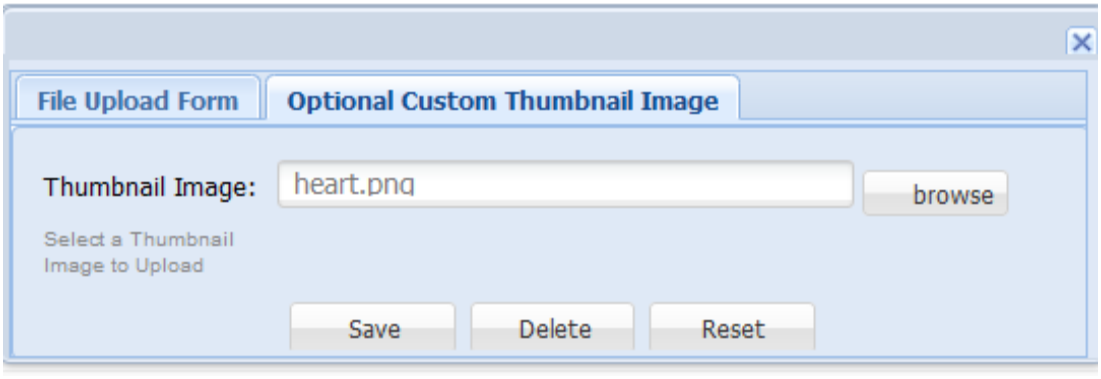


Figure 5.5.5 Image Describing / Advertising Flash Movie

5.6. Printing and Downloading Data

To Print a Grid simple select the “Print” button and a printable grid will popup as show in Figure 5.6.1 below:

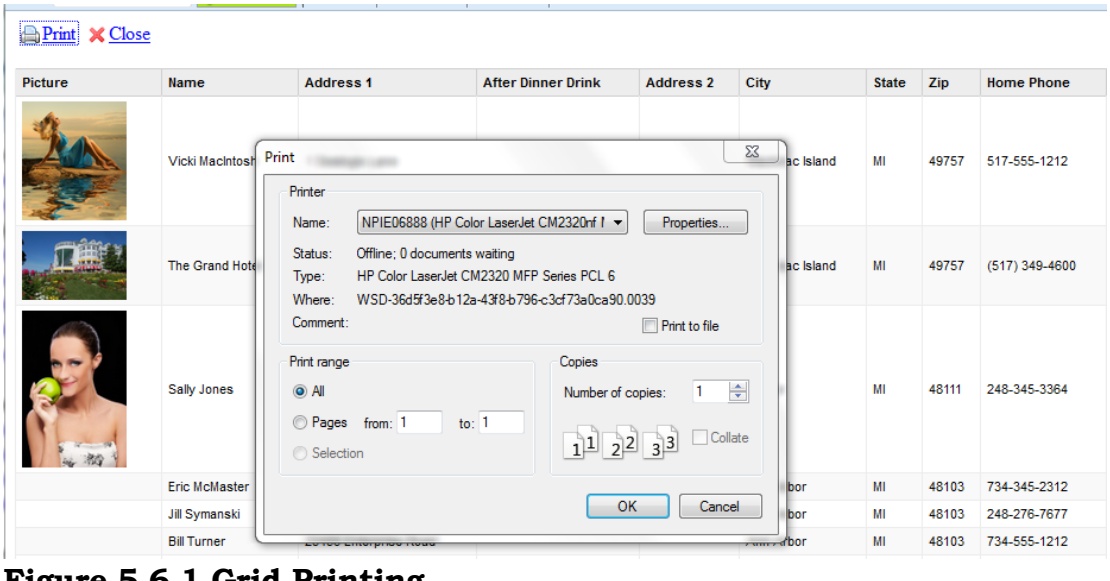


Figure 5.6.1 Grid Printing

Click the “Print” button in the upper left and the print popup from

you local computer will popup as shown above. Select a printer in click “OK” and the grid will print. To cancel click the “Close” button in the upper left.

To down load grid data select the “Download Data” button as shown in Figure 5.5.1 above. The download popup shown in Figure 5.6.2 below will display:

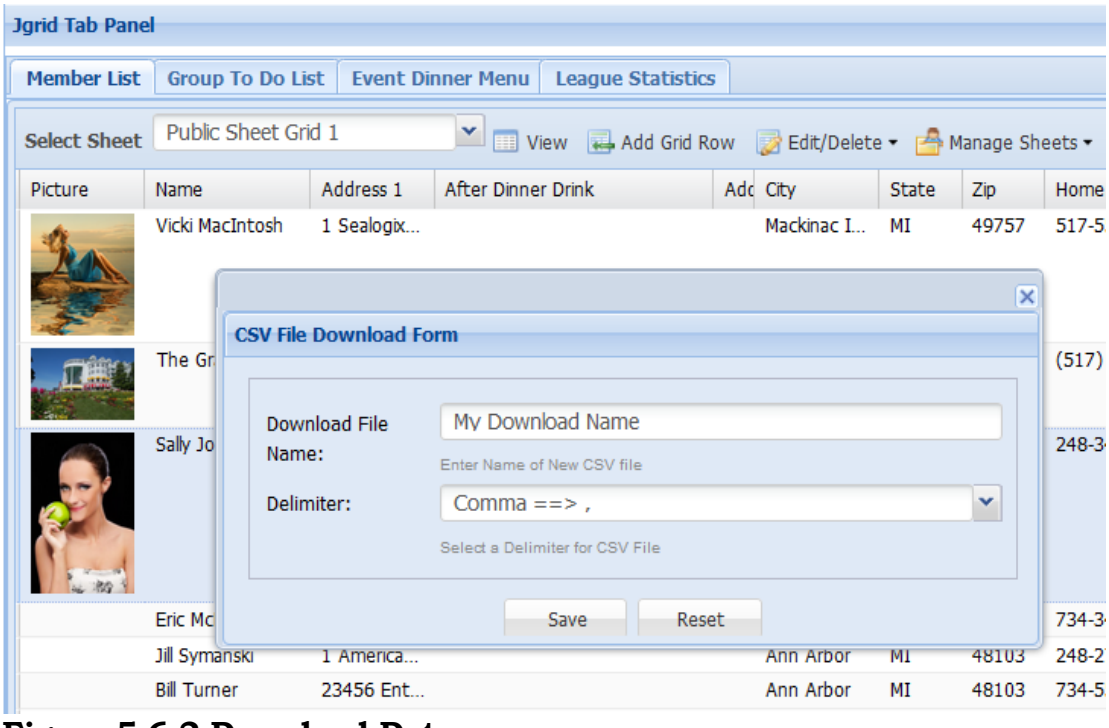


Figure 5.6.2 Download Data

Enter a filename for the download data and a delimiter to separate cell values. Comma, semicolon, tab, pipe, and colon are supported in dropdown list under the arrow on the right. Picture cell images are not downloaded, just the text reference data to the stored image.

5.7. Manage Sheets

To add a new Sheet of Data to a Grid click the “Manage Sheets” button on the grid toolbar.

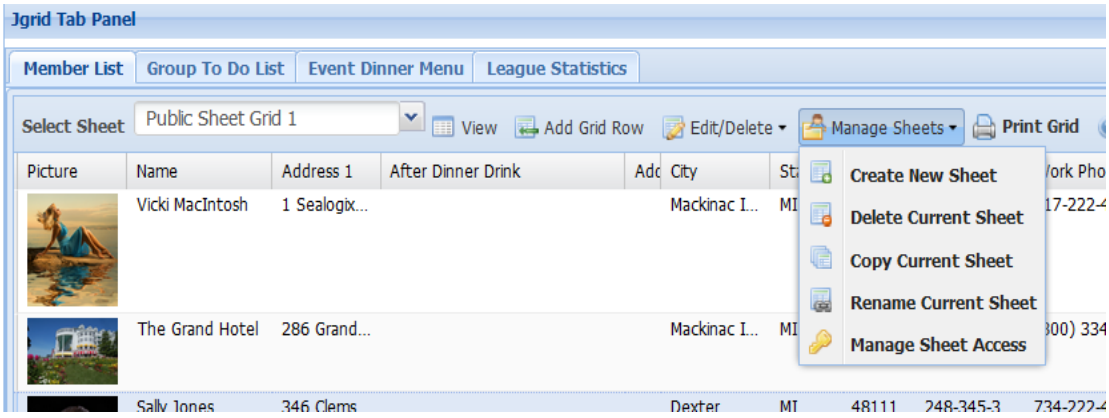


Figure 5.7.1 Manage Sheets

As shown in Figure 5.7.1 below you can “Create”, “Delete”, “Copy”, “Rename” and “Manage Sheet” Access depending on the users Access Rights as assigned in Section 6.4 below. Every grid can have multiple sheets of data that use the same column format, but have a unique set of data. The data on these sheets can be combined by creating Custom SQL calls that pull data from multiple sheets into a summary view as described in Section 7.2 below. Select “Create New Sheet” and fill out the new sheet data as described below in Figure 5.7.2.

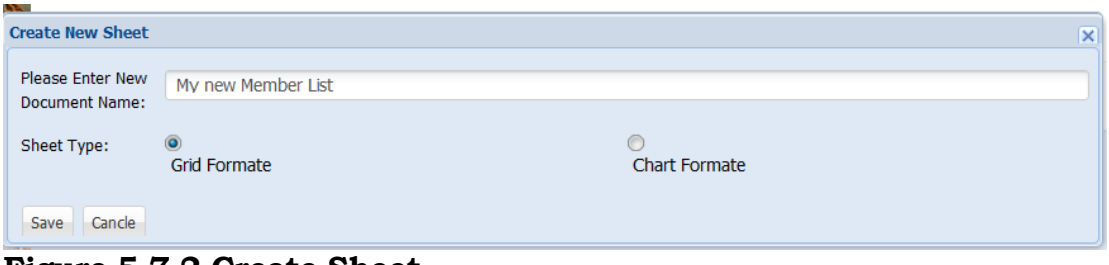


Figure 5.7.2 Create Sheet

The Create Sheet form will default to ‘Grid Format”. If creating a new sheet of data this is the correct setting. By selecting “Chart Format” the form will change to define a chart that will popup using the data from the selected sheet. We will cover chart configuration in 5.8 below.

Enter the name of the new sheet you are creating and click Save. A new sheet will be created in the same grid column format as shown in Figure 5.7.3 below. Notice you can switch between sheets with from the dropdown list in the upper left of the grid toolbar.

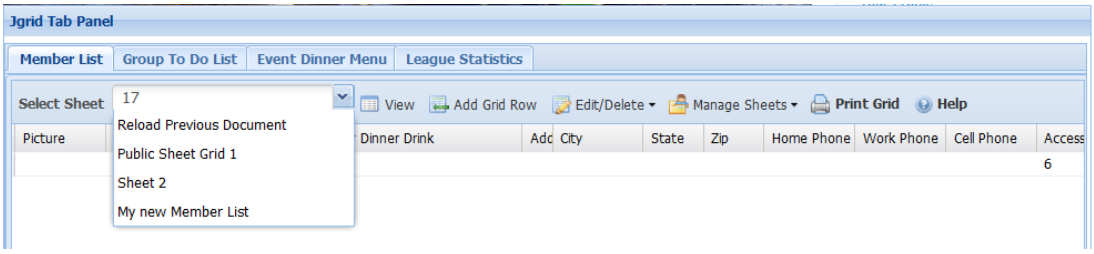


Figure 5.7.3 New Grid Sheet

- Delete Current Sheet: Select the "Delete Current Sheet" selection in 5.7.1 above and the current sheet you are on will be deleted. You are asked to confirm this deletion. All data in the sheet will be permanently deleted.

- Copy Current Sheet: Select the "Copy Current Sheet" selection in 5.7.1 above and a popup will appear asking for the name to give to the copied sheet as shown in Figure 5.7.4 below.

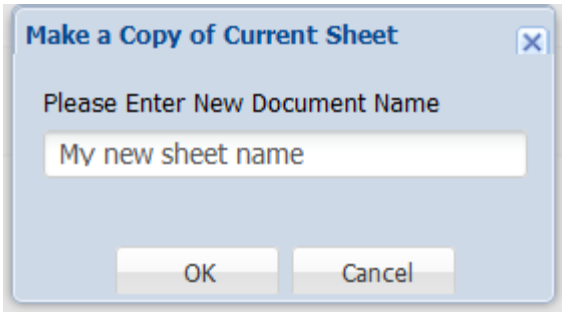


Figure 5.7.4 Copy Sheet

Enter your new sheet name and press the "OK" button. A new sheet will be created and all of the text data and images from the sheet you were on will be copied to a new sheet with the new name and the new sheet selected.

- **Rename Current Sheet**: Select the "Rename Current Sheet" selection in 5.7.1 above and a popup will appear asking for the new name of the current sheet as show in figure 5.7.5 below.

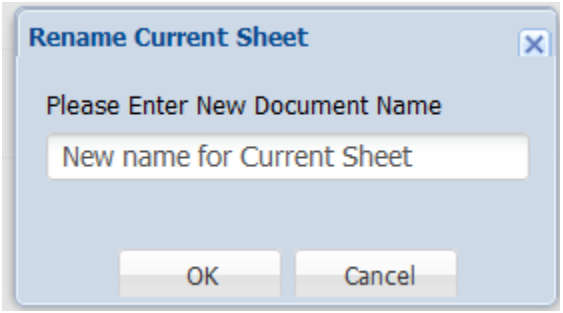


Figure 5.7.5 Rename Sheet

Give the Sheet a new name as shown above and click the "OK" button to rename the current sheet.

- **Manage Sheet Access**: Select the "Manage Sheet Access" selection in 5.7.1 above and a popup will appear allowing a user with 'Sheet Manager" access rights to modify other users access rights. This "Setting Access Control Rules" capability is only available in the JGrid Club Version. "Access Rules" configuration is described in Section 6.4 below, however on the front end Access Rules can only be created for sheets in the current grid as shown in Figure 5.7.6 below, rather for all grids and associated sheets in the JGrid Joomla backend configuration menu as described in Section 6.4 below.

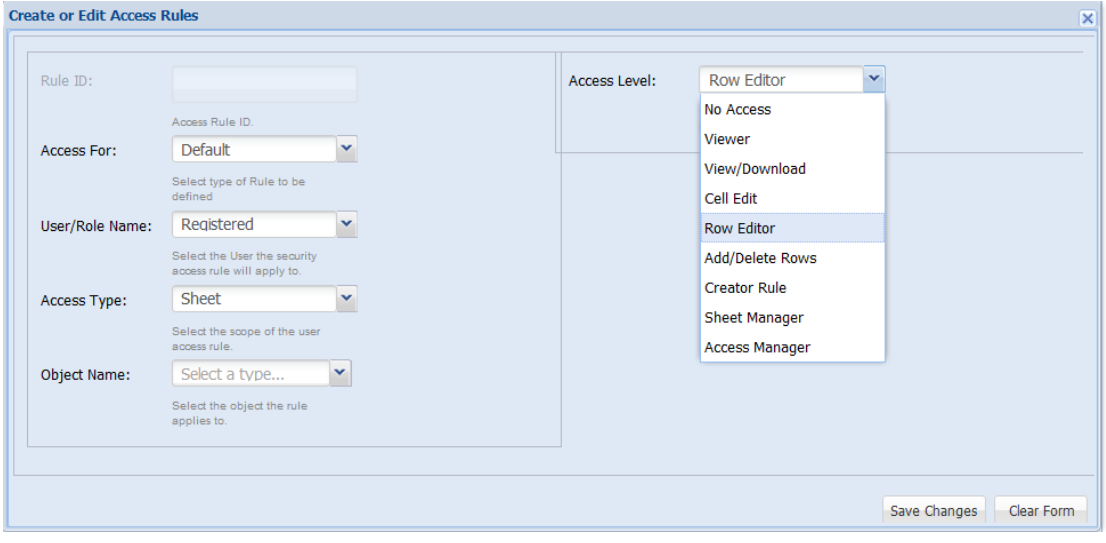


Figure 5.7.6 Front End Access Rules Configuration

5.8. Creating and Viewing Charts

As shown in Section 5.7 above Select “Create New Sheet” or “Edit Existing Sheet” and the Create New Sheet window will popup and select the “Chart Format” radio button as shown in Figure 5.8.1 below. Note when you click the “Edit Chart Sheet” the popup will default to Chart Format since the only editing you can do on this sheet other than changing the name is to create a chart. If you want to just change the name then select “Grid Format” and change the name, otherwise if you want to add a chart to this data grid then follow the instructions below. When you create a new sheet it defaults to “Grid Format”, if you want to also have a chart for this data grid then just Select the “Chart Format” selection at initial creation and follow the instructions below:

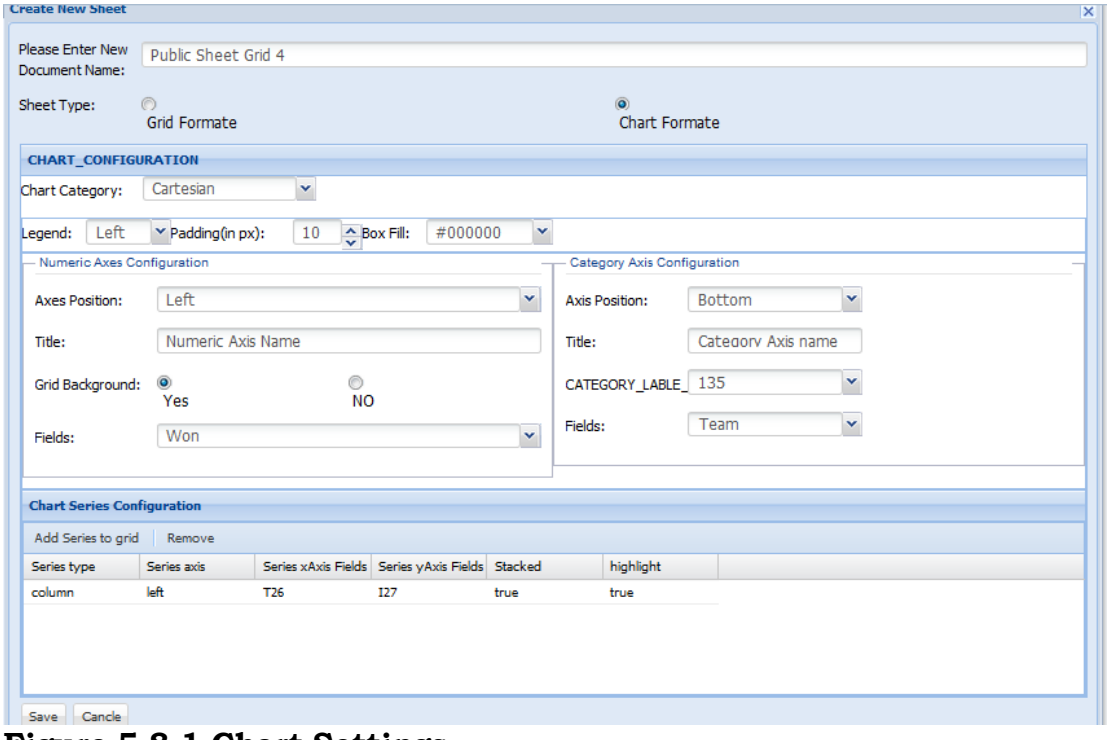


Figure 5.8.1 Chart Settings

Enter the configuration setting as shown in Figure 5.8.1 and outlined below to create a chart that will be created from the Numeric data (Integer or Number type columns) and associated text fields. Once a chart is created a button will appear on the grid toolbar allowing the user to click and view chart data in a popup

window as shown below in figure 5.8.2.

- **Chart Category:** From the dropdown list select chart type:
  1. **Cartesian:** This Cartesian Chart type should be selected to enable the Sub Chart Types listed below:
     - Column – See Figure 5.8.2
     - Bar – See Figure 5.8.3
     - Line – See Figure 5.8.4
     - Area – See Figure 5.8.5
     - Scatter - See Figure 5.8.6
     - Mixed Chart (Column and Line) – See Figure 5.8.7

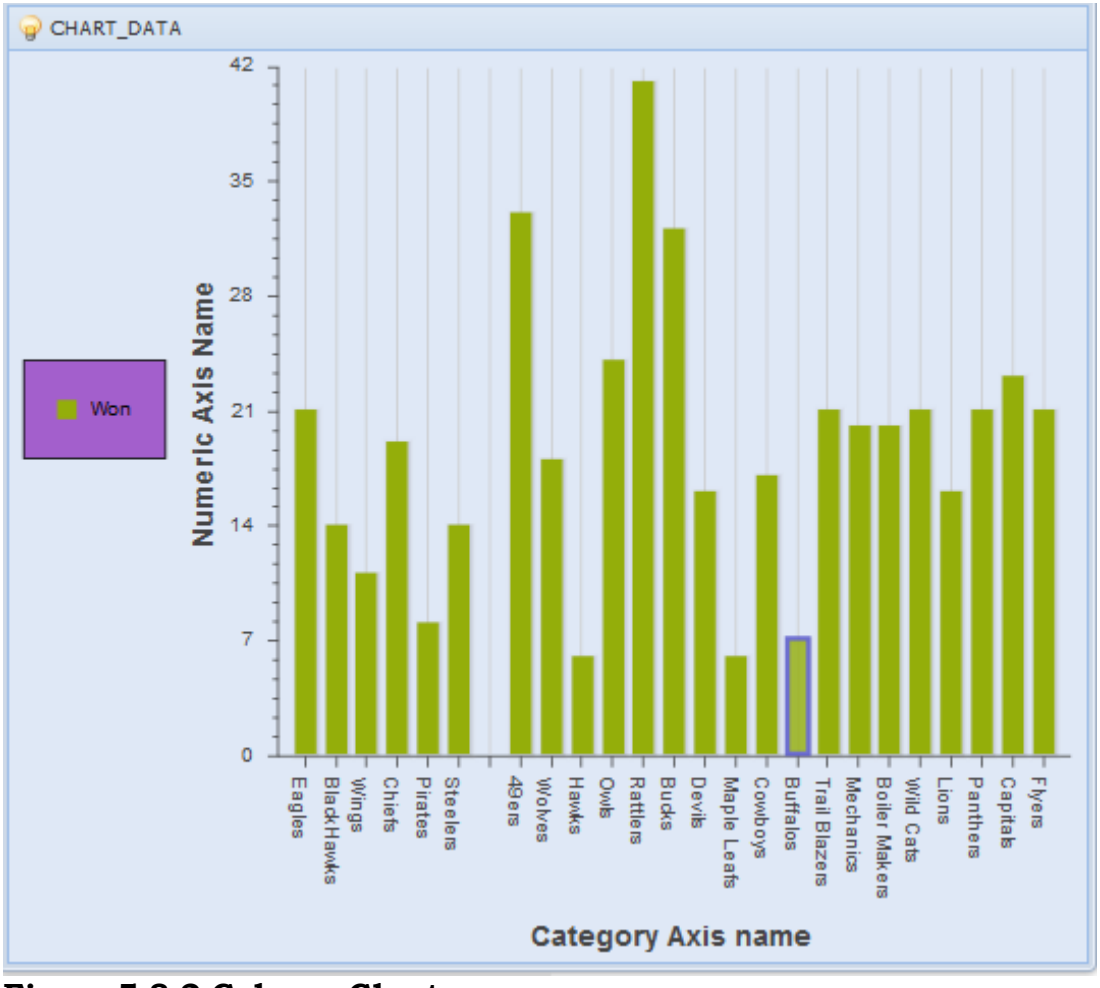


Figure 5.8.2 Column Chart

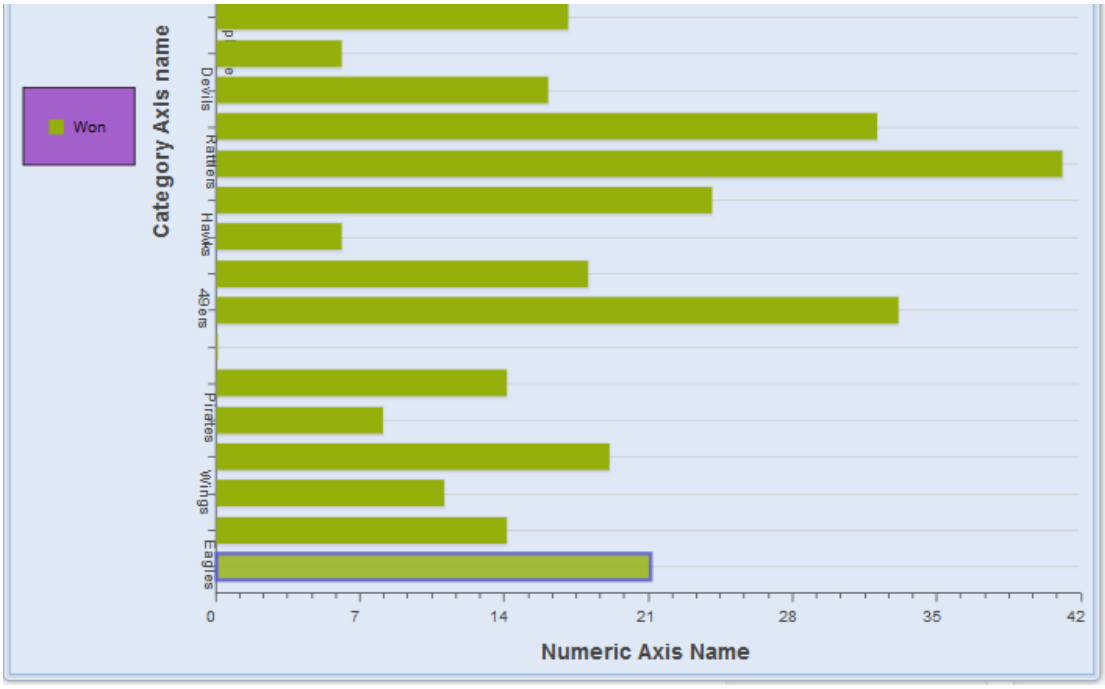


Figure 5.8.3 Bar Chart

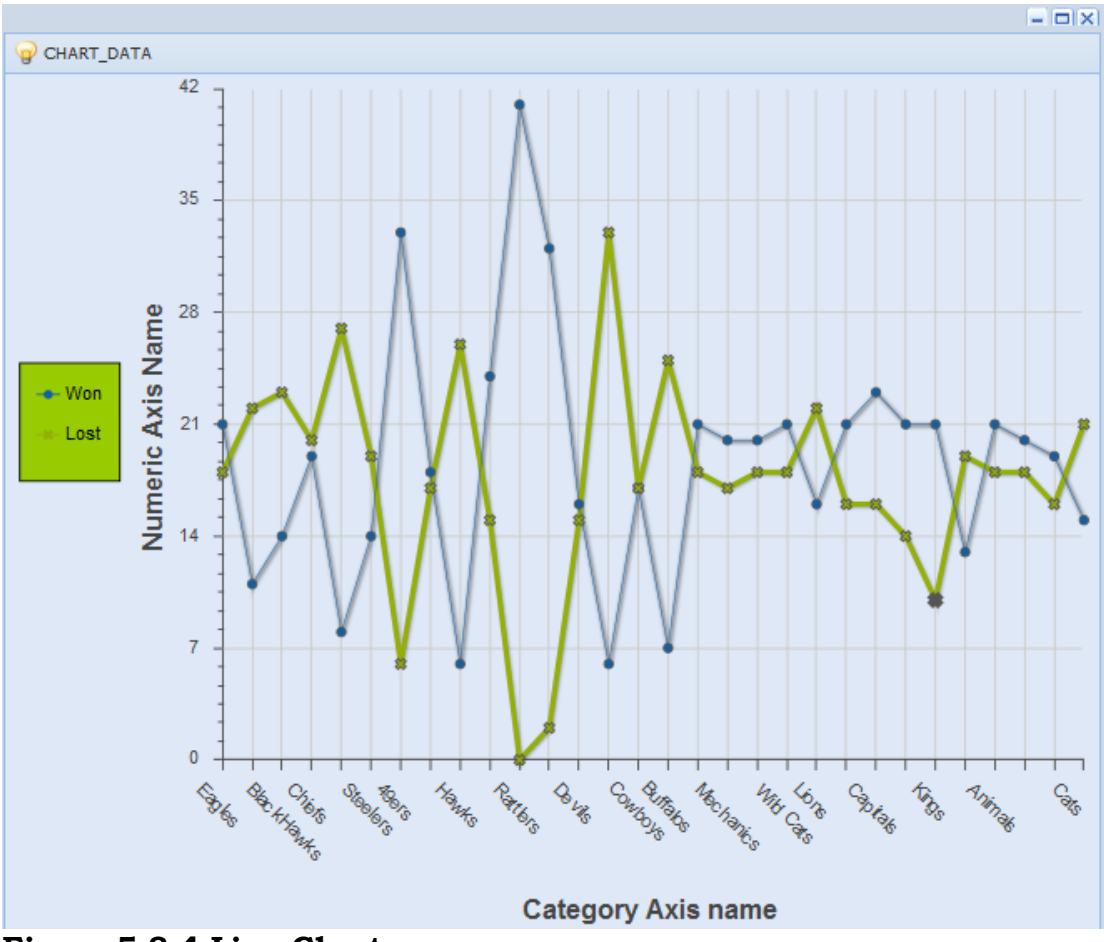


Figure 5.8.4 Line Chart

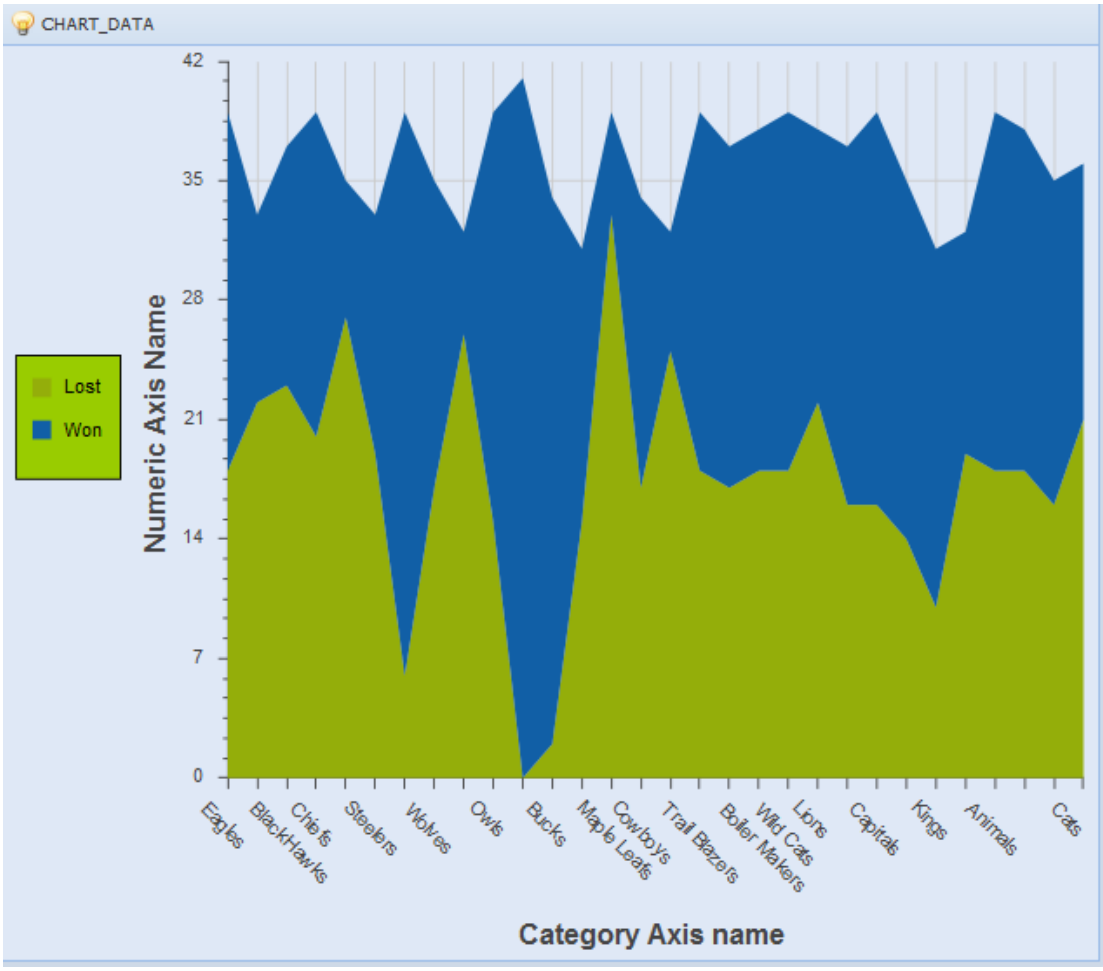


Figure 6.8.5 Area Chart

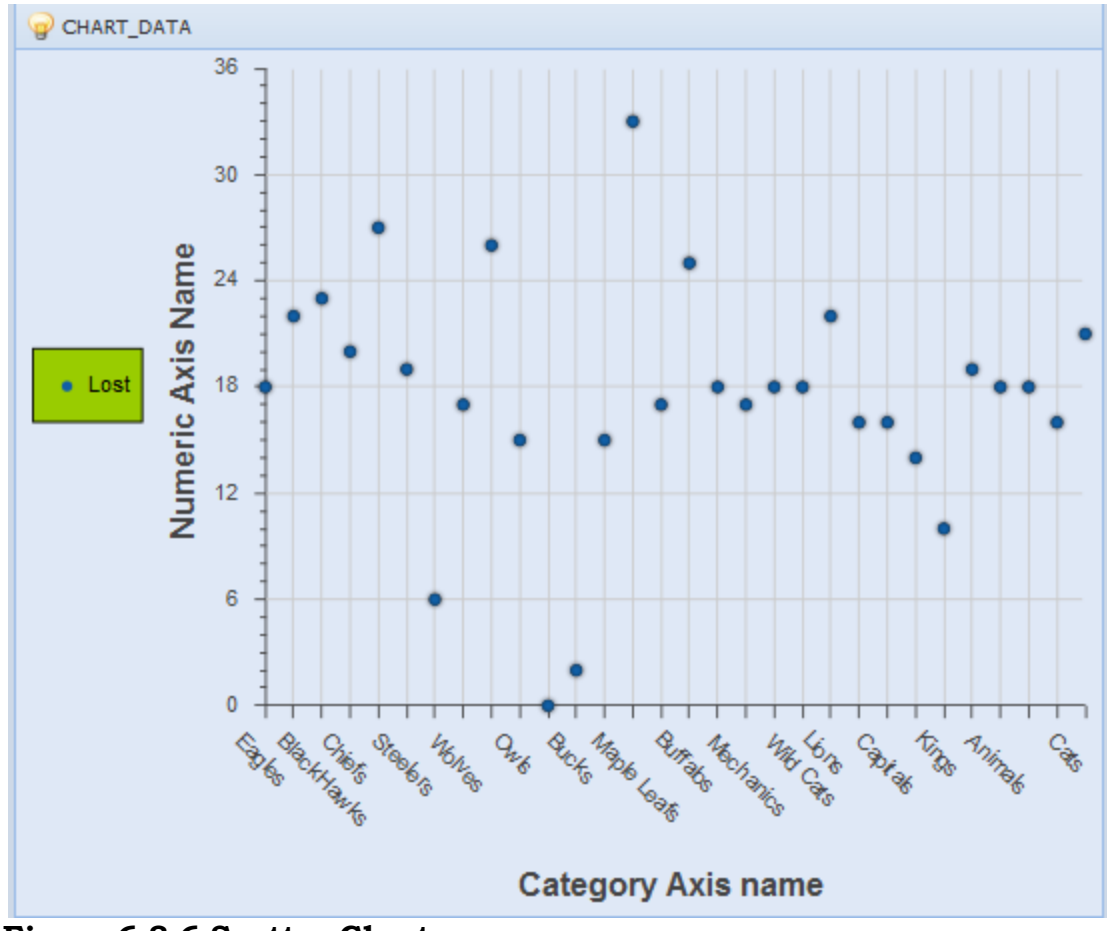


Figure 6.8.6 Scatter Chart

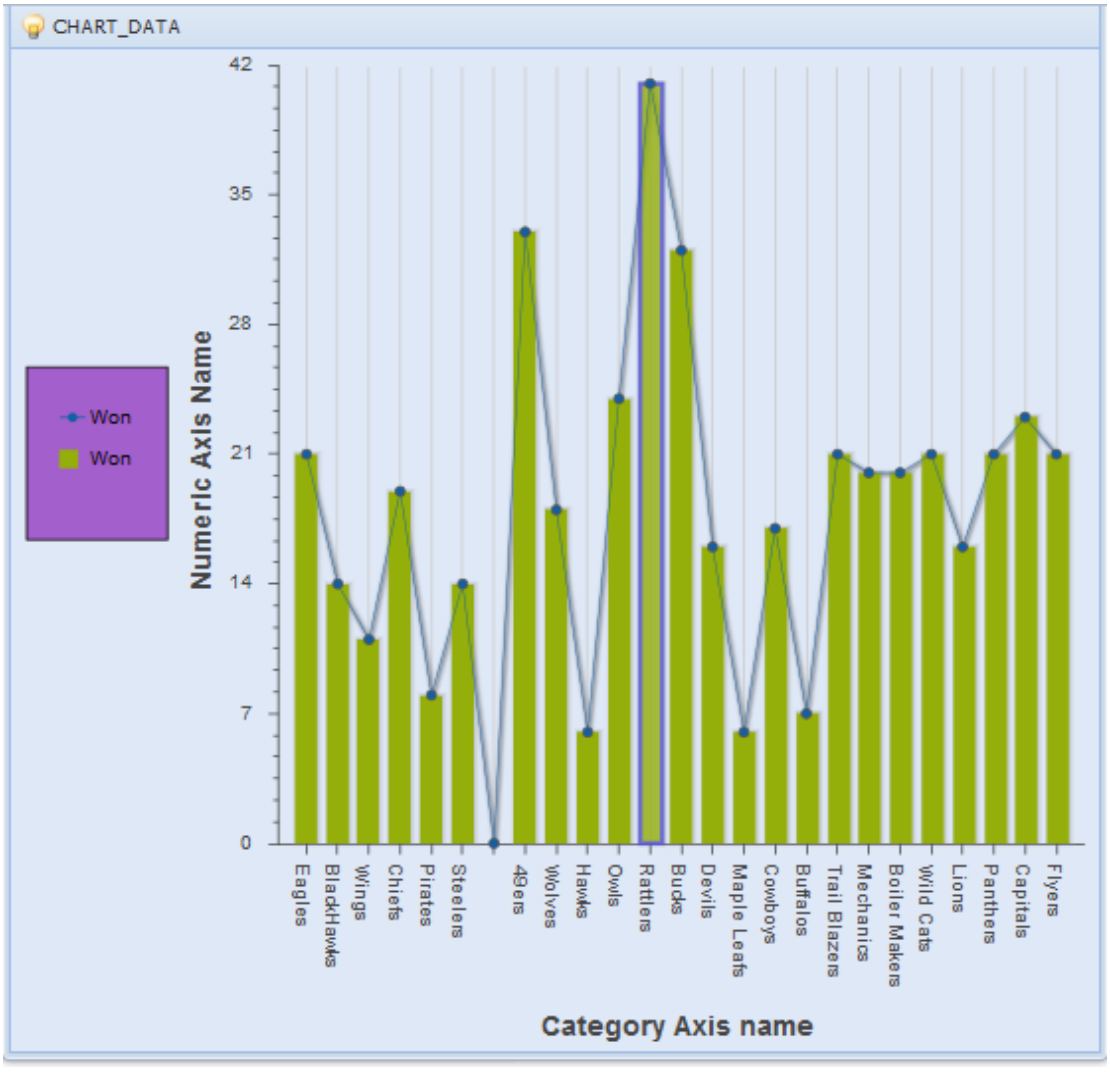


Figure 5.8.7 Mixed Chart (Column and Line)

2. **Pie:** See Figure 5.8.8 below

Figure

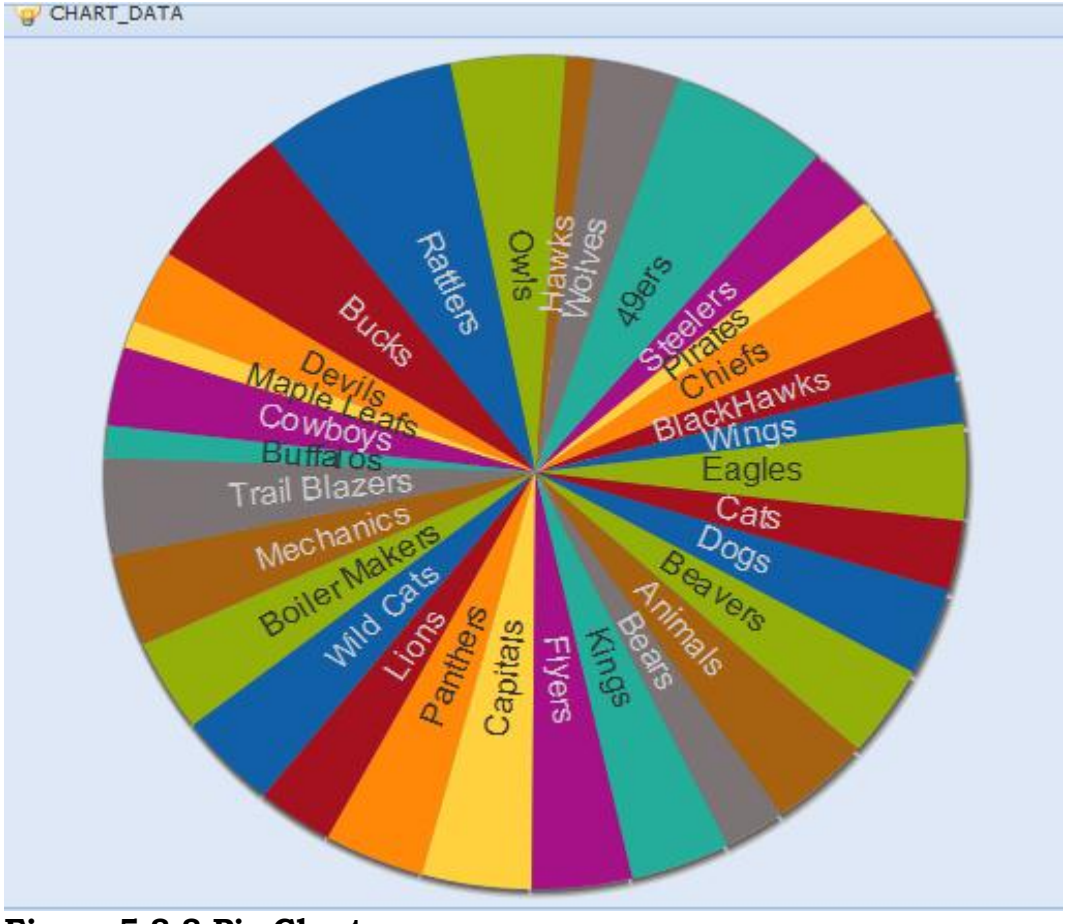


Figure 5.8.8 Pie Chart

3. **Radar:** See Figure 5.8.9 below

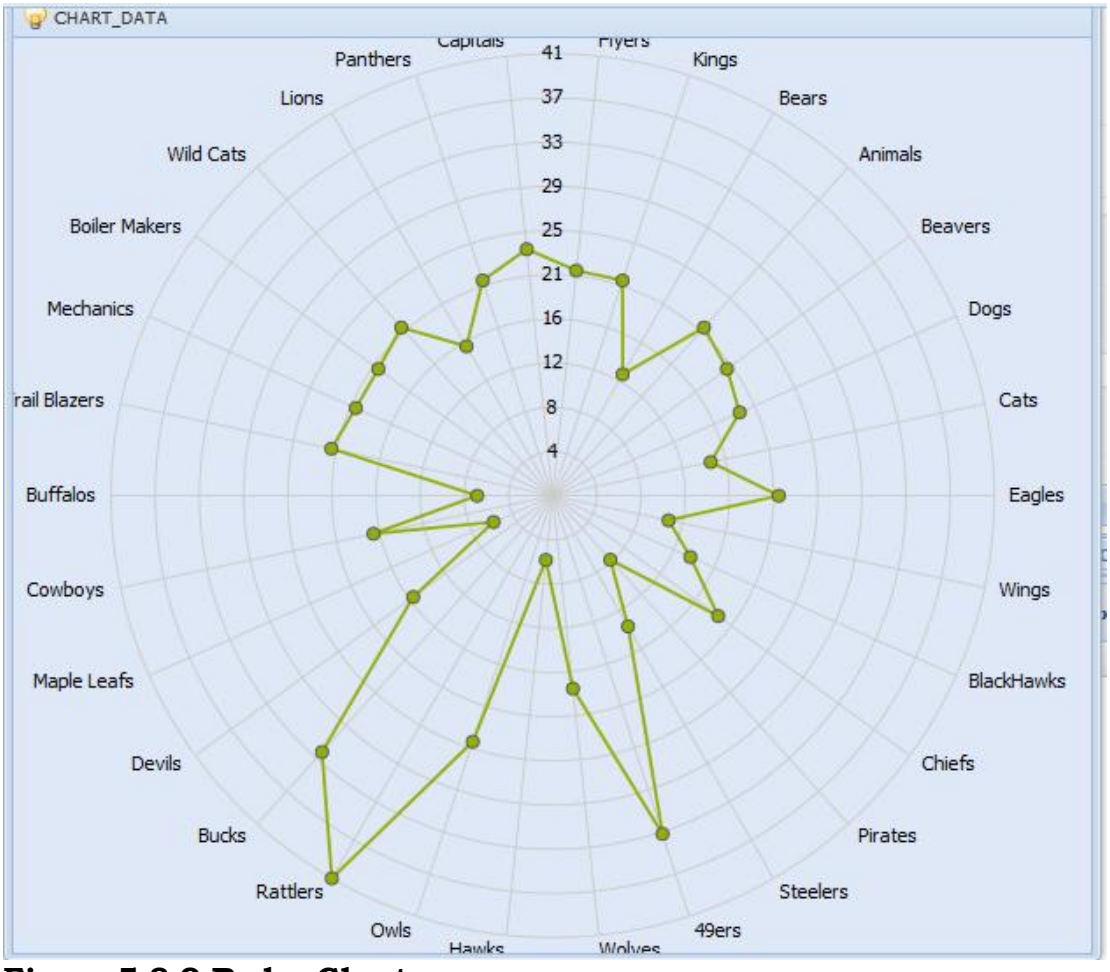


Figure 5.8.9 Radar Chart

- **Legend:**
  1. **Bottom:** Positions legend at bottom of chart.
  2. **Top:** Positions legend at top of chart.
  3. **Left:** Positions legend on left side of chart.
  4. **Right:** Positions legend on right side of chart.
  5. **Relative:** Positions legend anywhere on chart based on chart x y coordinates. If you select this option an x and a y dropdown selection list will appear to the far right of this row. Fill the x and y coordinates out to position window.

6. **Hidden:** If marked hidden the legend will be hidden and not show on the chart.

- **Padding (in px):** Defines the padding on the legend box. Enter the padding in pixels that will apply to all sides of the legend box.

- **Box Fill:** Defines the background color of legend box. Select the color from the dropdown color palet.

- **Numeric Axes Configuration:**
  1. **Axes Position:** Select the position of the Numeric Axis as show in "Left Position" in Figure 5.8.2 above. Valid Selections are:
     - **Left:** Valid for Column, Line, Area, or Scatter Chart Types.
     - **Right:** Valid for Column, Line, Area, or Scatter Chart Types.
     - **Top:** Valid for Bar Chart Only
     - **Bottom:** Valid for Bar Chart Only

  2. **Title:** Enter the Title to display on the Numeric Axis. In Figure 5.8.2 above title is "Numeric Axis Name".

  3. **Grid Background:** Check Box to show grid lines in background of chart.

  4. **Fields:** Select Numeric Fields from the dropdown list to plot in the chart. Multiple fields can be selected for Column, Line, Area, Bar or Scatter Chart Types. But not for Pie and Radar types. If you are changing types from one of the Multiple field types to Pie or Radar you must remember to remove the multiple fields or the chart will not render.

- **Category Axes Configuration:**
  1. **Axes Position:** Select the position of the Category Axis as show in "Bottom Position" in Figure 5.8.2 above. Valid Selections are:
     - **Left:** Valid for Bar Chart Only.
     - **Right:** Valid for Bar Chart Only.
     - **Top:** Valid for Column, Line, Area, or Scatter Chart Types.

- **Bottom:** Valid for Column, Line, Area, or Scatter Chart Types.

2. **Title:** Enter the Title to display on the Category Axis. In Figure 5.8.2 above title is “Category Axis Name”.

3. **Category Label Angle:** Rotates the category label text angle on the chart. Select the angle value from the drop down list: 45, 90, 135, etc.

4. **Fields:** Select Character Field from the dropdown list to show in the chart. Valid for Column, Line, Area, Bar, Scatter Charts Categories. See bottom Labels in Figure 5.8.2 above.

- **Chart Series Configuration**

1. **Series Type:** Select the Series Type from the dropdown list. For the “Cartesian Type” category Bar, Column, Line, Area, Scatter types are legal for the Series type available for selection.

2. **Series Axis** (Not required for Pie or Radar Chart Types) Select the Axis that will define the values the chart data will be plotted against. In Figure 5.8.2 above the chart data all starts from the bottom axis. Normally this axis should match you selection in Numeric axis above.

3. **Series XAxis:** Select a field from the dropdown list that will define the XAxis plot data points. This will normally be the same as was defined in the Category Axis above.

4. **Series YAxis fields:** Select fields from the dropdown list that will define the YAxis axis plot data points. For Bar, Column, and Area Charts multiple fields may be selected then multiple data sets will be displayed. But for Scatter Chart and Line Chart for adding multiple fields you must add a separate series by clicking the “Add Series to Grid” button. For Pie Chart you should only have one series with on field selected.

5. **Stacked** (Optional for Column and Bar Chart Types) To Create a Stacked chart first you need to Choose a least 2

Numeric Catagories and their associated Series YAxis, and Check the “Stacked” box as show in Figure xxx below. The result of these configuration settings are shown in Figure 5.8.10 below as well.

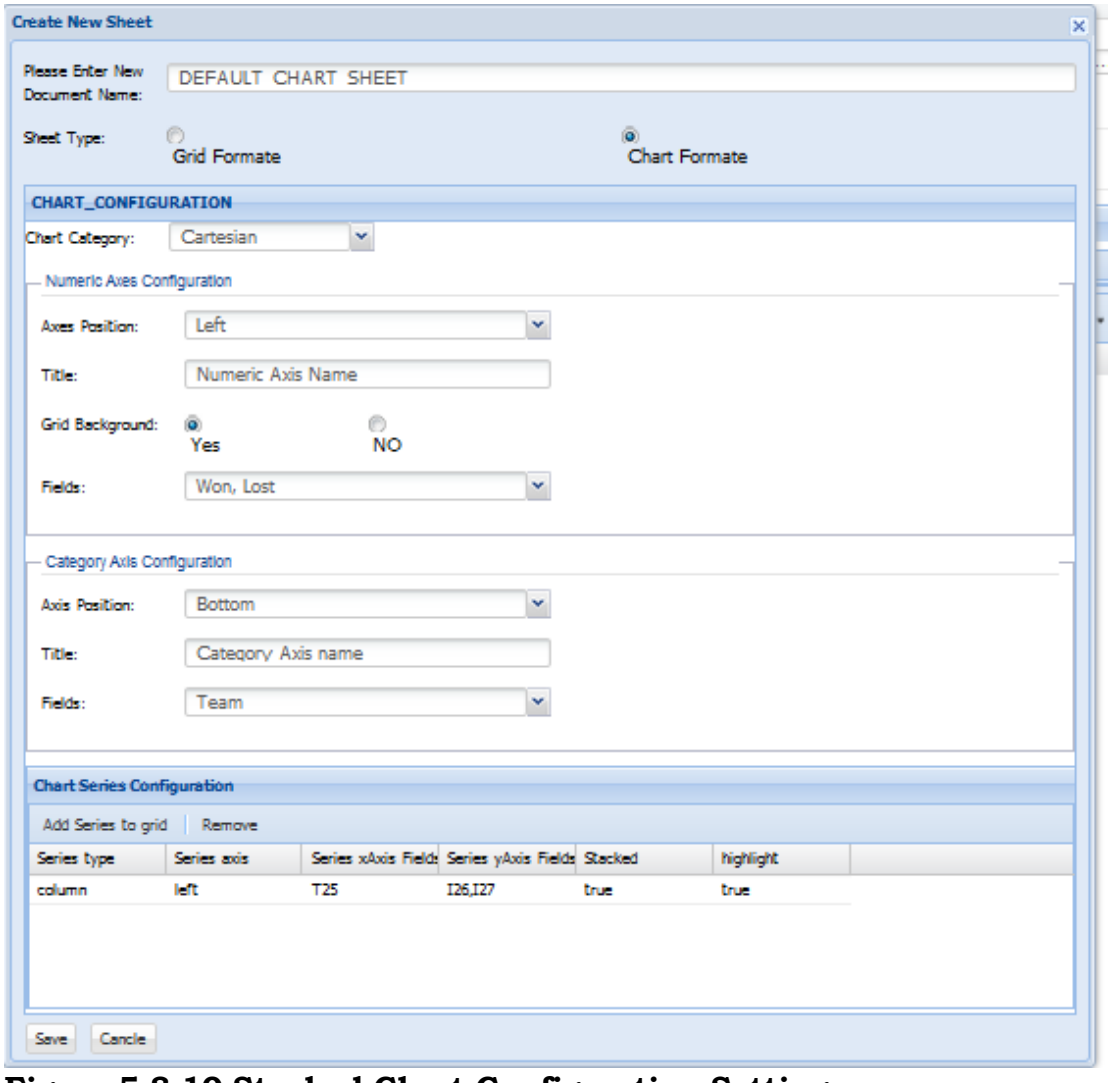


Figure 5.8.10 Stacked Chart Configuration Settings

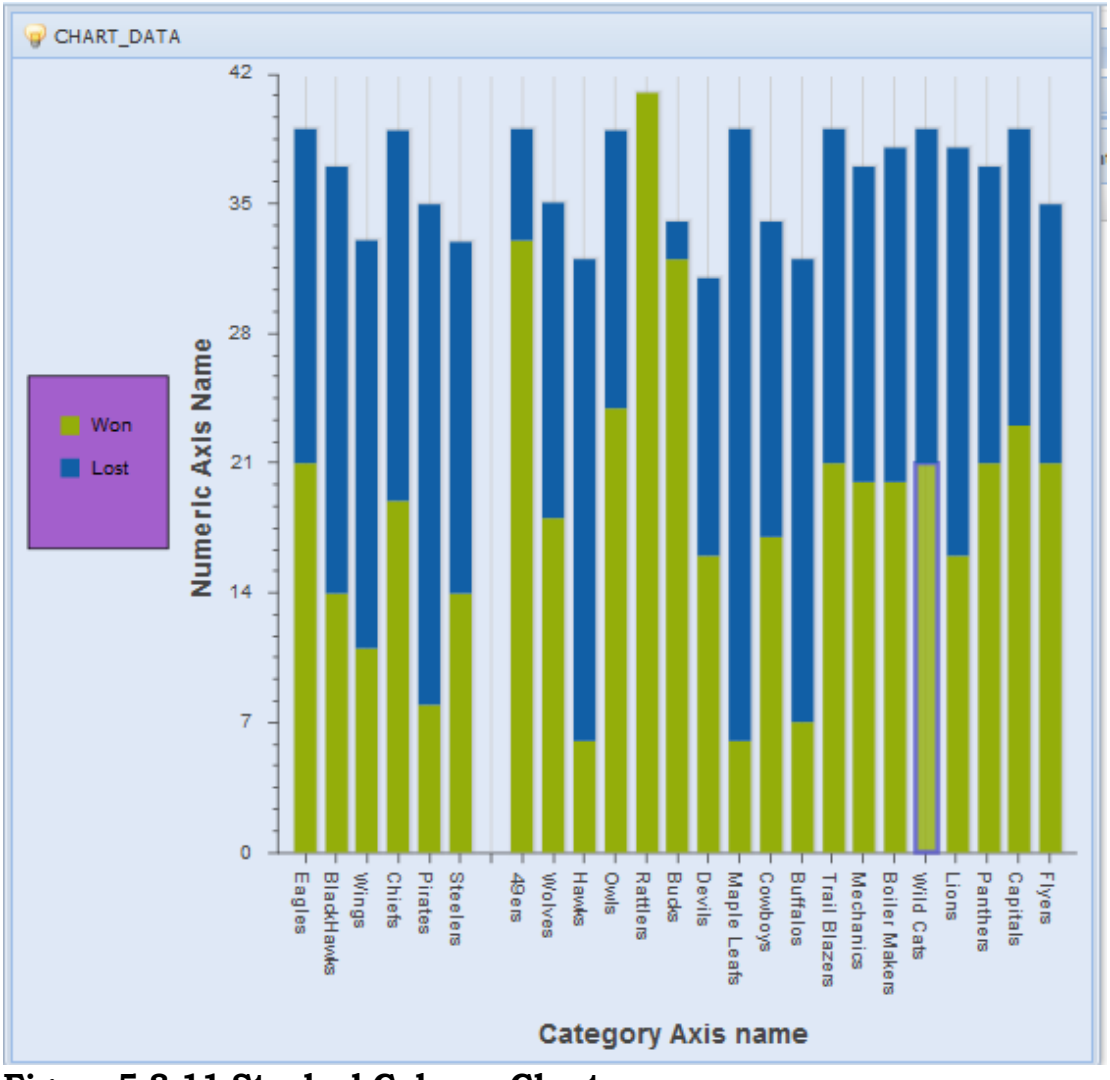


Figure 5.8.11 Stacked Column Chart

6. **Highlight:** Select true from the dropdown list and when a user puts his mouse over a chart data point the actual numeric value will be displayed next to the cursor.

To add multiple series to the same chart select the “Add Series to Grid” button the toolbar under “Chart Series Configuration” section of Figure 5.8.1 above. Multiple series will work for Column, Line, Area, Scatter and Bar Chart Types. Just fill out the additional Series as described above. You may also remove a series by selecting the series and then select the “Remove” button in the toolbar.

5.9. Help Menu

To access a “Help Menu” popup just select the “Help” button on the far right to the Toolbar. Help Menus are available throughout the JGrid Panels. Appendix A shows a full list and text of JGrid help menus for various panels as shown in Figure 5.9.1 below.

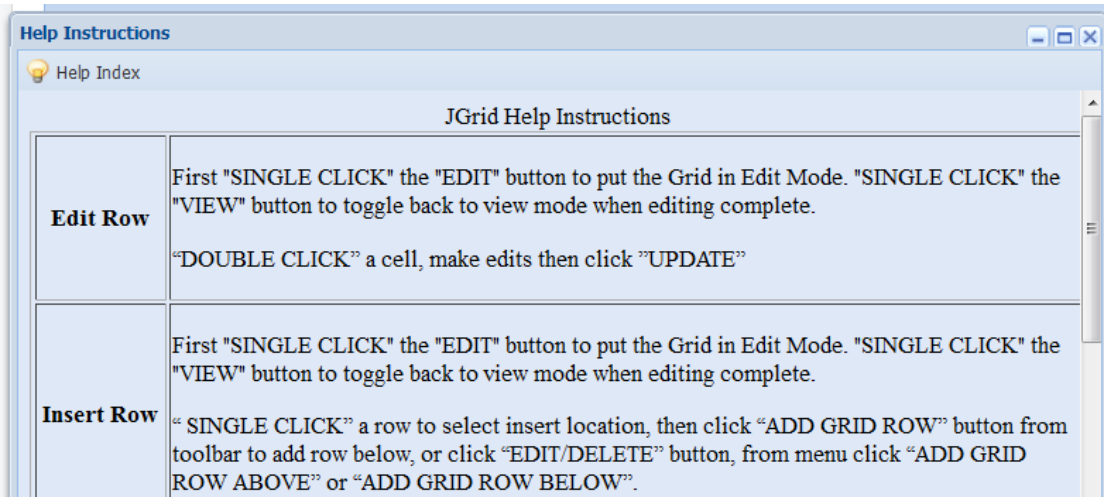


Figure 5.9.1 Help Menu

Notice the “Help Index” button in the upper left tool bar. Select the “Help Index” button and a complete JGrid documentation Index will be displayed from the JGrid WEB site as shown in Figure 5.9.2 below.

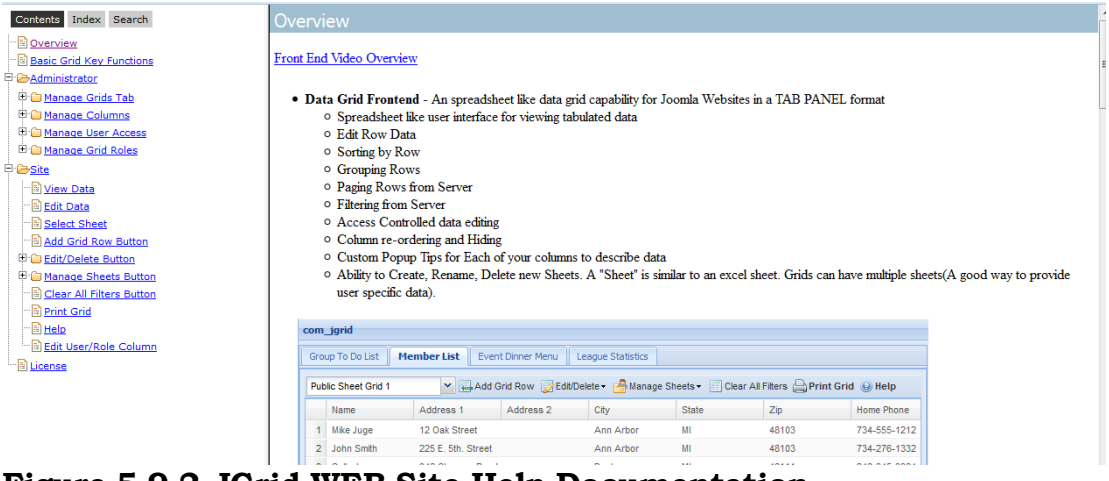


Figure 5.9.2 JGrid WEB Site Help Documentation

6. Basic Admin Configuration Guide

6.1. Tab Panel and Grids

Now that you have your grid names and sizes defined as described in Section 3.1 above select a grid by single clicking its row. Now click the “Grid Setting” button on the toolbar. The following window will popup:

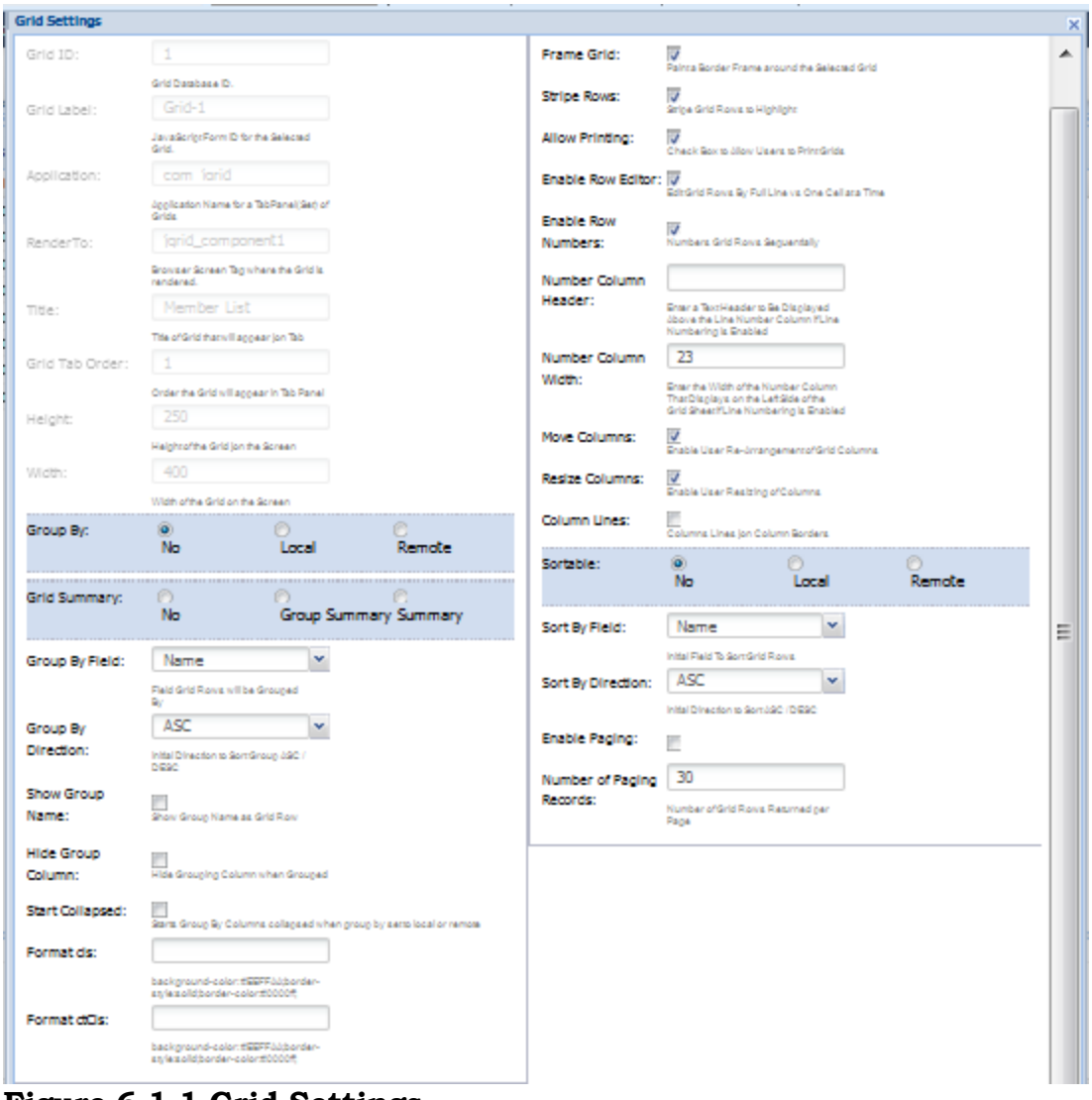


Figure 6.1.1 Grid Settings

- **Grid Id:** Not Editable. The JGrid database ID of the Grid you are currently editing.

- **Grid Label:** Not Editable. Automatically generated Javascript Form Label. For Internal Use.

- **Application:** Not Editable in Grid Settings Popup. Editable in main “Data Grid Settings” screen. Dropdown list of current installed JGrid component “com_jgrid” and any installed JGrid Modules “mod_jgrid”, “mod_jgrid2”, etc. This Application setting assigns the associated grid to the main JGrid component tab panel or one of the JGrid module tab panels.

- **Render To:** Not Editable in Grid Settings Popup. Editable in Joomla Parameter settings as described in Section 7.7. Defines the Browser Document DIV where the Grid is rendered.

- **Title:** Not Editable in Grid Settings Popup. Editable in main “Data Grid Settings” screen. Title of Grid that will appear on Tab in the Tab Panel.

- **Grid Tab Order:** Not Editable. Order that the Grid will appear on the Tab Panel Tab Menu. To modify the order go to the main “Data Grid Settings” screen, select a grid and move the selected grid with your cursor up or down (tab order will adjust left to right respectively) in the list of grids, the tab order will be adjusted. Note grid order is only relative to grids with the same application name. You can mix grids with different application names and when calculating the order only grids with the same name will be considered together.
- **Height:** Not Editable in Grid Settings Popup. Editable in main “Data Grid Settings” screen. Height (pixels) the “JGrid Tab Panel” panel will appear on the Browser Screen.
- **Width:** Not Editable in Grid Settings Popup. Editable in main “Data Grid Settings” screen. Width (pixels) the “JGrid Tab Panel” panel will appear on the Browser Screen.
- **Group By:** Select “No grouping”, “Local grouping”, or “Remote grouping” the group the grid rows as shown below in Figure 3.2.2. “Local grouping” only groups the rows that have been loaded to the browser and is faster if all rows are loaded and data set is relatively small. However if “Paging” active all the rows are not in the local browser to be grouped so “Remote grouping” should be selected. For large data sets (thousands of rows) remote grouping is faster as well, but you should be using “Paging” anyway for large data sets.

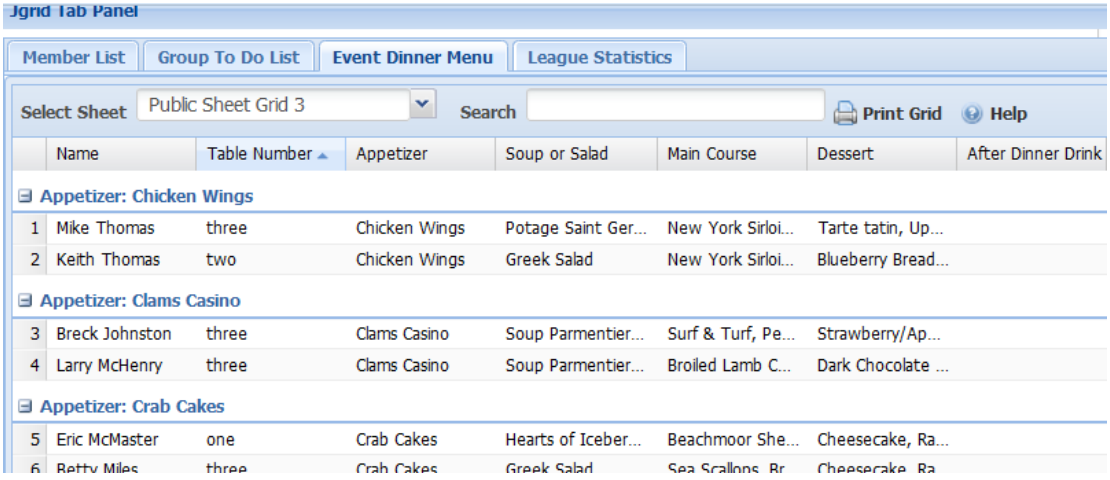


Figure 6.1.2 Group By Appetizer

- **Grid Summary**: Select “No Summary”, “Group Summary”, or “Summary” to turn on Column Summaries at the bottom of each column that has a summary defined in the column template. The “Group Summary” is necessary if Grouping is selected above as shown in Figure 6.1.3 below, otherwise select “Summary”. Note you must define Summary columns in Column setup as defined in Section 6.2 below.

Figure 6.1.3 Grid Summary with Grouping

- **Group By Field**: Select field name from dropdown list that rows will be grouped by when grid is initially loaded as shown in Figure 6.1.2 above. This selection can be re-defined by user in front end for his current browser load.

- **Group By Direction**: Select direction group will be sorted from the dropdown list. “ASC” for ascending, “DESC” for descending sort order.

- **Show Group Name:** Check box will cause the name of the group to be displayed as shown in Figure 6.1.2 above. If the box is not checked then the Group name will not be shown.

- **Hide Group Column:** Check box to hide the column that is being grouped.

- **Start Collapsed**: Check box and when grid initially renders if data is grouped then only a “+” sign and the Group Name will show. Click the “+” sign to expand the rows to show the data in each group

- **Format cls**: An optional extra CSS class that will be added to this component's Element. This can be useful for adding customized styles to the component or any of its children using standard CSS rules. Initially set to ‘’. An example of setting would be “background-color: #EEFFAA;border-style:solid;border-color:#0000ff;”.

- **Format ctCls:** An optional extra CSS class that will be added to this component's container. This can be useful for adding customized styles to the container or any of its children using standard CSS rules. Initially set to ''. An example “x-box-layout-ct custom-class”'

- **Frame Grid**: Check box to paint a frame around selected grid.

- **Stripe Rows**: Check box to stripe alternate grid rows with dark highlight to better differentiate between row data.

- **Allow Printing:** Check box to allow users to print grids. When checked a print button will appear in the grid tool bar.

- **Enable Row Editor:** Check box will enable row editor that edits

all cells in a row together vs one cell at a time. This is the default and preferred method of editing.

- **Enable Row Numbers:** Check box to enable row numbers on the left hand column of the grid.

- **Row Column Header:** Enter a Column Heading that will appear over the row number column if “Row Numbers” are enabled.

- **Number Column Width:** Enter the width in pixels of the row number column.

- **Move Columns:** Check box to allow front end user to move columns. The location of moved columns will only be valid until the bowser is refreshed.

- **Resize Columns:** Check box to allow front end user to resize columns. The new size of the column will only be valid until the browser is refreshed.

- **Column Lines:** Check box to enable column lines between the columns in the grid.

- **Sortable:** Check box to allow user to sort data as shown in Figure 5.3.1 above.

- **Sort By Field**: Select field from the dropdown list to initially sort the grid by.

- **Sort By Direction**: Select direction grid will be sorted from the dropdown list. “ASC” for ascending, “DESC” for descending sort order.

- **Enable Paging**: Check box to enable paging. The paging toolbar will display on the bottom of the grid as shown in Figure 6.1.3 below. Only the number of rows as defined below will be returned from the server to the browser with each successive page selection on the paging toolbar.

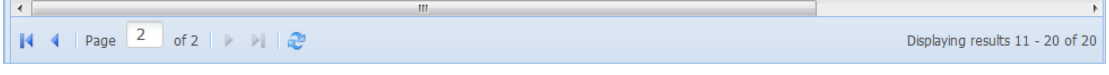


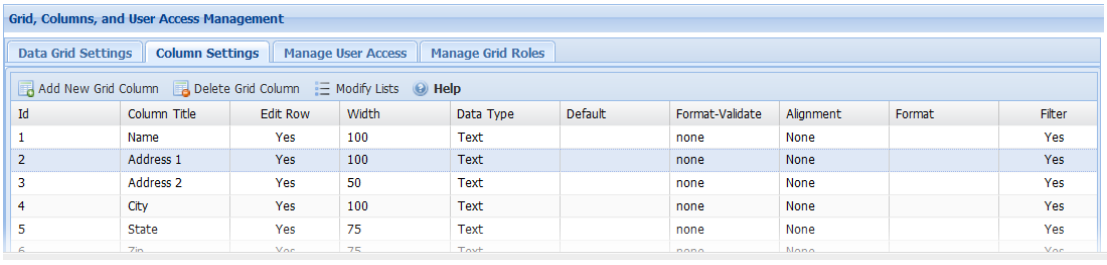
Figure 6.1.3 Paging Toolbar

- Number Of Paging Records: Enter the number of records to

retrieve from the server each time a new page is selected from the paging toolbar above in Figure 6.1.3.

6.2. Columns

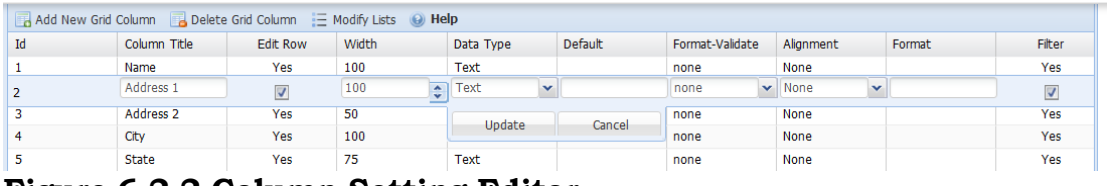
Select the “Columns Settings” Tab to define your column templates and the following screen with appear:



Id	Column Title	Edit Row	Width	Data Type	Default	Format-Validate	Alignment	Format	Filter
1	Name	Yes	100	Text		none	None		Yes
2	Address 1	Yes	100	Text		none	None		Yes
3	Address 2	Yes	50	Text		none	None		Yes
4	City	Yes	100	Text		none	None		Yes
5	State	Yes	75	Text		none	None		Yes

Figure 6.2.1 Column Settings

The sample data columns used in the sample grids are shown. You may either use these sample columns for your grids, edit them and reuse on your grids (However any changes you make will also affect the sample grids), or you can click the “Add New Grid Column” in the toolbar to create a new column template. To delete columns, select a column and click the “Delete Grid Column” button on the grid toolbar. To configure the Column, double click the column you want to edit and the row editor will come up as shown below in Figure: 6.2.2 below:



Id	Column Title	Edit Row	Width	Data Type	Default	Format-Validate	Alignment	Format	Filter
1	Name	Yes	100	Text		none	None		Yes
2	Address 1	☑	100	Text		none	None		☑
3	Address 2	Yes	50			none	None		Yes
4	City	Yes	100			none	None		Yes
5	State	Yes	75	Text		none	None		Yes

Figure 6.2.2 Column Setting Editor

Enter the Column configuration data as shown below:

- **Id:** Not Editable. The JGrid database ID of the Column you are currently editing.

- **Column Title:** Enter the title of the Column that will appear in the column header of the grids you assign this column template to. This title can be up to 100 characters but you must size to fit on the grid in conjunction with visible column width below.

- **Edit Row:** Check box to make column editable. If box is not

checked then grid cells in grid rows will not be editable for this column.

- **Width:** Enter the width in pixels to define the width the column will show in the grid. The actual width of the data can be up to 5000 characters or 11 digits for numerical data.

- **Data Type:** Select the type of data from the dropdown list that will be entered in the grid column and stored in the database. The mysql database. This selection needs to be used in conjunction with the Format-Validate setting below to align the database storage type "Data Type" with the "Format-Validate" setting. Available types are:

  1. Text
  2. Integer
  3. Boolean
  4. Date
  5. List Box (For Lists, Select the "Modify Lists" button as described below in Figure 6.2.4 to add dropdown values for this columns)
  6. Unique Row ID (For Issue Lists, etc. Not Editable)
  7. Picture
  8. URL
  9. Email
  10. Number.

- **Default:** Default value that will be entered into column cell when new row is created.

- **Format-Validate:** Select Format-Validation type from the drop down list. This will format and limit the type of data that can be entered in the cell. Available types are:
  1. None
  2. Alpha
  3. Alphanum
  4. URL (Will make URL active in cell, pops up selected web site)
  5. Email (Will make Email active in cell, pops up new email window)
  6. Numeric
  7. Decimal
  8. Phone
  9. Dollar

10. Time
11. Various Date and Number Formats

- **Alignment:** Select alignment type form the dropdown list to align text in the cell. Available options are:
  1. None
  2. Right
  3. Left
  4. Center

- **Format:** Enter a CSS format string to create a custom format for the cell. For example: “background-color #EEFFAA;border-stype:solid;border-color:#0000ff;”

- **Filter:** Check Box to allow user to filter by this column as described in Section 5.4 above.

- **Sortable:** Check Box to allow user to sort by this column as described in Section 5.3 above.

- **Tool Tip:** Enter the tool tip text that will appear in a hover popup when user hovers their cursor over the column header in the front end.

  - **Email Subject:** Enter the Email Subject Text that will default into the Email popup as shown in Figure 5.1.2 above when this column is defined as an active email address. You may enter wildcards in the default Email Subject Ref: as defined below:

    @!ROWID - Will be replaced by the RowId of the grid row the clicked image cell is located in.

    @!T21 – Where T21 is the Grid Column Column ID. The @!T21 will be replaced by the cell value in the column and grid row the clicked email cell is located. This allow you to add the values from other cells in the clicked row into your default email subject.

- **Freeze Column:** Check Box to make this column stay visible when user scrolls to the left as columns to its right scroll off the page.

- **Summary Column:** Check Box to make this column as "Summary Type" column as shown below in Figure 6.2.3 below. "pre" and "post" refer to prefix and postfix respectively and are configurable as explained below. "424" is the "Sum" of the values in this column. As noted below in "Summary Type" you my select from "Count", "Sum", "Min", "Max", or "Average" as the value calculated as the summary. Also note that you must activate the grid summary in the grid setting menu as described in Section 6.1 above.

22	Lions	16.00	22.00	3.00
23	Panthers	21.00	16.00	4.00
24	Capitals	23.00	16.00	2.00
25	Flyers	21.00	14.00	6.00
			pre 424 post	

Figure 6.2.3 Summary Column

- **Summary Type:** Select from the dropdown list the mathematical operation to apply to the rows of data in this column. Selection options are "Count", "Sum", "Min", "Max", or "Average".

- **Summary Prefix:** Enter the prefix to display ahead of the calculated Summary value as shown in figure 6.2.3 above "pre".

- **Summary Postfix:** Enter the postfix to display after the calculated Summary value as shown in figure 6.2.3 above "post".

To modify list type columns first select a list type column then click the "Modify Lists" button in Figure 6.2.1 above. The List Box Configuration Popup shown in Figure 6.2.4 below will appear:

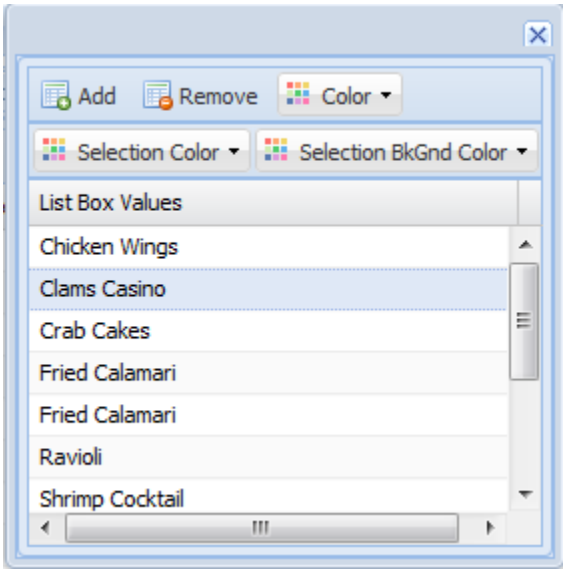
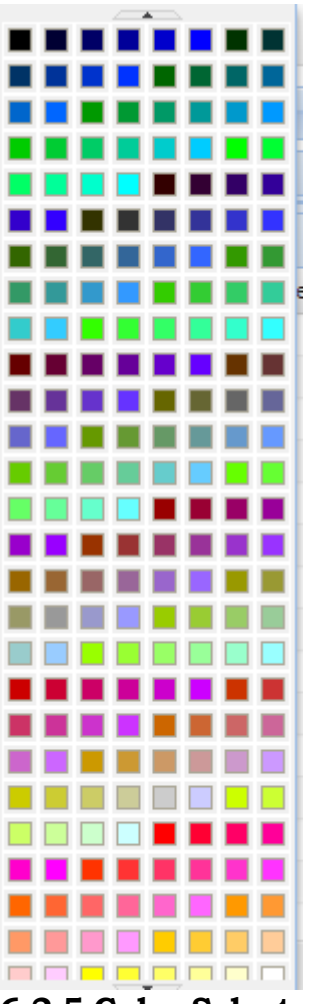


Figure 6.2.4 List Box Configuration

To add a new selection value to the list box click the “Add” button shown in Figure 6.2.4 above and type in the name of the new selection for this list box column. To remove a selection, select the selection and click the “Remove” button in 6.2.4 above. To make the whole grid row change colors based on the value selected in the list box, you can assign a text color, back ground color, and selection color to each list box value. See figure 6.2.5 below:

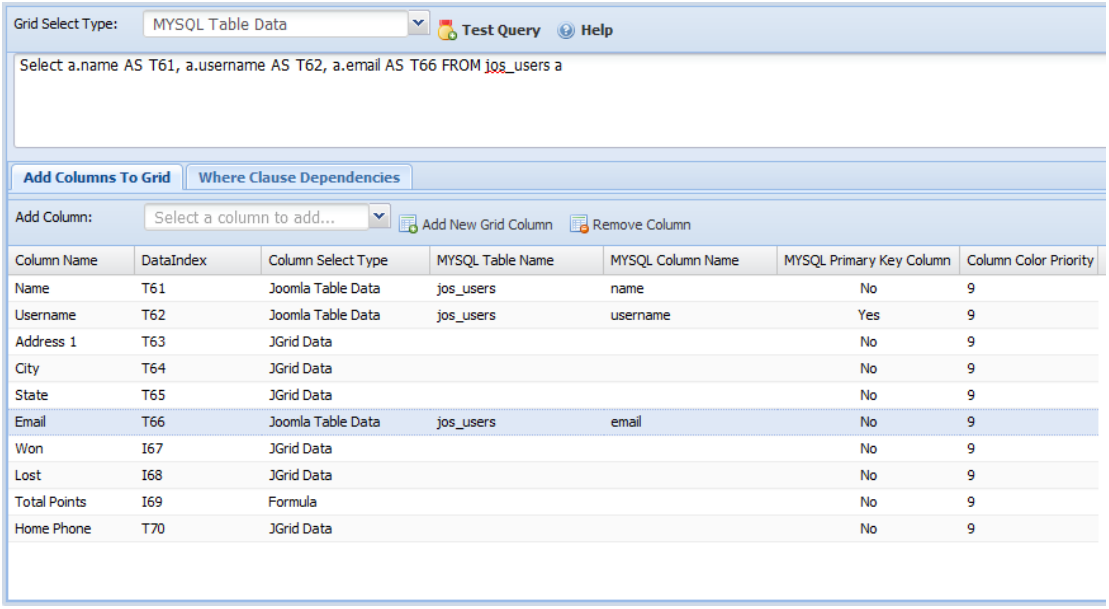


6.2.5 Color Selector for List Box Selection Values

When there are more than one list box values in a grid with different colors assigned to each selection, the color priority assigned in Section 6.3.2 below will define which color selection is used to define the row color.

6.3. Assigning Columns to Grids

Select the “Data Grid Settings” tab. Select a Grid to add column, then select the “Add Grid Columns” button in the toolbar and the add columns window will pop up as shown in Figure 6.3.1 below:

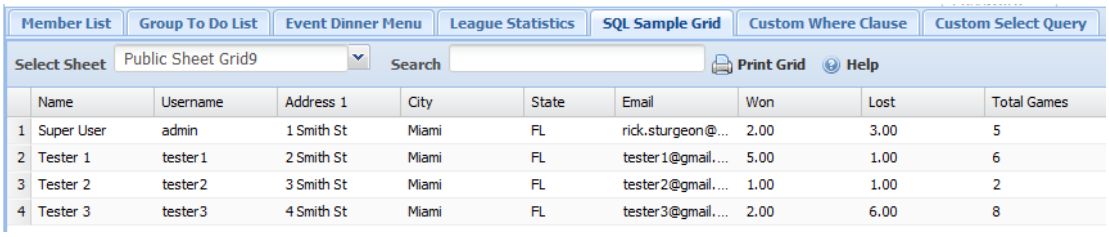


Column Name	DataIndex	Column Select Type	MYSQL Table Name	MYSQL Column Name	MYSQL Primary Key Column	Column Color Priority
Name	T61	Joomla Table Data	jos_users	name	No	9
Username	T62	Joomla Table Data	jos_users	username	Yes	9
Address 1	T63	JGrid Data			No	9
City	T64	JGrid Data			No	9
State	T65	JGrid Data			No	9
Email	T66	Joomla Table Data	jos_users	email	No	9
Won	I67	JGrid Data			No	9
Lost	I68	JGrid Data			No	9
Total Points	I69	Formula			No	9
Home Phone	T70	JGrid Data			No	9

Figure 6.3.1 Add Columns To Grid (SQL Data TYPE)

The sample data columns for the “SQL” Sample Grid are shown above. Notice that this sample data is set for Grid Select Type – “MYSQL Table Data”. The default type is “JGrid Data” as shown in Figure 3.3.1 above. Adding and Moving columns in general is described in Section 3.3 above as well.

The “MYSQL Table Data” Grid Select Type shown in Figure 6.3.1 above allows you to create an SQL call to query data from the MYSQL database and display query result in a grid. The “name”, “username”, and “email” columns in Figure 6.3.1 above are set to Column Select Type – “Joomla Table Data”, and assigned to the “jos_user” joomla MYSQL database table and the respective “name”, “username”, and “email” database columns. Notice that by setting these three columns to “Joomla Table Data” type and aligning them with the MYSQL database column the SQL Query will be automatically created as shown in Figure 6.3.1 (“Select a.name AS T61, a.username AS T62, a.email AS T66 FROM jos_users a”). Also notice that “username” is assigned as the primary key column. The rest of the columns are normal “JGrid Data” columns. However the SQL query result defines the rows in the grid, and any data added to the normal “JGrid Data” columns (“address1”,”city”,”state”,etc) are keyed to the “Primary Key Data” for each row. If a row in the query result is eliminated in the MYSQL database (for example if a user is removed from the “jos_user” table) the associated “JGrid Data” row data will be removed as well.



	Name	Username	Address 1	City	State	Email	Won	Lost	Total Games
1	Super User	admin	1 Smith St	Miami	FL	rick.sturgeon@...	2.00	3.00	5
2	Tester 1	tester1	2 Smith St	Miami	FL	tester1@gmail....	5.00	1.00	6
3	Tester 2	tester2	3 Smith St	Miami	FL	tester2@gmail....	1.00	1.00	2
4	Tester 3	tester3	4 Smith St	Miami	FL	tester3@gmail....	2.00	6.00	8

Figure 6.3.2 SQL Grid Result With Formula (Won + Lost = Total Games)

6.3.1 Grid Select Type:

Select the "Grid Select Type" from the dropdown list Shown in Figure 6.3.1.1 below:

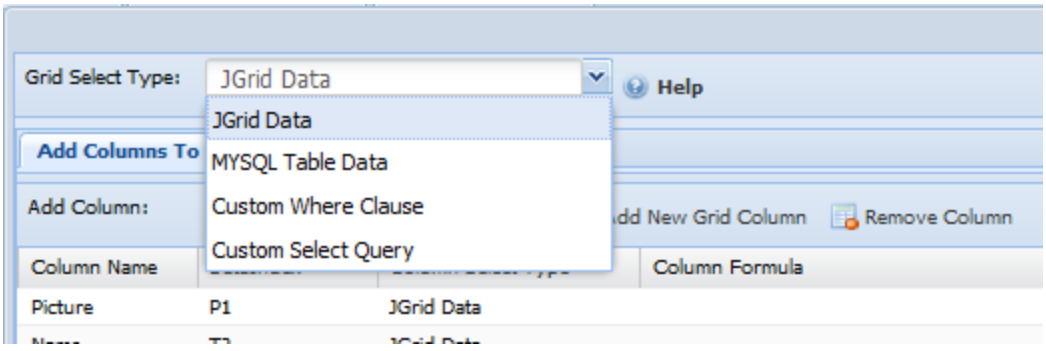


Figure 6.3.1 Grid Select Type

The "Grid Select Type" defines where the data for your grid will come from. For the basic "JGrid Data" selection you must enter the data in the JGrid grid sheets either row at a time or with CSV file uploads. For the other selections the data come from a combination of an SQL query result and any of your data you add the query result rows.

- **JGrid Data:** This selection defines the Grid data as a basic JGrid data only type as shown in Figure 3.3.1 above and is configured as described in Section 3.3 above. This is the default type and is consistent with previous versions of the JGrid Joomla extension.

- **MYSQL Table Data:** This selection defines the Grid data as the result of an SQL Query as shown in Figure 6.3.1 below and configured as described in Section 6.3.2 below. You may also add a "Where Clause Dependency" as shown in Figure 6.3.3.1 below and configured as described in Section 6.3.3 below.

- **Custom Where Clause:** This selection allows the addition of a Custom Where Clause that will be appended on to the SQL statement (Section 6.3.2) and Where Clause Dependency (Section 6.3.3). This allows for complex SQL queries and is for use by advanced SQL literate users. See Figure 6.3.4.1 below and configured as described in Section 6.3.4 below.

- **Custom Select Query:** This selection allows you to enter a totally custom SQL query as shown in Figure 6.3.5.1 below and configured as described in Section 6.3.5 below. This allows a very advanced SQL user to fully define the SQL query including the column selections and where clause.

6.3.2 Add Columns To Grid

- **Column Name:** Title of the column as defined in the column template see Section 6.2 above (Not editable).

- **DataIndex:** The dataIndex is a unique identifier generated by JGrid that define created by combining the column type ("I" for integer, "S" for String, etc.) and the column database ID. This DataIndex is user to as the column name in SQL calls

- **Column Select Type:** Select from the dropdown list the type of data that will be displayed in the column. Available options are:
    1. JGrid Data: User Entered Custom Data that is keyed to SQL Database query Result
    2. Formula: Calculated Data as defined by "Column Formula Field"
    3. Joomla Table Data: Data Queried From Joomla MYSQL Table based on SQL Query as described above. By selection this option this Column will be included in the SQL Query result from the Joomla Database_Table_Column as defined in the columns below
    4. MYSQL Table Data: Data Queried From any MYSQL Database Table on the server (Including Joomla database)based on SQL Query as described above. By selection this option this Column will be included in the SQL Query" result from the MYSQL Database_Table_Column as defined in the columns below.

  NOTE: "Joomla Table Data" and MYSQL Table Data" Drop down options are available hen grid "Select Type dropdown" has been set to "MYSQL Table Date", "Custom Where Clause", or "Custom Select Query".

- **MYSQL Database Name:** Select from the dropdown list the MYSQL "Database" the table and column data you want to query to this Grid Column. NOTE: This Selection will only appear when the "Column Select Type: above is set to "MYSQL Table Data"

- **MYSQL Table Name:** Select from the dropdown list the database "Table" whose column data you want to query to this Grid Column. NOTE: This Selection will only appear when the "Column Select Type: above is set to "MYSQL Table Data" or "Joomla Table Data"

- **MYSQL Column Name:** Select from the dropdown list the database table "Column" whose column data you want to query to this Grid Column. NOTE: This Selection will only appear when the "Column Select Type: above is set to "MYSQL Table Data" or "Joomla Table Data"

- **MYSQL Primary Key Column:** Select "Yes" to define this MYSQL Database Column as the key column whose queried data will provide a key to the "JGrid" type column data. NOTE: This Selection will only appear when the "Column Select Type: above is set to "MYSQL Table Data" or "Joomla Table Data"

Column Formula: Enter a Formula to Calculate the Value Displayed in Column Rows. eg SQRT(T31 * 77 / 3) Where T31 is Another Column Name as defined in the "Dataindex" column above. Supported functions are shown in Figure 6.3.2 below. "NOTE: This Selection will only appear when the "Column Select Type: above is set to "Formula".

Arithmetic	Logical	Comparison	Functions
+	!	=	**AVG**(v1,v2,v3,..) - Average
-	&	<	**ABS**(v) - Absolute Value
*	|	>	**ASC**(v) – Check to See if ASCI
/		>=	**CDATE**("03-20-2008", "m-d-y") - Convert To Date Format
%		<=	**CHR(v)** – Convert to Character
^		<>	**COS** (v) Cosine
			DATE - Current Date
			FIX(v) – Rounds to the nearest zero integer
			HEX(v) – Converts to Hexadecimal
			IIF(v1 < v2) - If Statement

			LCASE(string) – Convert to lower case
			LEFT(string,length) – Returns x characters from left of string
			LOG(v) – Logarithm
			MAX(v1,v2,v3,..) - Maximum
			MID(string, start, length) – returns x characters of string
			MIN(v1,v2,v3..) - Minimum
			RIGHT(string, length) – returns x characters from right of string
			ROUND(v) – Round number to nearest value
			SIN(v) - sign
			SQRT(v) – Square Root
			TAN(v) - Tangent
			UCASE(string) – Convert to Upper Case

FIGURE 6.3.2 Formula Valid Expressions

- **Column Color Priority:** Enter the priority (1 thru 9, 9 highest) assigned to the list box selection value in this column as compared to the other columns in grid. The color assigned to the list box value in this column (See Section xxx above) will be assigned to the whole row if this column has the highest color priority.

6.3.3 Where Clause Dependencies - The Where Clause Dependencies tab is used to add a where clause to the SQL Query that was defined above by adding JOOMLA or MYSQL columns to the grid. See Figure 6.3.3.1 below:

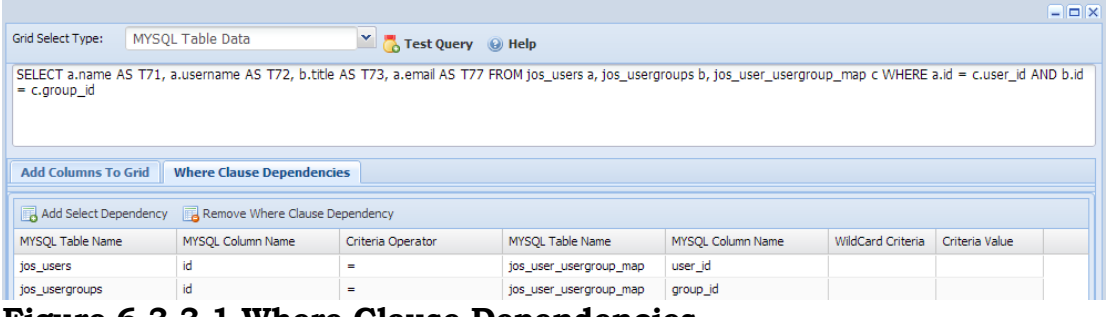
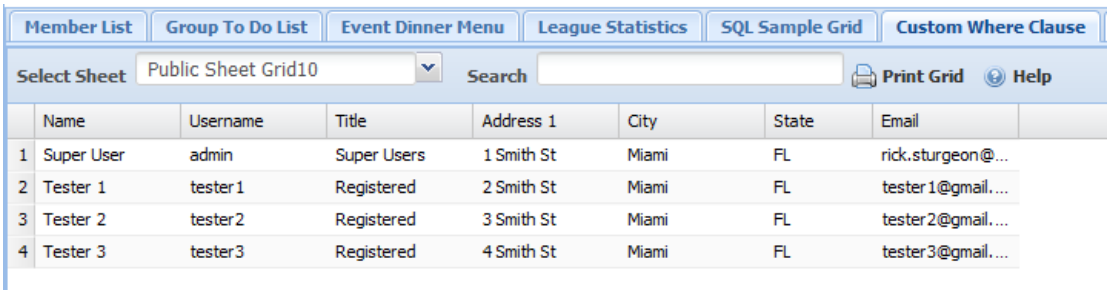


Figure 6.3.3.1 Where Clause Dependencies

We have added a new column title into the column list as queried from jos_usergroups.title in the Joomla database. We have then added join criteria in as shown in Figure 6.3.3.1 above as

“jos_users.id = jos_user_group_map.user_id” and “jos_usergroups.id = jos_usergroup_map.group_id” creating the query “SELECT a.name AS T71, a.username AS T72, b.title AS T73, a.email AS T77 FROM jos_users a, jos_usergroups b, jos_user_usergroup_map c WHERE a.id = c.user_id AND b.id = c.group_id”. This query returns the following results as shown in Figure 6.3.3.2 below. Notice that the Title column has been populated with joined values from jos_usergroups.title Joomla column.



	Name	Username	Title	Address 1	City	State	Email
1	Super User	admin	Super Users	1 Smith St	Miami	FL	rick.sturgeon@...
2	Tester 1	tester1	Registered	2 Smith St	Miami	FL	tester1@gmail....
3	Tester 2	tester2	Registered	3 Smith St	Miami	FL	tester2@gmail....
4	Tester 3	tester3	Registered	4 Smith St	Miami	FL	tester3@gmail....

Figure 6.3.3.2 Where Clause Dependencies Result

- **MYSQL Database Name:** Select from the dropdown list the MYSQL “Database” the table and column value you want to use for this where clause criteria. NOTE: This Selection will only appear when the “Column Select Type: above is set to “MYSQL Table Data”

- **MYSQL Table Name:** Select from the dropdown list the database “Table” whose column value you want to use for this where clause criteria. NOTE: This Selection will only appear when the “Column Select Type: above is set to “MYSQL Table Data” or “Joomla Table Data”

- **MYSQL Column Name:** Select from the dropdown list the database table “Column” whose column value you want to use for this where clause criteria. NOTE: This Selection will only appear when the “Column Select Type: above is set to “MYSQL Table Data” or “Joomla Table Data”

- **Criteria Operator:** Select from the dropdown list the Operator to use to compare the database table columns or column and value. Selections include (=, <, <, <-, >=, !=)

- **MYSQL Database Name:** Select from the dropdown list the

MYSQL “Database” the table and column value you want to use for this where clause criteria. NOTE: This Selection will only appear when the “Column Select Type: above is set to “MYSQL Table Data”

- **MYSQL Table Name:** Select from the dropdown list the database “Table” whose column value you want to use for this where clause criteria. NOTE: This Selection will only appear when the “Column Select Type: above is set to “MYSQL Table Data” or “Joomla Table Data”

- **MYSQL Column Name:** Select from the dropdown list the database table “Column” whose column value you want to use for this where clause criteria. NOTE: This Selection will only appear when the “Column Select Type: above is set to “MYSQL Table Data” or “Joomla Table Data”

- **WildCard Criteria:** Select from the dropdown list the a WildCard value (A Value defined from the Joomla Installation) to be used in the Where Clause criteria. Selections include:
  1. CurrentDateTime: System Date and Time
  2. UserEmail: Current users email address
  3. UserGroupID: Database ID of the current users Group
  4. UserID: Database ID of the current user
  5. UserLastVisitDate: Date of the last visit of current user
  6. UserName: Name of current user
  7. UserRegisterDate: Date the current user registered
  8. UserType: Joomla: User Type of current user
  9. UserUserName: Username of current user

- **Criteria Value:** Enter value of string or number to compare with database table column value Criteria in SQL Where Clause or to compare with or WildCard value.

6.3.4 Custom Where Clause

Select the “Custom Where Clause” from the Grid Select Type menu dropdown list. The “Custom Where Clause” Tab will appear on the Tab Panel as in Figure 6.3.4.1 below:

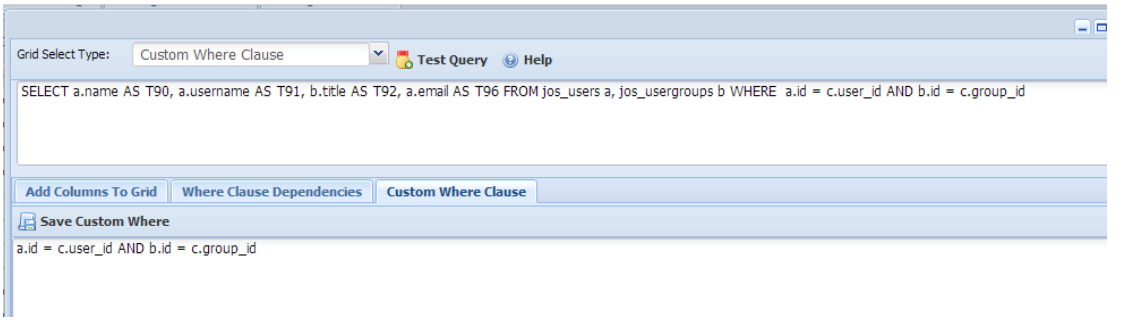


Figure 6.3.4.1 Custom Where Clause

Type in the where clause in the dialog box at the bottom of the panel "a.id=c.user_id AND b.id = c.group_id" (Do not add WHERE it will be added automatically) and press the "Save Custom Where" button. This custom where clause will be added to the end of the SQL statement as shown above in Figure 6.3.4.1. Notice we have deleted the values from the "Where Clause Dependencies" and add the same join criteria to the "Custom Where Clause" to obtain the same query result as shown in Figure 6.3.3.2 above.

6.3.5 Custom Select Query

Select the "Custom Select Query" from the Grid Select Type menu dropdown list. You may now type in your own totally custom Query in the dialog box just where the SQL Query was automatically generated in the prior options above. Be sure to user the "Dataindex" values for Joomla or MYSQL type columns as shown in Figure 6.3.4.1 below (T78, T79, etc) as column names in your custom SQL query. This query will give the same result as the other options above as shown in Figure 6.3.3.2.

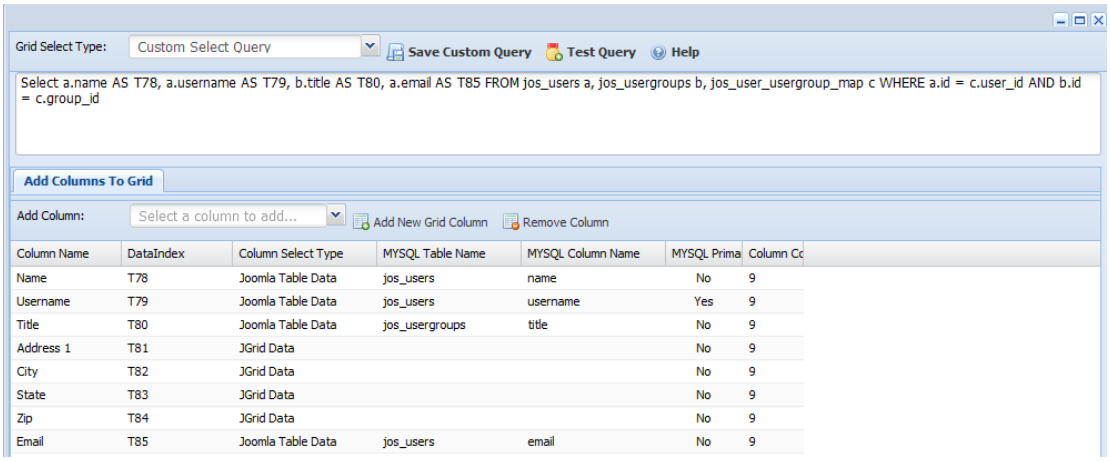


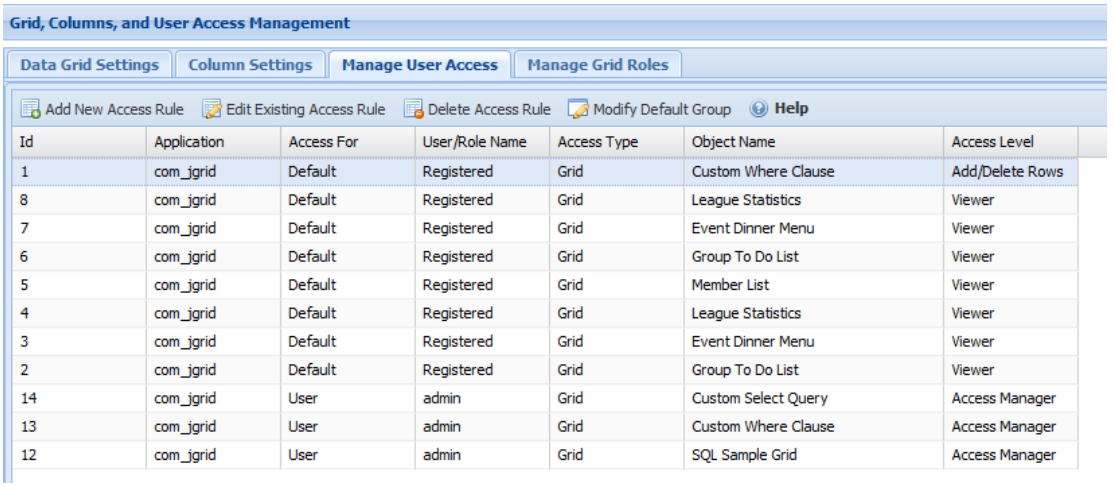
Figure 6.3.5.1 Custom Select Query

Notice that all three examples of Grid Select Types, “MYSQ Data Table” with Where Clause Dependencies (6.3.3), “Custom Where Clause” (6.3.4), and ”Custom Select Query” (6.3.5) have been configured to all give the same result. You may also use the Normal JGrid Data from the JGrid type grids in you queries by selecting for the SQL views created to for each JGrid grid. For example the data in the sample “member List” Grid is accessible thru the view **“jview_g1_member_list”** with columns as shown below:

- id int(11)
- grid_id int(11)
- document_id int(11)
- creator_userid int(11)
- P1_Picture varchar(5000)
- T2_Name varchar(5000)
- T3_Address_1 varchar(5000)
- T4_Address_2 varchar(5000)
- T5_City varchar(5000)
- T6_State varchar(5000)
- T7_Zip varchar(5000)
- T8_Home_Phone varchar(5000)
- T9_Work_Phone varchar(5000)
- T10_Cell_Phone varchar(5000)
- T11_Email varchar(5000)

6.4 User Access Control Rules

Select the “Manage user Access” Tab to define your User Access Control Rules and the following screen with appear:



Id	Application	Access For	User/Role Name	Access Type	Object Name	Access Level
1	com_jgrid	Default	Registered	Grid	Custom Where Clause	Add/Delete Rows
8	com_jgrid	Default	Registered	Grid	League Statistics	Viewer
7	com_jgrid	Default	Registered	Grid	Event Dinner Menu	Viewer
6	com_jgrid	Default	Registered	Grid	Group To Do List	Viewer
5	com_jgrid	Default	Registered	Grid	Member List	Viewer
4	com_jgrid	Default	Registered	Grid	League Statistics	Viewer
3	com_jgrid	Default	Registered	Grid	Event Dinner Menu	Viewer
2	com_jgrid	Default	Registered	Grid	Group To Do List	Viewer
14	com_jgrid	User	admin	Grid	Custom Select Query	Access Manager
13	com_jgrid	User	admin	Grid	Custom Where Clause	Access Manager
12	com_jgrid	User	admin	Grid	SQL Sample Grid	Access Manager

Figure 6.4.1 Manage User Access Rules

To add a User Access Rule click the “Add New Access Rule” button and the configuration window will popup as shown in Figure 6.4.2. To edit an Existing Access Rule select a rule in Figure 6.4.1 above and click the “Edit Existing Access Rule” button in Figure 6.4.1 above and the configure window in Figure 6.4.2 will popup with the selected rules data for editing.

You can also manage Access Rules from the JGrid Front End by Users given "MANAGE ACCESS" Security Level, see Figure 5.7.6 above.

To remove an access rule, first select the rule as shown in Figure 6.4.1 above and click the “Delete Access Rule” button to delete the rule.

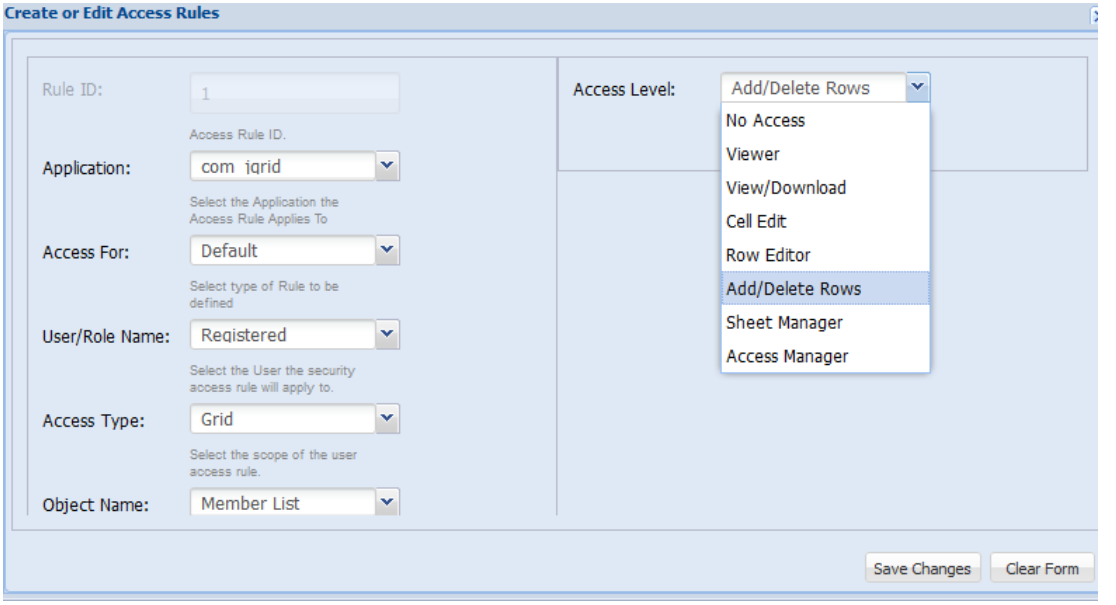


Figure 6.4.2 Add or Edit User Access Control Rule

- **Application:** Select the application this rule is to apply to. Each tab panel (Jgrid_component or multiple JGrid_Modules) are separate applications as described in Section 6.1 above.

- **Access For:** Select from the dropdown list the scope of the rule you are defining. Selections include:

    1. User – Rule limited to a specific user as selected below
    2. Users Roles – Rule limited to specific role
    3. Joomla Default - Rule applies to all Joomla users of type defined below
    4. Row Creator Types - Special Rule for Creator of Row Data (See Below)

- **User/Role Name:** Select from the dropdown list the "User" for the “User Rule Type”, "Role" to define a rule for all users with that Role, For “Default” select Joomla User Type to apply to all users of that type, or Creator to apply to the creator of a row.

- **User/Role Name:** Select from the dropdown list the Default Joomla user type, User or Role the Rule will apply to. The Default type will apply to the Joomla user type eg: non-registered users are guests (Joomla 1.5) or public (Joomla 1.6). For the Creator Role type the following options will appear.

    1. Creator Edit Private - Allows a registered user to create rows of data and only the creator row will see his data when viewing the grid.
    2. CRole Edit Private - Allows all members assigned to the same role to create, edit and view the data of all members of the role
    3. Creator Edit CRole View - Allows a member of a role to create data and all members of the role can see the data but only the creator can edit.
    4. Creator Edit Reg View - Allows a registered user to create rows and any registered user to view the data but only the creator can edit.
    5. CRole Edit Reg View - Allows a member of a role to create data and any registered user to view the data but only members of the role can edit.
    6. Creator Edit Public View - Allows a registered user to create rows and any public user to view the data but only the creator can edit.
    7. CRole Edit Pub View - Allows a member of a role to create data and any public user to view the data but only members of the role can edit
    8. Access Manager Edit Creator View – Allow Access Manager to Edit and set creator and view all rows, Creator to View only rows they are listed as creator.
    9. Access Manager Edit CRole View – Allow Access Manager to Edit and set creator and view all rows, User with Creator Role to View only rows they are listed as part of Creator Role.

- **Access Type:** Select from dropdown list "Grid" to apply to all sheets shown on this grid, “Grid-Column” to apply to a column on all sheets or "Sheet" to apply just to one sheet or "Sheet-Column" to apply to a column on a sheet.

- **Object Name:** Select from the dropdown list the “All Grids (global Rule), or the specific Grid, Grid-Column, Sheet, or Sheet-Column that the Rule will apply to.

- **Access Level**: Select from the dropdown list the Access Level to be Apply to the Rule. Selections are:

    1. NO ACCESS – User will be given no access to object
    2. VIEW ACCESS - User can view object but not edit
    3. VIEW DOWNLOAD – User can download CSV data or Images
    4. CELL EDIT – (Special Case) Edit data in specific row or cell see description below to activate.
    5. ROW EDITOR – User can edit all data in row
    6. ADD/DELETE ROWS – User can add or delete rows
    7. SHEETS Manager - User can add or delete Sheets
    8. ACCESS Manager – User can give access to other users for this Grid or Sheet

  Click the "Update Key" in Figure 6.4.2 above and the rule is now active in your Component.

  A Special Rule is the "Cell Edit" Type Rule. This "Access Rule" allows you to give specific users "Edit Access" to specific Cells in the Grid.

  1. To activate this Rule you first need to create a rule with "Access Level" equal to "CELL EDIT". This will enable Access control on specific rows or cells in your Grid.
  2. Next you need to go the the Joomla Front End JGrid that the Rule you just created applies to. You must have Joomla "Administrator" Access Rights or have been given "Access Manager" Rights to Grid or Sheet where you plan to add specific Cell or Row Access Rights.
  3. In the Front End a column will be visible "Edit User/Role" where you must select the User or Role who has "Edit Rights" for each row.
  4. When the selected user or role access this grid/sheet/or column depending on what "Access Type" you defined for the "Cell Edit" Rule in the backend will be able to edit the rows that will be Marked "Y" under the "Editable" column.

NOTE The Access Control will always default to the highest level of access you have given a user. This can be confusing for example if you have given a user "Sheet Level Security" and then add a rule to give him "viewer" security on a specific Column on the Sheet the Sheet level "Sheet Level Security"(greater) rule will override.

- Modify Default Group: To set the Access Level assigned to all grids and sheets based on the User Joomla Default Group as assigned by Joomla, click the “Modify Default Group” button in Figure 6.4.1 above. See figure 6.4.3 below to configure default groups Access Rights.

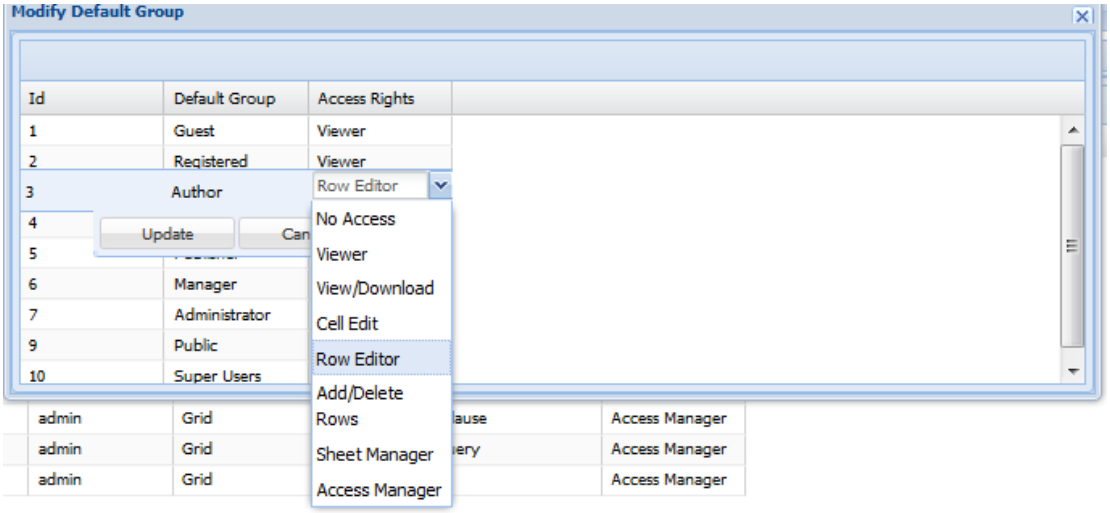


Figure 6.4.3 Modify Default Group

6.5 Manage Grid Roles

Select the "Manage Grid Rules" Tab to define User Role and assign Users to the roles as shown in Figure 6.5.1 below:

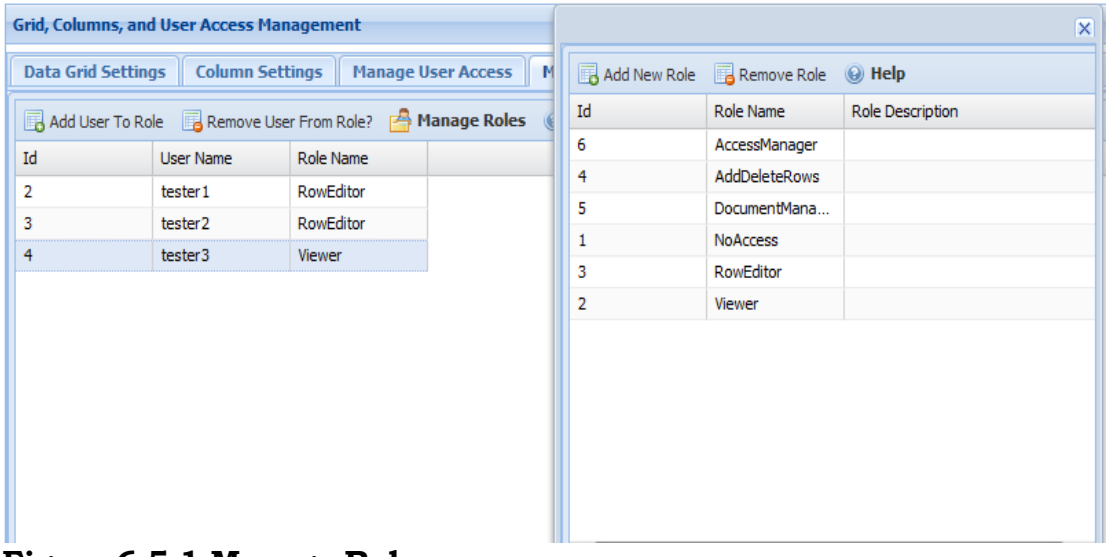


Figure 6.5.1 Manage Roles

- **Add User to Role**: To add a user to an existing Role, click the "Add User To Role" button and select the "user Name" from the drop down list and then select the "Role Name" from the drop down list and save.

- **Delete User from Role:** Select the user and click the “Remove User From Role” button.

- **Add New Role:** Click the “Manage Roles” button and the pop-up window on the right in Figure 6.5.1 will display. To add a new Role click the “Add New Role” button and type in your “Role Name”. To delete Role just select the role and click the “Remove Role” button.

7 Advanced Admin Configuration Guide

7.1 Importing and Exporting Data

7.2 Parameter Settings

Parameter Settings for the JGrid component can be viewed and modified by clicking the “Options” button shown in Figure 3.1.1 above. The JGrid Parameter Settings window will popup as shown in Figure 7.2.0 below: Click on Tabs to see detailed settings forms as shown in detailed sections below. To set width, height, X, or Y to default settings set value to zero (0) in detailed setting field.

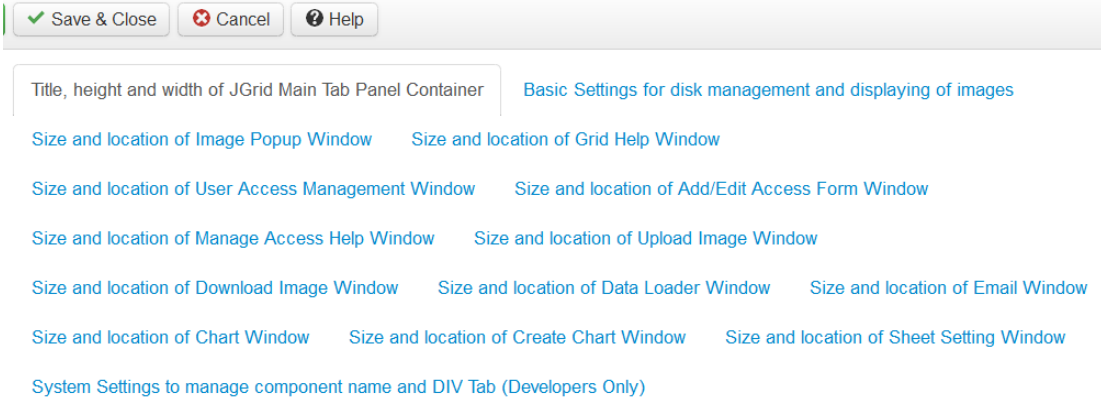


Figure 7.2.0 JGrid Parameters Setting Window

- **Title, height and width of JGrid Main Tab Panel Container:** Basic Settings title, height, width of the JGrid main tab panel window. See Section 7.2.1 Below:

- **Basic Settings for disk management and displaying of images:** Sizes of thumbnails, allowable upload and storage size, download settings, etc. See Section 7.2.2 below:

- **Size and location of Image Popup Window:** Height, Width, screen-x, screen-y of Image Popup Window. See Section 7.2.3 below:

- **Size and location of Grid Help Window:** Height, Width, screen-x, screen-y of Grid Help Window. See Section 7.2.4 below:

- **Size and location of User Access Management Window:** Height, Width, screen-x, screen-y of User Access Management Window. See Section 7.2.5 below:

- **Size and location of Add/Edit Access Form Window:** Height, Width, screen-x, screen-y of Add/Edit Access Form Window. See Section 7.2.6 below:

- **Size and location of Manage Access Help Window:** Height, Width, screen-x, screen-y of Manage Access Help Window. See Section 7.2.7 below:

- **Size and location of Upload Image Window:** Height, Width, screen-x, screen-y of Upload Image Window. See Section 7.2.8 below:

- **Size and location of Download Image Window:** Height, Width, screen-x, screen-y of Download Window. See Section 7.2.9 below:

- **Size and location of Data Loader Window:** Height, Width, screen-x, screen-y of Data Loader Window. See Section 7.2.10 below:

- **Size and location of Email Window:** Height, Width, screen-x, screen-y of EMail Window. See Section 7.2.11 below:

- **Size and location of Chart Window:** Height, Width, screen-x, screen-y of Chart Window. See Section 7.2.12 below:

- **Size and location of Create Chart Window:** Height, Width, screen-x, screen-y of Create Chart Window. See Section 7.2.13 below:

- **Size and location of Sheet Setting Window:** Height, Width, screen-x, screen-y of Sheet Setting Window. See Section 7.2.14 below:

- **System Settings to manage component name and DIV Tab:** (Developers Only) Rename all Files and JGrid.xml and Reset these value to add second Component, also rename DIV. See Section 7.2.15 below:

7.2.1 Title, height and width of JGrid Main Tab Panel Container:

Basic Settings title, height, width of the JGrid main tab panel window. See Figure 7.2.1 below:

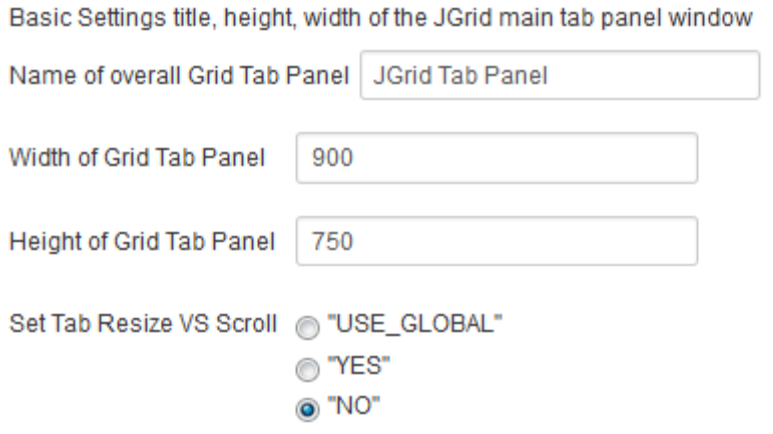


Figure 7.2.1 Title, Height & Width of JGrid Main Tab Panel

- **Name of overall Grid Tab Panel:** Enter the title that will appear on the top of the tab panel.
- **Width of Grid Tab Panel:** Enter the width that the grid tab panel will display.
- **Height of Grid Tab Panel:** Enter the height that the grid tab panel will display.
- **Set Tab Resize VS Scroll**: Set YES then enter tab width below or NO to Scroll tabs at preset width.

- **Width of tab panel:** Enter the width of the tab panel tab in pixels

7.2.2 Basic Settings for disk management and displaying of images: Sizes of thumbnails, allowable upload and storage size, download settings, etc. See Figure 7.2.2 below:

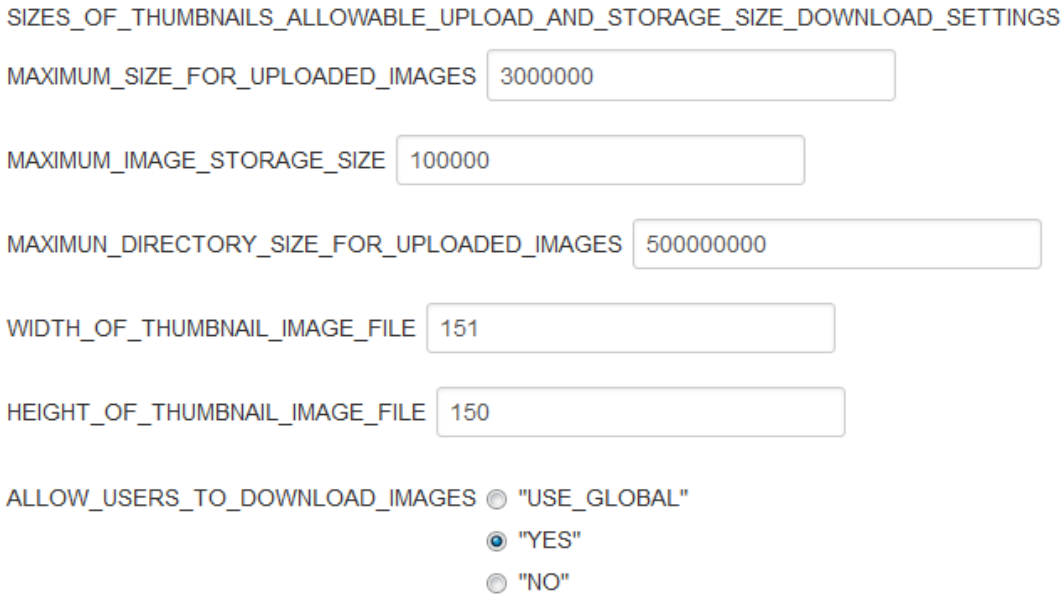


FIGURE 7.2.2 Basic Settings For Disk & Image Management

- **Maximum Size for Uploaded Images:** Enter the maximum size in bits allowed for uploaded images.
- **Maximum Image Storage Size:** Enter the size uploaded images will be reduced to for storage in bits.
- **Maximum Directory Size for Uploaded Images:** Enter the maximum size of the Directory in bits allowed for uploaded image files.
- **Width of Thumbnail Image File:** Enter the width that the Thumbnail image will be stored.
- **Height of Thumbnail Image File:** Enter the height that the Thumbnail image will be stored.
- **Allow Users To Download Images:** Allow Users to Download Images From the Site

7.2.3 Size and location of Image Popup Window: Height, Width, screen-x, screen-y of Image Popup Window. See Figure 7.2.3 below:

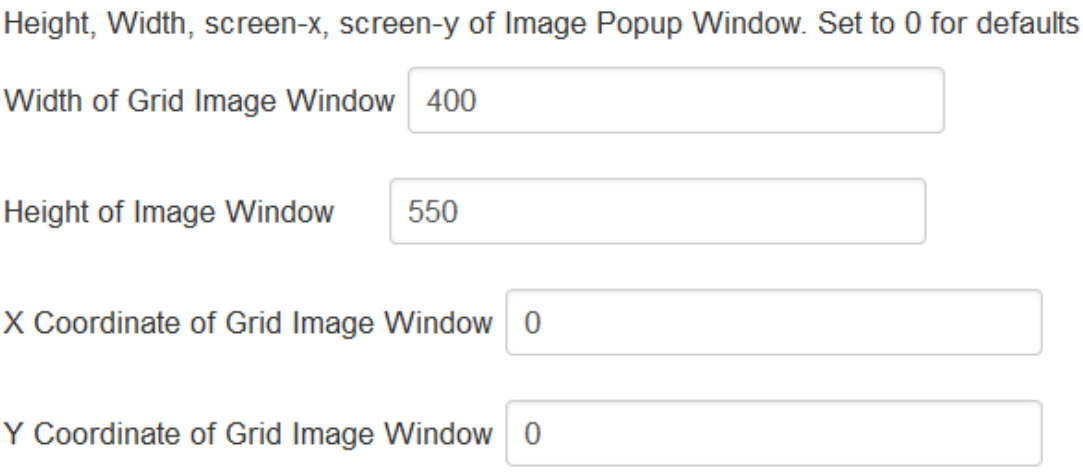


Figure 7.2.3 Size & location of Image Popup Window

- **Width of Grid Image Window:** Enter the width that the image window will display
- **Height of Image Window:** Enter the height that the image window will display
- **X Coordinate of Grid Image Window**: Enter the x coordinate where the image window will display
- **Y Coordinate of Grid Image Window:** Enter the y coordinate where the image window will display

7.2.4 Size and location of Grid Help Window: Height, Width, screen-x, screen-y of Grid Help Window. See Figure 7.2.4 below:

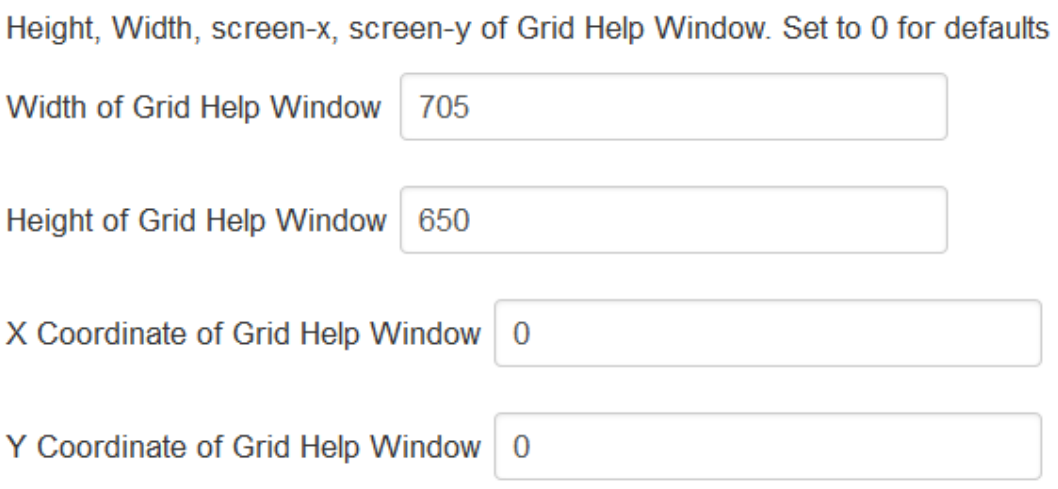


Figure 7.2.4 Size and location of Grid Help Window

- **Width of Grid Help Window:** Enter the width that the help window will display
- **Height of Grid Help Window:** Enter the height that the help window will display
- **X Coordinate of Grid Help Window**: Enter the x coordinate where the help window will display
- **Y Coordinate of Grid Help Window:** Enter the y coordinate where the help window will display

7.2.5 Size & location of User Access Management Window: Height, Width, screen-x, screen-y of User Access Management Window. See Figure 7.2.5 below:

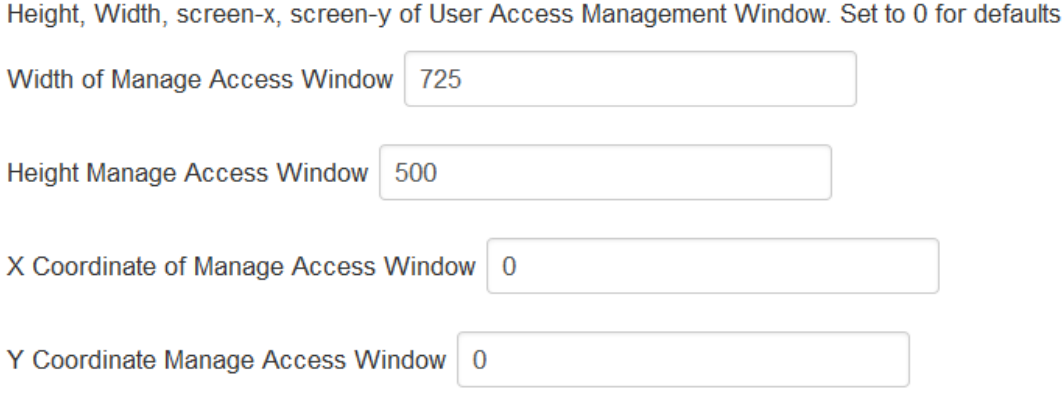


Figure 7.2.5 Size & location of User Access Management Window

- **Width of Manage Access Window:** Enter the width that the manage access window will display
- **Height of Manage Access Window:** Enter the height that the manage access window will display
- **X Coordinate of Manage Access Window**: Enter the x coordinate where the manage access window will display
- **Y Coordinate of Manage Access Window:** Enter the y coordinate where the manage access window will display

7.2.6 Size and location of Add/Edit Access Form Window: Height, Width, screen-x, screen-y of Add/Edit Access Form Window. See Figure 7.2.6 below:

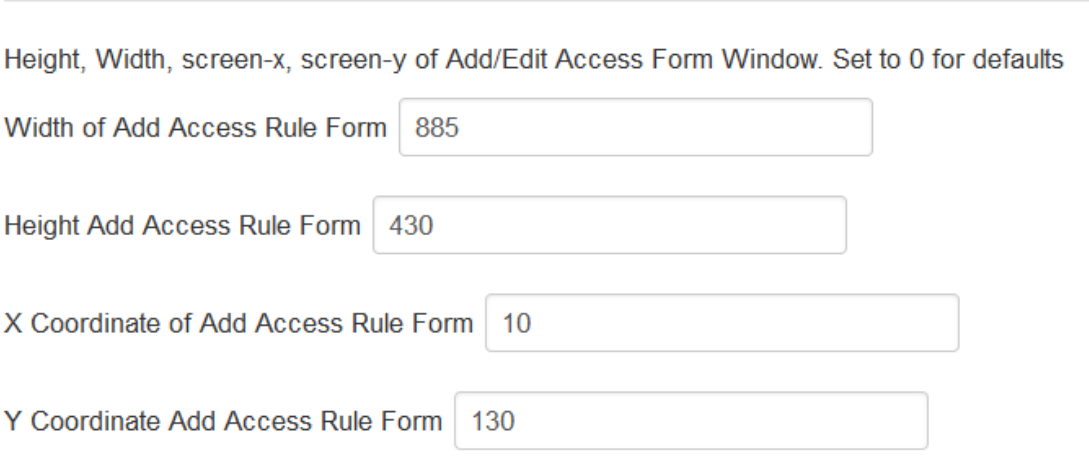


Figure 7.2.6 Size & location of Add/Edit Access Form Window

- **Width of Add Access Window:** Enter the width that the Add Access window will display
- **Height of Add Access Window:** Enter the height that the Add Access window will display
- **X Coordinate of Add Access Window**: Enter the x coordinate where the Add Access window will display
- **Y Coordinate of Add Access Window:** Enter the y coordinate where the Add Access window will display

7.2.7 Size and location of Manage Access Help Window: Height, Width, screen-x, screen-y of Manage Access Help Window. See Figure 7.2.7 below:

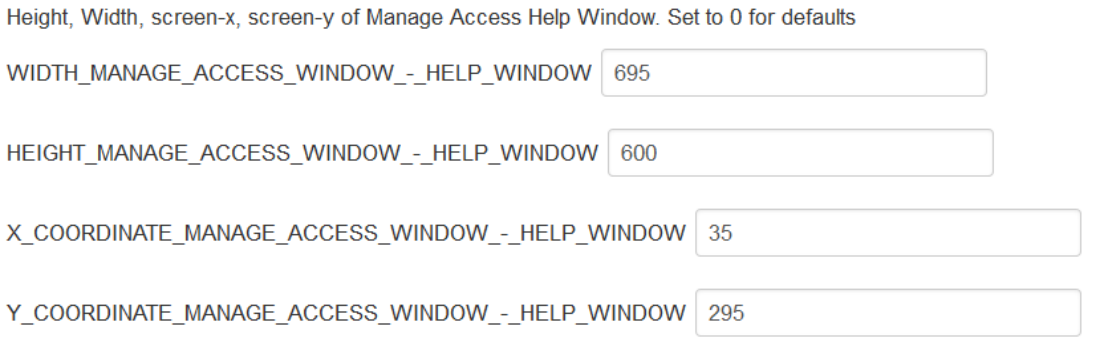


Figure 7.2.7 Size & location of Manage Access Help Window:

- **Width of Access Help Window:** Enter the width that the Access Help window will display
- **Height of Access Help Window:** Enter the height that the Access Help window will display
- **X Coordinate of Access Help Window**: Enter the x coordinate where the Access Help window will display
- **Y Coordinate of Access Help Window:** Enter the y coordinate where the Access Help window will display

7.2.8 Size and location of Upload Image Window: Height, Width, screen-x, screen-y of Upload Image Window. See Figure 7.2.8 below:

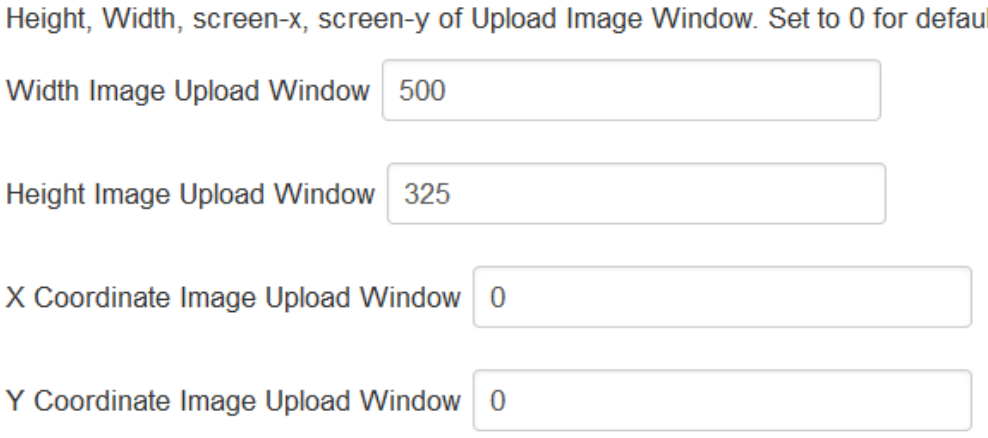


Figure 7.2.8 Size & location of Upload Image Window

- **Width of Image Upload Window:** Enter the width that the Image Upload window will display

- **Height of Image Upload Window:** Enter the height that the Image Upload window will display
- **X Coordinate of Image Upload Window**: Enter the x coordinate where the Image Upload window will display
- **Y Coordinate of Image Upload Window:** Enter the y coordinate where the Image Upload window will display

7.2.9 Size and location of Download Image Window: Height, Width, screen-x, screen-y of Download Window. See Figure 7.2.9 below:

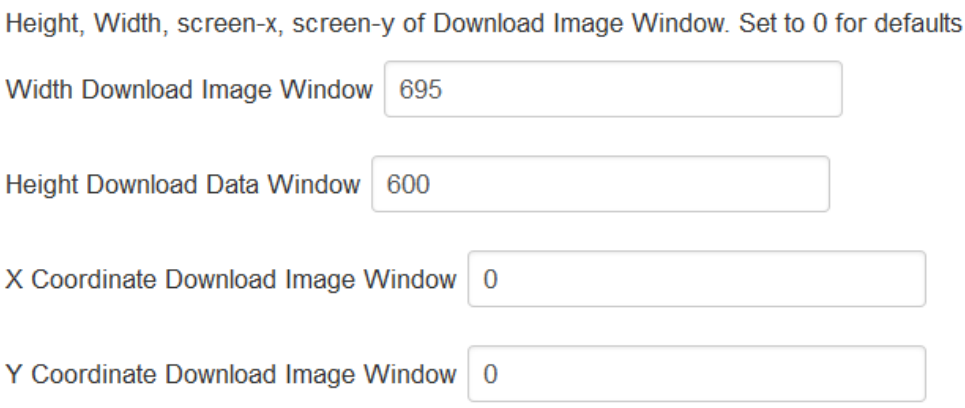


Figure 7.2.9 Size and location of Download Image Window

- **Width of Download Image Window:** Enter the width that the Download Image window will display
- **Height of Download Image Window:** Enter the height that the Download Image window will display
- **X Coordinate of Download Image Window**: Enter the x coordinate where the Download Image window will display
- **Y Coordinate of Download Image Window:** Enter the y coordinate where the Download Image window will display

7.2.10 Size and Location of Data Loader Window: Height, Width, screen-x, screen-y of Data Loader Window. See Figure 7.2.10 below:

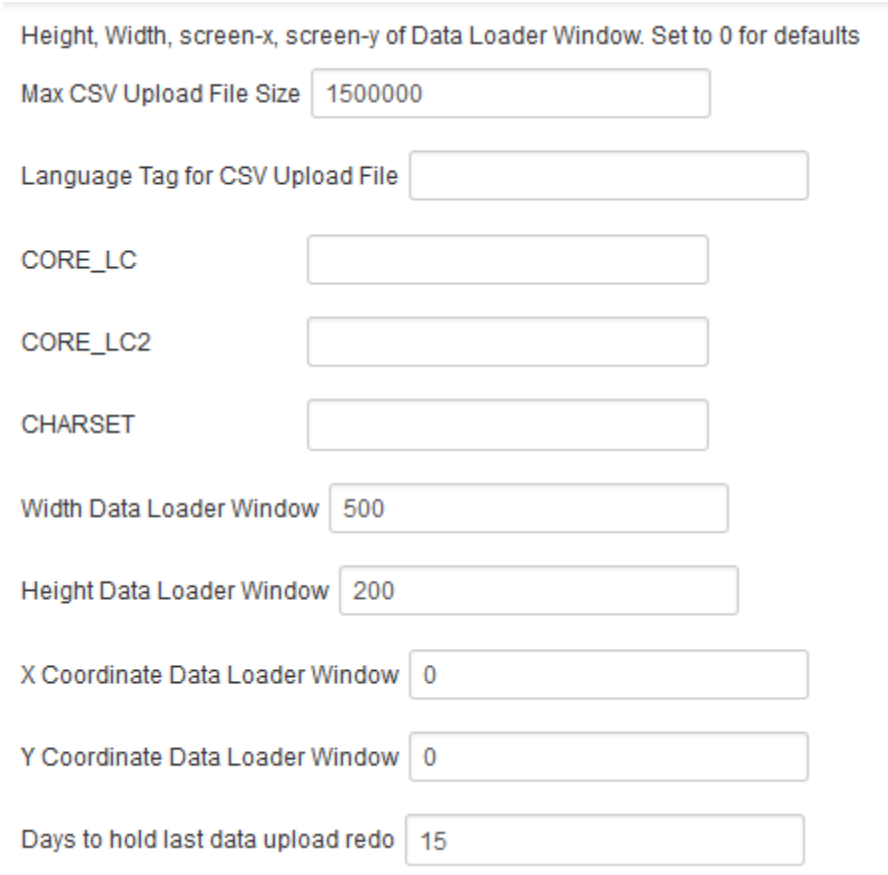


Figure 7.2.10 Size & Location of Data Loader Window

- **Max CSV Upload File Size:** Enter The Maximum Size of File That Can be Uploaded
- **Language Tag for CSV Upload File:** If you have problems with default CSV Upload Language Support, Enter The Language Tag to Allow The System to Read CSV Uploaded Characters See setlocale() PHP Function
- **CORE_LC:** If you have problems with default CSV Upload Language Support. Enter The CORE_LC Tag to Allow The System to Read CSV Uploaded Characters See setlocale() PHP Function
- **CORE_LC2:** If you have problems with default CSV Upload Language Support. Enter The CORE_LC2 Tag to Allow The System to Read CSV Uploaded Characters See setlocale() PHP Function
- **CHARSET:** If you have problems with default CSV Upload Language Support. Enter The CHARSET Tag to Allow The System to Read CSV Uploaded Characters See setlocale() PHP

Function

- **Width of Data Loader Window:** Enter the width that the Data Loader window will display
- **Height of Data Loader Window:** Enter the height that the Data Loader window will display
- **X Coordinate of Data Loader Window**: Enter the x coordinate where the Data Loader window will display
- **Y Coordinate of Data Loader Window:** Enter the y coordinate where the Data Loader window will display

7.2.11 Size and Location of Email Window: Height, Width, screen-x, screen-y of EMail Window. See Figure 7.2.11 below:

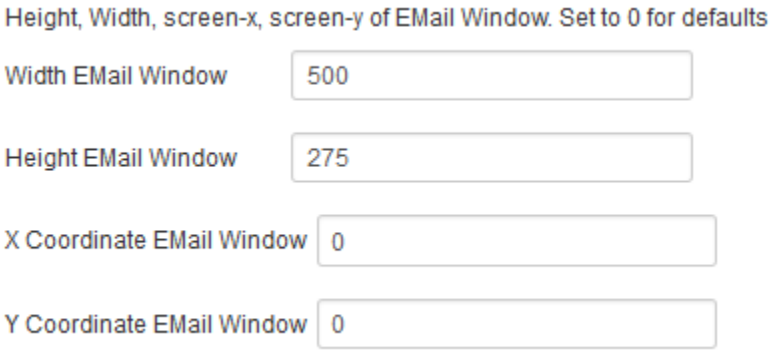


Figure 7.2.11 Size & Location of Email Window

- **Width of EMail Window:** Enter the width that the EMail window will display
- **Height of EMail Window:** Enter the height that the EMail window will display
- **X Coordinate of EMail Window**: Enter the x coordinate where the EMail window will display
- **Y Coordinate of EMail Window:** Enter the y coordinate where the EMail window will display

7.2.12 Size and Location of Chart Window: Height, Width, screen-x, screen-y of Chart Window. See Figure 7.2.12 below:

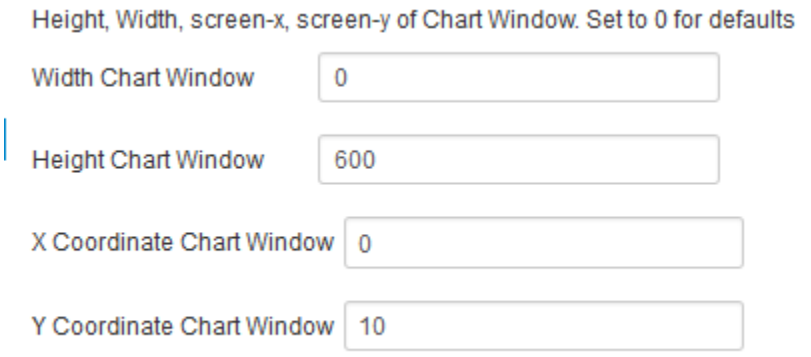


Figure 7.2.12 Size and Location of Chart Window

- **Width of Chart Window:** Enter the width that the Chart window will display
- **Height of Chart Window:** Enter the height that the Chart window will display
- **X Coordinate of Chart Window**: Enter the x coordinate where the Chart window will display
- **Y Coordinate of Chart Window:** Enter the y coordinate where the Chart window will display

7.2.13 Size and Location of Create Chart Window: Height, Width, screen-x, screen-y of Create Chart Window. See Figure 7.2.13 below:

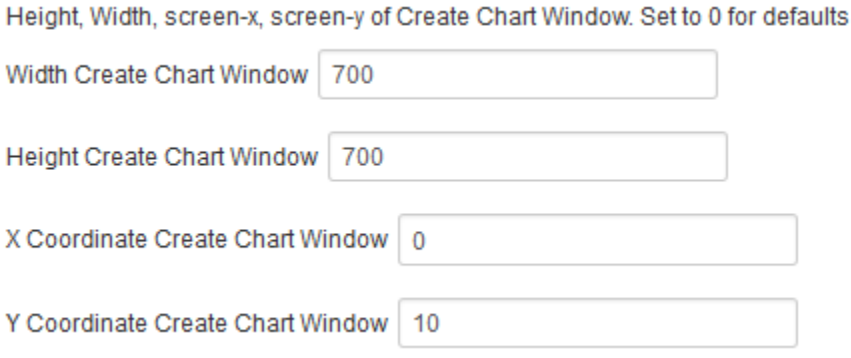


Figure 7.2.13 Size and Location of Create Chart Window

- **Width of Create Chart Window:** Enter the width that the Create Chart window will display
- **Height of Create Chart Window:** Enter the height that the Create Chart window will display
- **X Coordinate of Create Chart Window**: Enter the x coordinate where the Create Chart window will display

- **Y Coordinate of Create Chart Window:** Enter the y coordinate where the Create Chart window will display

7.2.14 Size and Location of Sheet Setting Window: Height, Width, screen-x, screen-y of Sheet Setting Window. See Figure 7.2.14 below:

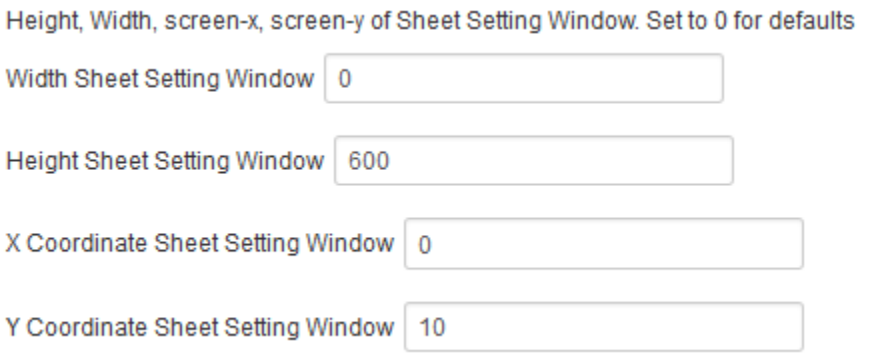


Figure 7.2.14 Size and Location of Sheet Setting Window

- **Width of Sheet Setting Window:** Enter the width that the Sheet Setting window will display
- **Height of Sheet Setting Window:** Enter the height that the Sheet Setting window will display
- **X Coordinate of Sheet Setting Window**: Enter the x coordinate where the Sheet Setting window will display
- **Y Coordinate of Sheet Setting Window:** Enter the y coordinate where the Sheet Setting window will display

7.2.15 System Settings to Manage Component Name and DIV Tab: (Developers Only) Rename all Files and JGrid.xml and Reset these value to add second Component, also rename DIV. See Figure 7.2.15 below:

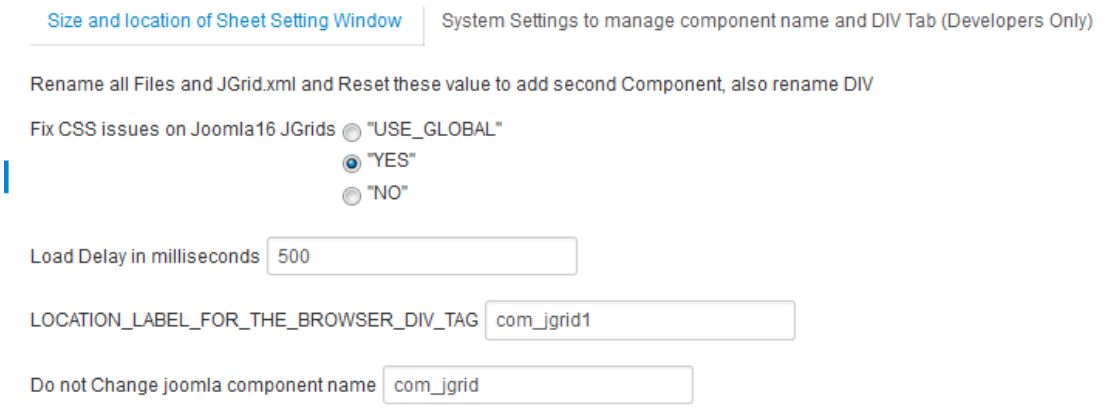


Figure 7.2.15 System Settings to Manage Comp Name & DIV Tab

- **Fix CSS issues on Joomla16 JGrids:** Select YES to fix CSS formatting issues on Joomla16 out of the box templates. This may not be needed for other Joomla templates
- **Delay Page Execution to Allow For All Scripts To Load:** Delay time in Milliseconds before WEB page javascript begins to execute to allow time for all JGrid scripts and images to load
- **Location Label for the Browser DIV Tag:** Only for Developers - Enter a unique text sting as a location label for the brower DIV Tag
- **Do not Change Joomla component name**: Only for Developers change this from com_jgrid if you have modified the source to allow a second JGRID component

7.2 Language Packs: Language Packs are currently not available for the JGrid Data Grid Component. They are planned for the next release of JGrid. You may perform your own conversion to your local language by making a copy of the \joomla\language\en-GB\ en-GB.com_jgrid.ini file and translating to your own local language. This file then needs to also be added to \joomla\administrator\language\en-GB and \joomla\components\com_jgrid\language\en-GB directorys. See http://docs.joomla.org/Specification_of_language_files for more information on Joomla language files.

The Help files must also be translated. Open directory \joomla\administrator\components\com_jgrid\help\en-GB and translate the help file found there.

8 Basic Example

9 Advanced Example

APPENDIX A: JGrid Help Menus

I. Site User Help File

JGrid Help Instructions	
Edit Row	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. “DOUBLE CLICK” a cell, make edits then click ”UPDATE”
Insert Row	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. “ SINGLE CLICK” a row to select insert location, then click “ADD GRID ROW” button from toolbar to add row below, or click “EDIT/DELETE” button, from menu click “ADD GRID ROW ABOVE” or “ADD GRID ROW BELOW”.
Move Row	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. “SINGLE CLICK” first row and press “SHIFT SINGLE CLICK” to select group of continuous rows, then with mouse cursor over selected rows hold down “LEFT MOUSE KEY” and move rows to new location
Copy Row	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. “SINGLE CLICK” first row and press “SHIFT SINGLE CLICK” to select group of continuous rows, then either press “CNTL-C” or click “EDIT/DELETE” button, from menu click “COPY ROWS” , then with mouse cursor over selected rows hold down “LEFT MOUSE KEY” and move rows to new location where they will be copied
Delete Row	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when

	editing complete. “SINGLE CLICK” first row and press “SHIFT SINGLE CLICK” to select group of continuous rows, then click “EDIT/DELETE” button, from menu click “DELETE ROWS”
Upload Data	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. 1.) First select the grid row the data will be loaded below 2.)Select the "UPLOAD DATA" button, a menu box will appear 3.) Click the "BROWSE" button and select a CSV (coma separated Value) file to upload. Note columns will load left to right skipping "any picture type columns". Click the "SAVE" button 4.) You can select the "UNDO" button to undo the last upload the user made for several weeks.
Upload Photos Or Flash	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. 1.) "DOUBLE CLICK" a cell in a "Picture Type" Column. A menu box will appear 2.)Click the "BROWSE" button and select a picture to upload. 3.) Type "TOOLTIP" text that will appear when you hover your mouse over the grid photo 4.) Type "URL REF" URL to associate with this picture that can be jumped to from a button under the picture popup window http://www.datagrids.clubsareus.org (optional) 5. Type "SHEET REF" Another Sheet in any grid in this TAB PANEL to associate with this picture that can be jumped to from a button under the picture popup window (optional) 6) Click the "SAVE" button to upload the picture. 7.) Click the "DELETE" button to delete and existing picture.

View Photos Or Flash	In View Mode (Click "VIEW" button in "edit" mode) "SINGLE CLICK" Image. Image will popup with action buttons below 1) If exists Click "GO TO URL" button to jump to associated URL 2.) If exists Click "GO TO SHEET" button to jump to associated Grid Sheet 3.) If Enabled Click "DOWNLOAD IMAGE" button to download image to your Workstation
Search	Enter Text to search for rows matching. If multiple words "Grand Street" will return all rows with "Grand" or Street. If you add "AND between "Lane AND Island" then only rows with "Lane" and "Island" in them will be returned. OR may also be used in compound clauses.
Sort Rows	Click “ARROW” next to column name, click “SORT ASCENDING” or “SORT DESCENDING”
Filter Row	Click “ARROW” next to column name, click “FILTERS” then type in filter text, number range or date range as required by column type Click "Clear All Filters" to clear Filters
Print Grid	Click “PRINT GRID” button, then follow the normal printing screens from you PC or workstation
Show Columns	Click “ARROW” next to column name, click “COLUMNS” then check or un-check boxes to show or hide specific columns
Resize Columns	Move mouse cursor over line between column headers, Press “LEFT MOUSE BUTTON” then resize column
Load New Sheet	Click arrow next to sheet name in upper left of toolbar, Click another sheet and it will be displayed on your screen
Create New Sheet	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. Click “MANAGE SHEETS” button, from menu Click “CREATE NEW SHEET” button then enter new sheet name, then click “OK” button
Delete Sheet	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when

	editing complete. Click “MANAGE SHEETS” button, from menu Click “DELETE CURRENT SHEET” button then verify your intent to delete current sheet by clicking “YES” button
Copy Current Sheet	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. Click “MANAGE SHEETS” button, from menu Click “COPY CURRENT SHEET” button then enter new sheet name, then click “OK” button
Rename Current Sheet	First "SINGLE CLICK" the "EDIT" button to put the Grid in Edit Mode. "SINGLE CLICK" the "VIEW" button to toggle back to view mode when editing complete. Click “MANAGE SHEETS” button, from menu Click “RENAME CURRENT SHEET” button then enter new sheet name, then click “OK” button
Change Grids	Click “TAB” at top of screen to move between grids
URL Or Email	If URL's or Email Addresses in cells are active they will be highlighted. Just double click and a popup screen will take you to the URL or let you enter your email to the address in the cell

II. Admin Grid Configuration Help File

JGrid Grids Help Instructions	
Edit Grid	“DOUBLE CLICK” a cell, make edits then click ”UPDATE”
Insert Grid	Click “ADD New Grid” button from toolbar to add row at bottom of grid list. Then enter "Grid Application Name" Unique Grid Title and setup information.
Reorder Grid On Tab	Girds appear on TAB panel in the order they show on this screen from top to bottom (Left to Right on Tab Panel). To reorder just drag rows to new location “SINGLE CLICK” first row and press “SHIFT SINGLE CLICK” to select the row or group of continuous rows, then with mouse cursor over selected rows hold down “LEFT MOUSE KEY” and move rows to new location

Delete Grid	“SINGLE CLICK” first row and press “SHIFT SINGLE CLICK” to select group of continuous rows, then click “Delete Grid” button
Assign Theme	Click the List Box Arrow and Select Color Theme from the drop down list. The JGrid Tab Panel will change to the Color Theme you have selected.
Show Columns	Click “ARROW” next to column name, click “COLUMNS” then check or un-check boxes to show or hide specific columns
Resize Columns	Move mouse cursor over line between column headers, Press “LEFT MOUSE BUTTON” then resize column
Add Grid Columns	“SINGLE CLICK” to select Grid then Click “ADD GRID COLUMNS” button to launch popup window to add Columns to Selected Grid
Update Grid Settings	“SINGLE CLICK” to select Grid then Click “GRID SETTINGS” button to launch popup window to update settings of Selected Grid

III. Admin Column Configuration Help File

JGrid Columns Help Instructions	
Add Column	Click “ADD New Column” button from toolbar to add column. Then enter "Column Title" Unique DataIndex and other setup information.
Modify Lists	Select List Type Column then Click “Modify Lists” button from toolbar to add Selection Box Lists and Colors. When window pops up. Add the valid list box text Select "COLOR" from pallet that grid row will change to when user selects this selection Select "SELECTION COLOR" for color of row with this list value when selected Select "BACKGROUND SELECTION COLOR" for color of selection background
Delete Column	“SINGLE CLICK” column and press "Delete Grid Column" button to Delete Column

IV. Admin Add Grid Columns Help File

JGrid GridColumns Help File	
Grid Select	The Grid Select Type will default to "JGrid Data". If you are a

Type	normal user do not change this setting and the columns you add below and the data you enter will all be part of the JGrid component as in previous releases. If you are a very advanced user and want to use the JGrid component to display query results from the MYSQL database then select "MYSQL Table Data", "Custom Where Clause", or "Custom Select Query". Each will provide a progressively more customized ability to create an SQL Query from the database providing additional tabs to fill out.
Insert Column	Click arrow in upper left of toolbar, Select a new column from the list of columns not yet used on this grid. Then click the “ADD New Grid Column” button to add the new column at the bottom of the list.
Move Columns	“SINGLE CLICK” first column and press “SHIFT SINGLE CLICK” to select group of continuous columns, then with mouse cursor over selected columns hold down “LEFT MOUSE KEY” and move columns to new location This will re-order the columns on the front end grid.
Delete Column	“SINGLE CLICK” first column and press “SHIFT SINGLE CLICK” to select group of continuous columns, then click “Remove Column” button to Delete Columns
Column Color Priority	Select Priority of Column if Multiply selection values want to change row color. Colors set in "Column Settings" Tab," Modify Lists" button, 1 = Highest priority, 9 = lowest priority. Multiple columns can have the same priority
Column Select Type	Select "JGrid Data" - Normal User Entered JGrid Data or "Formula" - Enter a formula as described in the formula column tooltip using the Dataindex values as variables.
With "MYSQL Table Data" Selected	If you are an advanced user and in the "Grid Select Type" selector at the top of the form select "MYSQL DATA" additional columns will appear. In the "Column Select Type" column new options will appear to make columns tie to columns in the "Joomla Data Table" or from any data in the "MYSQL Data Table". As you tie database tables to your JGrid tables an SQL call will build in the top text area. This area is not editable but automatically generates. If you click the "Where Clause Dependencies" tab you can add SQL Where Clause dependencies to your query. One column must be designated as the primary key. This will allow JGrid or Formula type columns to be added. They will contain your JGrid data added to the sql result from the Query you create. If data from the primary key changes your custom JGrid data will be lost for that key value. When you are done

	click the "Test Query" button to see if you have a valid SQL query created. If you get a "SQL Query Validated" message go to the front end and check you returned data.
With "Custom Where Clause" Selected	If in the "Grid Select Type" selector at the top of the form you select "Custom Where Clause" you get an additional tab where you can add you own Custom Where Clause that will be added to the end of your SQL Call
With "Custom Select Query" Selected	If in the "Grid Select Type" selector at the top of the form you select "Custom Select Query" you can enter a totally custom SQL call in the top text box which is now editable. Use the same format as the automated SQL create logic used, but you are in full control..

V. Admin User Access Rules Help File

JGrid Rules Help Instructions	
Edit Access Rule	“SINGLE CLICK” a rule row then Click the "EDIT EXISTING RULE" button ”UPDATE” button to launch popup window to update rule settings
Add New Access Rule	“ SINGLE CLICK” a rule row to select insert location below, then click “ADD NEW ACCESS RULE” to launch popup window to update rule settings. Rule adds on save
Delete Access Rule	“SINGLE CLICK” rule and press “SHIFT SINGLE CLICK” to select rule, then click “DELETE ACCESS RULE”
Sort Access Rules	Click “ARROW” next to column name, click “SORT ASCENDING” or “SORT DESCENDING”
Show Columns	Click “ARROW” next to column name, click “COLUMNS” then check or un-check boxes to show or hide specific columns
Show In Groups	Click “ARROW” next to column name, Click "Group By This Field" Button to Group Rows, Uncheck "Show In Groups" to remove groups.
Resize Columns	Move mouse cursor over line between column headers, Press “LEFT MOUSE BUTTON” then resize column

Description of JGrid Access(Security) Overview

The JGrid Joomla Component Provides Grid Level, Grid-Column Level, Sheet Level, Sheet-Column Level and Sheet-Cell Level "Access Control" by User,Users Roles,Joomla Default, and Row Creator Types. This "Access Control" system provides several levels of Grid Sheet Access including:

- NO ACCESS
- VIEW ACCESS
- VIEW DOWNLOAD
- CELL EDIT
- ROW EDITOR
- ADD/DELETE ROWS
- SHEETS Manager
- ACCESS Manager

These "Access Control" Levels are managed by the Joomla Administrator from the Backend and can be managed from the front end by Users given "MANAGE ACCESS" Security Level To Begin Managing "Access Control" in the "Manage User Access" Screen in the Joomla Backend:

1. Press the "Add New Access Rule" button and Window will popup
2. Double Click to Edit Rule Under "Access For" Column.
3. Select "User" for a rule for a specific user, "Role" to define a rule for all users with the role, Default to apply to all users of that type, or Creator to apply to the creator of a row.
4. Under the "User/Role Name" Colum Select the Default Joomla user type, User or Role the Rule will apply to. The Default type will apply to the Joomla user type eg: non-registered users are guests (Joomla 1.5) or public (Joomla 1.6). For the Creator Role type the following options will appear.
    1. Creator Edit Private - Allows a registered user to create rows of data and only the creator row will see his data when viewing the grid.
    2. CRole Edit Private - Allows all members assigned to the same role to create, edit and view the data of all members of the role
    3. Creator Edit CRole View - Allows a member of a role to create data and all members of the role can see the data but only the creator can edit.
    4. Creator Edit Reg View - Allows a registered user to create rows and any registered user to view the data but only the creator can edit.
    5. CRole Edit Reg View - Allows a member of a role to create data and any registered user to view the data but only members of the role can edit.
    6. Creator Edit Public View - Allows a registered user to create rows and any public user to view the data but only the creator can edit.
    7. CRole Edit Pub View - Allows a member of a role to create data and any public user to view the data but only members of the role can edit

8. Access Manager Edit Creator View – Allow Access Manager to Edit and set creator andview all rows, Creator to View only rows they are listed as creator.
9. Access Manager Edit CRole View – Allow Access Manager to Edit and set creator and view all rows, Userwith Creator Role to View only rows they are listed as part of Creator Role.

5. Select "Grid" to apply to all sheets shown on this grid, “Grid-Column” to apply to a column on all sheets or "Sheet" to apply just to onesheet or "Sheet-Column" to apply to a column on a sheet.
6. Under "Object Name" select the “All Grids (global Rule), or the specific Grid, Grid-Column, Sheet, or Sheet-Column that the Rule will apply to.
7. Under the "Access Level" Column Select the Access Level to be Applied to the Rule.
8. Click the "Update Key" and the rule is now active in your Component.

A Special Rule is the "Cell Edit" Type Rule. This "Access Rule" allows you to give specific users "Edit Access" to specific Cells in the Grid.

1. To activate this Rule you first need to create a rule with "Access Level" equal to "CELL EDIT". This will enable Access control on specific rows or cells in your Grid.
2. Next you need to go the the Joomla Front End JGrid that the Rule you just created applies to. You must have Joomla "Administrator" Access Rights or have been given "Access Manager" Rights to Grid or Sheet where you plan to add specific Cell or Row Access Rights.
3. In the Front End a column will be visible "Edit User/Role" where you must select the User or Role who has "Edit Rights" for each row.
4. When the selected user or role access this grid/sheet/or column depending on what "Access Type" you defined for the "Cell Edit" Rule in the backend will be able to edit the rows that will be Marked "Y" under the "Editable" column.

NOTE The Access Control will always default to the highest level of access you have given a user. This can be confusing for example if you have given a user "Sheet Level Security" and then add a rule to give him "viewer" security on a specific Column on the Sheet the Sheet level "Sheet Level Security"(greater) rule will override.

VI. Admin Role Configuration Help File

JGrid Roles Help Instructions	
Edit User Role	“DOUBLE CLICK” a cell, make edits then click ”UPDATE”
Add New User Role	“ SINGLE CLICK” a row to select insert location, then click “ADD NEW USER ROLE” button to add row below”.

Delete User From Role	"SINGLE CLICK" rule and press "SHIFT SINGLE CLICK" to select rule, then click "DELETE USER FROM ROLE"
Sort User Roles	Click "ARROW" next to column name, click "SORT ASCENDING" or "SORT DESCENDING"
Show Columns	Click "ARROW" next to column name, click "COLUMNS" then check or un-check boxes to show or hide specific columns
Resize Columns	Move mouse cursor over line between column headers, Press "LEFT MOUSE BUTTON" then resize column

JGrid Roles Help File	
Insert New Row	Click arrow in upper left of toolbar, Select a new column from the list of columns not yet used on this grid. Then click the "ADD New Grid Column" button to add the new column at the bottom of the list.
Delete Roles	"SINGLE CLICK" first column and press "SHIFT SINGLE CLICK" to select group of continuous columns, then click "Remove Column" button to Delete Columns
Sort Columns	Click "ARROW" next to column name, click "SORT ASCENDING" or "SORT DESCENDING"
Show Columns	Click "ARROW" next to column name, click "COLUMNS" then check or un-check boxes to show or hide specific columns
Resize Columns	Move mouse cursor over line between column headers, Press "LEFT MOUSE BUTTON" then resize column

APPENDIX B: Upgrading JGrid To upgrad JGrid to a new version first make a full backup of you site then just follow the Installation Instructions in Section 2.2 above. The new version code will replace the existing JGrid code. Your database Grid Settings and your users data stored in the database will not be modified. Once you have installed the new JGrid version you must launch the JGrid Administrative backend as described at the start of Section 3.1 above. JGrid will make any required changes to you database scheme automatically in a backward compatible method. Once completed you are ready to use the new version of JGrid.

APPENDIX C: The JGrid Forum

The JGrid Forum is available to all users to ask Questions and

Share Ideas on the JGrid Extension. Enter http://www.datagrids.clubsareus.org to access the JGrid Web Site as shown below in Figure Appendix.C.1

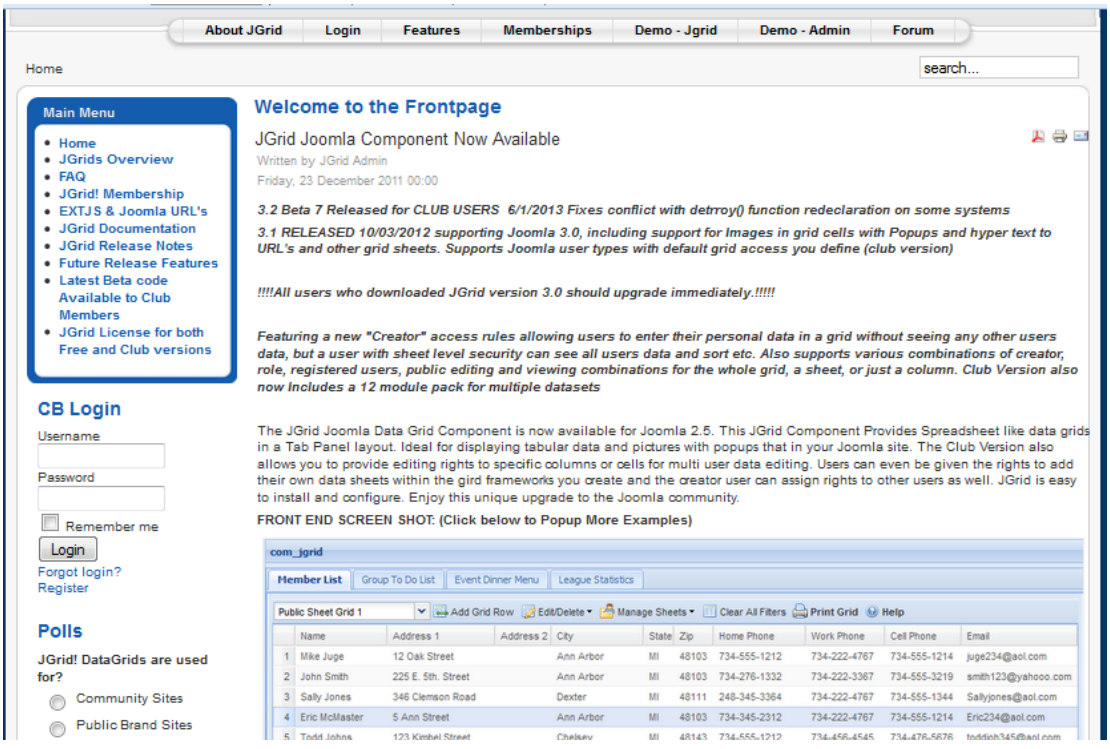


Figure Appendix C.1 JGrid Web Site

To access the JGrid Forum click the Forum Tab in the top right of the tab panel and the panel will popup as shown in Figure Appendix.C.2 below. You can review previously answered questions or ask your own. If you find any bugs in the JGrid code please be sure to ask for help on the forum to resolve. JGrid is a continuously developing and and improving application and as shareware you are important as part of the community that develops and tests JGrid.

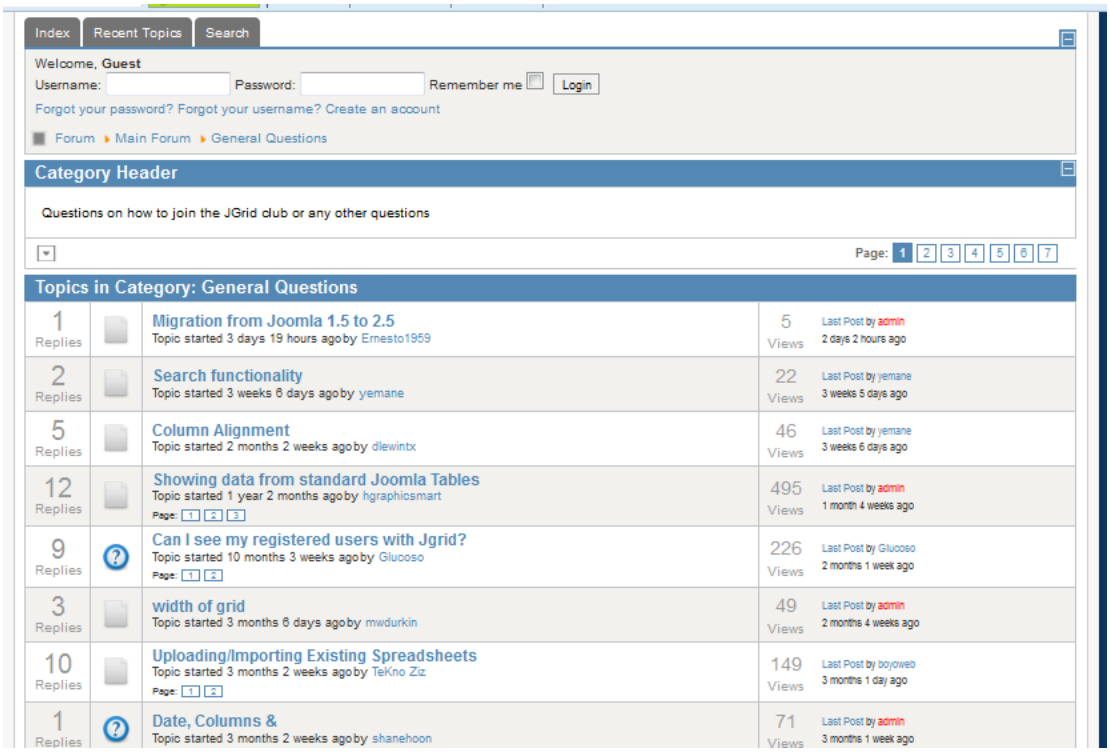


Figure Appendix.C.2 JGrid Forum

APPENDIX D: The JGrid Database Schema

```
CREATE TABLE IF NOT EXISTS `#__jgrid_applications` (
  `id` int(11) NOT NULL auto_increment,
  `grid_application_name` varchar(25) NOT NULL,
  `theme` int(11) default 1,
  PRIMARY KEY  (`id`), UNIQUE KEY (`grid_application_name`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table is stores JGrid
Component and Module Application Names and Themes' DEFAULT
CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_grids` (
  `id` int(11) NOT NULL auto_increment,
  `select_type` int(11) NOT NULL default 1,
  `primary_key_column` varchar(50) default 0,
  `parent_id` int(11),
  `grid_reference_id` varchar(25) NOT NULL default 'panel-grid',
  `grid_application_name` varchar(25) NOT NULL default 'jgrid_component',
  `renderTo` varchar(25) NOT NULL default 'edit-grid',
  `title` varchar(120) NOT NULL default 'firstgrid',
```

```
  `ordering` int(11) NOT NULL,
  `access_level_default` int(4) default 1,
  `frame` boolean NOT NULL default true,
  `height` varchar (4) NOT NULL default '250',
  `width` varchar(4) NOT NULL default '520',
  `stripe_rows` boolean NOT NULL default true,
  `enable_row_numbers` boolean NOT NULL default true,
  `enableRowEditor` boolean NOT NULL default true,
  `columnlines` boolean NOT NULL default false,
  `enableColumnMove` boolean NOT NULL default false,
  `enableColumnResize` boolean NOT NULL default true,
  `enableGroupBy` int(11) NOT NULL default 0,
  `groupByField` varchar(25),
  `enableGroupBySummary` INT(11) NOT NULL,
  `groupDir` varchar(4) NOT NULL default 'ASC',
  `showGroupName` boolean NOT NULL default false,
  `hideGroupedColumn` boolean NOT NULL default false,
  `startCollapsed` boolean NOT NULL default false,
  `enableSortBy` int(11) NOT NULL default 0,
  `sortByField` varchar(25),
  `sortByDirection` varchar(4) NOT NULL default 'ASC',
  `enable_paging` boolean NOT NULL default false,
  `paging_records` varchar (6) NOT NULL default '30',
  `tabtip` varchar (240),
  `cls` varchar (240),
  `ctCls` varchar (240),
  `print` boolean NOT NULL default true,
  `number_width` int(11) NOT NULL default 23,
  `number_header` varchar(120),
  PRIMARY KEY  (`id`),
  INDEX (`parent_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid Configuration Settings Data' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_select_join_criteria` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int(11)  NOT NULL,
  `criteria_type_id` int(11)  NOT NULL default 1,
  `database_sql_name_id` varchar(50),
  `table_sql_name_id` varchar(50),
  `column_sql_name_id` varchar (50),
  `criteria_operator_id` varchar (30),
  `jdatabase_sql_name_id` varchar(50),
  `jtable_sql_name_id` varchar(50),
  `jcolumn_sql_name_id` varchar (50),
  `select_wildcard_id` varchar (50),
  `criteria_value` varchar (240),
  PRIMARY KEY  (`id`),
  INDEX (`grid_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid SQL Query Join Criteria' DEFAULT CHARSET=utf8;
```

```
  CREATE TABLE IF NOT EXISTS `#__jgrid_select_custom_criteria` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int(11)  NOT NULL,
  `custom_where_query` varchar(50) NOT NULL,
  PRIMARY KEY  (`id`),
  UNIQUE KEY (`grid_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Custom Join Criteria' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_custom_select_query` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int(11)  NOT NULL,
  `sql_query` varchar(50) NOT NULL,
  `validated` boolean NOT NULL default false,
  PRIMARY KEY  (`id`),
  UNIQUE KEY (`grid_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Complete Custom SQL Select Queries' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_select_query` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int(11)  NOT NULL,
  `sql_query` varchar(5000) NOT NULL,
  `jgrid_sql_query` varchar(5000) NOT NULL,
  `validated` boolean NOT NULL default false,
  `database_sql_name_id` varchar(50),
  `table_sql_name_id` varchar(50),
  `p_column_sql_name_id` varchar (50),
  PRIMARY KEY  (`id`),
  UNIQUE KEY(`grid_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid SQL Select Query' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_select_criteria_type` (
  `id` int(11) NOT NULL auto_increment,
  `criteria_type` varchar(25) NOT NULL,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid SQL Select Criteria Type Lookup Data' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_select_sheet_values` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int(11)  NOT NULL,
  `document_id` int (11) NOT NULL,
  `select_join_criteria_id` int (11) NOT NULL,
  `join_criteria_sheet_value` varchar(25) NOT NULL,
  PRIMARY KEY  (`id`),
  INDEX (`grid_id`, `document_id`, `select_join_criteria_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Sheet SQL Join Criteria and Value For Each Sheet View' DEFAULT
CHARSET=utf8;
```

```
 CREATE TABLE IF NOT EXISTS `#__jgrid_select_wildcards` (
  `id` int(11) NOT NULL auto_increment,
  `select_wildcard` varchar(25) NOT NULL,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
SQL Join Criteria Wildcard Lookup Data' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_columns` (
  `id` int(11) NOT NULL auto_increment,
  `header` varchar(25) NOT NULL,
  `editable` boolean NOT NULL default true,
  `width` varchar(25) NOT NULL default '50',
  `dataindex` int(11),
  `data_size` int(11) NOT NULL default '25',
  `data_type` varchar (25) NOT NULL default 'T',
  `ddefault` varchar (240) default'',
  `align` varchar (25),
  `css` varchar (240),
  `validation_type` varchar (25) NOT NULL default 'none',
  `tooltip` varchar (240),
  `freeze_column` boolean NOT NULL default false,
  `email_subject` varchar (240) default '',
  `dfilter` boolean NOT NULL default true,
  `sortable` boolean NOT NULL default true,
  `summarycolumn` boolean NOT NULL DEFAULT '0',
  `summarytype` ENUM( 'count', 'sum', 'min', 'max', 'average' ) NOT NULL DEFAULT
'count',
  `summaryprefix` VARCHAR( 24 ) NOT NULL,
  `summarypostfix` VARCHAR( 24 ) NOT NULL,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid Column Configuration Settings Data' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_column_list_field_values` (
  `id` int(11) NOT NULL auto_increment,
  `column_id` int(11)  NOT NULL,
  `listboxvalues` varchar(240) NOT NULL,
  `listboxvaluerowcolor` varchar(64),
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid Column List Field Lookup Values' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_columngrid` (
  `id` int(11) NOT NULL auto_increment,
  `parent_id` int(11),
  `column_id` int(11)  NOT NULL,
  `column_type` int(11)  NOT NULL default 1,
  `grid_id` int(11) NOT NULL,
  `ordering` int(11) NOT NULL,
  `row_color_pressidence` int(11) NOT NULL DEFAULT 9,
  `database_sql_name_id` varchar(50),
  `table_sql_name_id` varchar(50),
```

```
  `column_sql_name_id` varchar (50),
  `jgrid_data_column` varchar (50),
  `primary_key_column` boolean NOT NULL default false,
  `formula` varchar(1000) DEFAULT '',
  PRIMARY KEY  (`id`),
  INDEX (`parent_id`),
  INDEX (`grid_id`,`column_id`,`ordering`),
  INDEX
(`grid_id`,`database_sql_name_id`,`table_sql_name_id`,`column_sql_name_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid-Column Configuration Settings Data' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_columngrid_column_type` (
  `id` int(11) NOT NULL auto_increment,
  `column_type_name` varchar(25) NOT NULL,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Dolumn Type Lookup Data' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_rows` (
  `id` int(11) NOT NULL auto_increment,
  `parent_id` int(11),
  `ordering` int(11) NOT NULL,
  `document_id` int (11) NOT NULL,
  `creator_userid` int(11) NOT NULL DEFAULT 62,
  `grid_id` int(11) NOT NULL,
  `row_access_id` VARCHAR(11) NOT NULL DEFAULT 'D',
  PRIMARY KEY  (`id`),
  INDEX (`parent_id`),
  INDEX (`document_id`,`id`,`ordering`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Grid Rows Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_document` (
  `id` int(11) NOT NULL auto_increment,
  `parent_id` int(11),
  `document_type` int(11),
  `ordering` int(11),
  `document_title` varchar (25) NOT NULL,
  `parent_document` int (11) DEFAULT -1,
  `creator_userid` int(11) NOT NULL,
  `grid_id` int (11) NOT NULL,
  `grid_default_document_flag` boolean NOT NULL default false,
  `summary_document_flag` boolean NOT NULL default false,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
    INDEX (`grid_id`,`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Document Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_document_summary_detail` (
```

```
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int (11) NOT NULL,
  `summary_document_id` int (11),
  `summarized_document_id` int (11),
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
    INDEX (`grid_id`,`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Document Summary Pointer' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_document_column_filters` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int (11) NOT NULL,
  `document_id` int (11),
  `column_id` int (11),
  `filter_type` varchar(25),
  `filter_comparison` varchar(25),
  `filter_value` varchar(240),
  `summary_document_flag` boolean NOT NULL default false,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
    INDEX (`grid_id`,`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Document Column Filter Setup Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_current_user_grid_document` (
  `id` int(11) NOT NULL auto_increment,
  `userid` int(11) NOT NULL,
  `grid_id` int(11) NOT NULL,
  `session_id` varchar(200) NOT NULL,
  `current_document_id` int (11),
  `previous_document_id1` int (11),
  `last_accessed` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  INDEX(`grid_id`,`userid`,`current_document_id`,`session_id`),
  CONSTRAINT MyUniqueKey UNIQUE
(userid,grid_id,current_document_id,session_id)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores Current
Users Last Document Viewed' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_data` (
  `id` int(11) NOT NULL auto_increment,
  `parent_id` int(11),
  `ordering` int(11) NOT NULL,
  `database_sql_name_id` varchar(50),
  `table_sql_name_id` varchar(50),
  `p_column_sql_name_id` varchar (50),
  `document_id` int (11) NOT NULL,
  `creator_userid` int(11) NOT NULL DEFAULT 62,
```

```
`row_access_id` VARCHAR(11) NOT NULL DEFAULT 'D',
`row_color` varchar (64),
`primary_key_value` int(11) NOT NULL,
`grid_id` int(11) NOT NULL,
`T1`    MEDIUMTEXT,
`T2`    MEDIUMTEXT,
`T3`    MEDIUMTEXT,
`T4`    MEDIUMTEXT,
`T5`    MEDIUMTEXT,
`T6`    MEDIUMTEXT,
`T7`    MEDIUMTEXT,
`T8`    MEDIUMTEXT,
`T9`    MEDIUMTEXT,
`T10`   MEDIUMTEXT,
`T11`   MEDIUMTEXT,
`T12`   MEDIUMTEXT,
`T13`   MEDIUMTEXT,
`T14`   MEDIUMTEXT,
`T15`   MEDIUMTEXT,
`T16`   MEDIUMTEXT,
`T17`   MEDIUMTEXT,
`T18`   MEDIUMTEXT,
`T19`   MEDIUMTEXT,
`T20`   MEDIUMTEXT,
`T21`   MEDIUMTEXT,
`T22`   MEDIUMTEXT,
`T23`   MEDIUMTEXT,
`T24`   MEDIUMTEXT,
`T25`   MEDIUMTEXT,
`T26`   MEDIUMTEXT,
`T27`   MEDIUMTEXT,
`T28`   MEDIUMTEXT,
`T29`   MEDIUMTEXT,
`T30`   MEDIUMTEXT,
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`T38`   MEDIUMTEXT,
`T39`   MEDIUMTEXT,
`T40`   MEDIUMTEXT,
`T41`   MEDIUMTEXT,
`T42`   MEDIUMTEXT,
`T43`   MEDIUMTEXT,
`T44`   MEDIUMTEXT,
`T45`   MEDIUMTEXT,
`T46`   MEDIUMTEXT,
`T47`   MEDIUMTEXT,
`T48`   MEDIUMTEXT,
```

```
`T49`  MEDIUMTEXT,
`T50`  MEDIUMTEXT,
`L1`  MEDIUMTEXT,
`L2`  MEDIUMTEXT,
`L3`  MEDIUMTEXT,
`L4`  MEDIUMTEXT,
`L5`  MEDIUMTEXT,
`L6`  MEDIUMTEXT,
`L7`  MEDIUMTEXT,
`L8`  MEDIUMTEXT,
`L9`  MEDIUMTEXT,
`L10`  MEDIUMTEXT,
`L11`  MEDIUMTEXT,
`L12`  MEDIUMTEXT,
`L13`  MEDIUMTEXT,
`L14`  MEDIUMTEXT,
`L15`  MEDIUMTEXT,
`L16`  MEDIUMTEXT,
`L17`  MEDIUMTEXT,
`L18`  MEDIUMTEXT,
`L19`  MEDIUMTEXT,
`L20`  MEDIUMTEXT,
`L21`  MEDIUMTEXT,
`L22`  MEDIUMTEXT,
`L23`  MEDIUMTEXT,
`L24`  MEDIUMTEXT,
`L25`  MEDIUMTEXT,
`L26`  MEDIUMTEXT,
`L27`  MEDIUMTEXT,
`L28`  MEDIUMTEXT,
`L29`  MEDIUMTEXT,
`L30`  MEDIUMTEXT,
`I1`  int(11),
`I2`  int(11),
`I3`  int(11),
`I4`  int(11),
`I5`  int(11),
`I6`  int(11),
`I7`  int(11),
`I8`  int(11),
`I9`  int(11),
`I10`  int(11),
`I11`  int(11),
`I12`  int(11),
`I13`  int(11),
`I14`  int(11),
`I15`  int(11),
`I16`  int(11),
`I17`  int(11),
`I18`  int(11),
`I19`  int(11),
`I20`  int(11),
```

```
`I21`  int(11),
`I22`  int(11),
`I23`  int(11),
`I24`  int(11),
`I25`  int(11),
`I26`  int(11),
`I27`  int(11),
`I28`  int(11),
`I29`  int(11),
`I30`  int(11),
`I31`  int(11),
`I32`  int(11),
`I33`  int(11),
`I34`  int(11),
`I35`  int(11),
`I36`  int(11),
`I37`  int(11),
`I38`  int(11),
`I39`  int(11),
`I40`  int(11),
`I41`  int(11),
`I42`  int(11),
`I43`  int(11),
`I44`  int(11),
`I45`  int(11),
`I46`  int(11),
`I47`  int(11),
`I48`  int(11),
`I49`  int(11),
`I50`  int(11),
`P1`  MEDIUMTEXT,
`P2`  MEDIUMTEXT,
`P3`  MEDIUMTEXT,
`P4`  MEDIUMTEXT,
`P5`  MEDIUMTEXT,
`P6`  MEDIUMTEXT,
`P7`  MEDIUMTEXT,
`P8`  MEDIUMTEXT,
`P9`  MEDIUMTEXT,
`P10`  MEDIUMTEXT,
`P11`  MEDIUMTEXT,
`P12`  MEDIUMTEXT,
`P13`  MEDIUMTEXT,
`P14`  MEDIUMTEXT,
`P15`  MEDIUMTEXT,
`P16`  MEDIUMTEXT,
`P17`  MEDIUMTEXT,
`P18`  MEDIUMTEXT,
`P19`  MEDIUMTEXT,
`P20`  MEDIUMTEXT,
`P21`  MEDIUMTEXT,
`P22`  MEDIUMTEXT,
```

```
`P23`  MEDIUMTEXT,
`P24`  MEDIUMTEXT,
`P25`  MEDIUMTEXT,
`P26`  MEDIUMTEXT,
`P27`  MEDIUMTEXT,
`P28`  MEDIUMTEXT,
`P29`  MEDIUMTEXT,
`P30`  MEDIUMTEXT,
`F1`  float,
`F2`  float,
`F3`  float,
`F4`  float,
`F5`  float,
`F6`  float,
`F7`  float,
`F8`  float,
`F9`  float,
`F10`  float,
`F11`  float,
`F12`  float,
`F13`  float,
`F14`  float,
`F15`  float,
`F16`  float,
`F17`  float,
`F18`  float,
`F19`  float,
`F20`  float,
`F21`  float,
`F22`  float,
`F23`  float,
`F24`  float,
`F25`  float,
`F26`  float,
`F27`  float,
`F28`  float,
`F29`  float,
`F30`  float,
`F31`  float,
`F32`  float,
`F33`  float,
`F34`  float,
`F35`  float,
`F36`  float,
`F37`  float,
`F38`  float,
`F39`  float,
`F40`  float,
`F41`  float,
`F42`  float,
`F43`  float,
`F44`  float,
```

```
`F45`  float,
`F46`  float,
`F47`  float,
`F48`  float,
`F49`  float,
`F50`  float,
`D1`  date,
`D2`  date,
`D3`  date,
`D4`  date,
`D5`  date,
`D6`  date,
`D7`  date,
`D8`  date,
`D9`  date,
`D10`  date,
`D11`  date,
`D12`  date,
`D13`  date,
`D14`  date,
`D15`  date,
`D16`  date,
`D17`  date,
`D18`  date,
`D19`  date,
`D20`  date,
`D21`  date,
`D22`  date,
`D23`  date,
`D24`  date,
`D25`  date,
`D26`  date,
`D27`  date,
`D28`  date,
`D29`  date,
`D30`  date,
`D31`  date,
`D32`  date,
`D33`  date,
`D34`  date,
`D35`  date,
`D36`  date,
`D37`  date,
`D38`  date,
`D39`  date,
`D40`  date,
`D41`  date,
`D42`  date,
`D43`  date,
`D44`  date,
`D45`  date,
`D46`  date,
```

```
  `D47`   date,
  `D48`   date,
  `D49`   date,
  `D50`   date,
  `B1`    int(4),
  `B2`    int(4),
  `B3`    int(4),
  `B4`    int(4),
  `B5`    int(4),
  `B6`    int(4),
  `B7`    int(4),
  `B8`    int(4),
  `B9`    int(4),
  `B10`   int(4),
  `B11`   int(4),
  `B12`   int(4),
  `B13`   int(4),
  `B14`   int(4),
  `B15`   int(4),
  `B16`   int(4),
  `B17`   int(4),
  `B18`   int(4),
  `B19`   int(4),
  `B20`   int(4),
  `B21`   int(4),
  `B22`   int(4),
  `B23`   int(4),
  `B24`   int(4),
  `B25`   int(4),
  `B26`   int(4),
  `B27`   int(4),
  `B28`   int(4),
  `B29`   int(4),
  `B30`   int(4),
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                 ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  INDEX (`grid_id`, `document_id`, `primary_key_value`),
  INDEX  (`database_sql_name_id`, `table_sql_name_id`, `p_column_sql_name_id`,
`primary_key_value`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores Rows of
Cell Data for SQL Query Type Additional Column Data' DEFAULT CHARSET=utf8;


CREATE TABLE IF NOT EXISTS `#__jgrid_columndata` (
  `id` int(11) NOT NULL auto_increment,
  `document_id` int (11) NOT NULL,
  `column_id` int(11) NOT NULL,
  `columngrid_id` int(11),
  `column_header` varchar(100) NOT NULL,
  `userid` int(11) NOT NULL,
  `row_number` int(11) NOT NULL,
```

```
  `string_data` varchar (5000),
  `int_data` int,
  `float_data` float,
  `boolean_data` boolean NOT NULL default false,
  `date_data` date,
  `listboxvaluerowcolor` varchar(64),
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  INDEX(`column_id`,`row_number`,`document_id`),
  INDEX(`columngrid_id`,`row_number`,`document_id`),
  INDEX(`row_number`),
  INDEX(`document_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid Cell
Data' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_roles` (
  `id` int(11) NOT NULL auto_increment,
  `role_name` varchar (25) NOT NULL,
  `description` varchar (50) NOT NULL,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Role Names and Descriptions' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_role_userlist` (
  `id` int(11) NOT NULL auto_increment,
  `userid` int(11) NOT NULL,
  `role_id` int(11) NOT NULL,
  `userid_assigning_role` int(11) NOT NULL,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  INDEX (`role_id`),
  INDEX (`userid`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores List of
Users Assigned to JGrid Roles' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_security` (
  `id` int(11) NOT NULL auto_increment,
  `parent_id` int(11),
  `access_rule_application_id` int(11) NOT NULL default 1,
  `userid_assigning_access` int(11) NOT NULL,
  `access_for` int(11) NOT NULL,
  `access_for_name` varchar(150) NOT NULL,
  `access_for_id` int(11) NOT NULL,
  `access_type` int(11) NOT NULL,
  `access_type_name` varchar(25) NOT NULL,
  `access_type_id` varchar(11) NOT NULL,
  `access_subtype_grid_id` int(11) NULL,
  `access_subtype_column_id` int(11) NULL,
  `access_subtype_document_id` int(11) NULL,
  `access_level` int(4) default 0,
```

```
   `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  INDEX `ind1` (`access_for`,`access_for_id`),
  INDEX `ind2` (`access_type`,`access_type_id`),
  INDEX `ind3`
(`access_type`,`access_subtype_grid_id`,`access_subtype_column_id`),
  INDEX `ind4`
(`access_type`,`access_subtype_document_id`,`access_subtype_column_id`),
  INDEX `ind5` (`access_for_name`,`access_type_name`)

) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGRID
Access Control Rules' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_tables_vcontrol` (
  `id` int(11) NOT NULL auto_increment,
  `grid_version` varchar(25) NOT NULL,
  `jgrid_installed` int(11),
  `grid_comments` varchar(25) NOT NULL,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores Version
and Current JGrid Code' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_code_vcontrol` (
  `id` int(11) NOT NULL auto_increment,
  `grid_version` varchar(25) NOT NULL,
  `jgrid_installed` int(11),
  `grid_comments` varchar(25) NOT NULL,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores Version
and Current JGrid Tables and Table Data' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_user_type_defaults` (
  `id` int(11) NOT NULL auto_increment,
  `parent_id` int(11),
  `ordering` int(11),
  `usertype_name` varchar(25) NOT NULL,
  `access_level` int(11),
  `version15` int(11),
  `version16` int(11),
  `version_future` int(11),
  `settings` varchar(25),
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  INDEX `ind1` (`usertype_name`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Default Types for Registered Joomla User' DEFAULT CHARSET=utf8;
```

```
 CREATE TABLE IF NOT EXISTS `#__jgrid_images` (
  `id` int(11) NOT NULL auto_increment,
  `filename` varchar(120),
  `download_filename` varchar(120),
  `file_type` varchar(25),
  `file_size` int(11),
  `image_thumb_path` varchar(240),
  `tooltip` varchar(240),
  `hyper_url` varchar(240),
  `image_email` varchar(240),
  `image_email_subject` varchar(240),
  `hyper_grid_sheet` varchar(240),
  `extension` varchar(11),
  `grid_id` int(11) NOT NULL,
  `document_id` int(11) NOT NULL,
  `column_id` int(11) NOT NULL,
  `columngrid_id` int(11) NOT NULL,
  `row_id` int(11) NOT NULL,
  `userid` int(11) NOT NULL,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  UNIQUE imageidx (`grid_id`,`document_id`,`column_id`,`row_id`)

) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores Meta Data
of JGrid Stored User Images' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_upload_undo` (
  `id` int(11) NOT NULL auto_increment,
  `grid_id` int(11) NOT NULL,
  `document_id` int(11) NOT NULL,
  `row_id` int(11) NOT NULL,
  `userid` int(11) NOT NULL,
  `session_id` varchar(64) NOT NULL,
  `last_updated` TIMESTAMP DEFAULT CURRENT_TIMESTAMP
                ON UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY  (`id`),
  UNIQUE uploadidx (`grid_id`,`document_id`,`row_id`,`userid`,`session_id`)

) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores UNDO
Data for Last JGrid Upload' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_valid_format` (
  `id` int(11) NOT NULL auto_increment,
  `valid_format` varchar(64) NOT NULL,
  `valid_format_name` varchar(64) NOT NULL,
  `data_type` varchar(11) NOT NULL,
  PRIMARY KEY  (`id`)

) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores List of
Valid Column Format Types' DEFAULT CHARSET=utf8;
```

```
 CREATE TABLE IF NOT EXISTS `#__jgrid_temp_table` (
  `ordering` int(11) NOT NULL auto_increment,
  `column_id` int(11),
  `group_name` varchar(120),
  `row_id` int(11),
  `grid_application_name` varchar(25) NOT NULL,
  `userid` int(11) NOT NULL,
  `session_id` varchar(64) NOT NULL,
  `temp_type` int(11) NOT NULL,
  PRIMARY KEY  (`ordering`),
  INDEX(`userid`,`session_id`,`row_id`),
  INDEX(`row_id`,`ordering`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
temporary Table for Row Grouping and Sorting Pass 1' DEFAULT CHARSET=utf8;

 CREATE TABLE IF NOT EXISTS `#__jgrid_temp_table2` (
  `ordering` int(11) NOT NULL auto_increment,
  `column_id` int(11),
  `group_name` varchar(120),
  `row_id` int(11),
  `grid_application_name` varchar(25) NOT NULL,
  `userid` int(11) NOT NULL,
  `session_id` varchar(64) NOT NULL,
  `temp_type` int(11) NOT NULL,
  PRIMARY KEY  (`ordering`),
  INDEX(`userid`,`session_id`,`row_id`),
  INDEX(`row_id`,`ordering`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
temporary Table for Row Grouping and Sorting Pass 2' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_category_axes` (
  `caxes_id` int(11) unsigned NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `position` varchar(50) NOT NULL,
  `title` varchar(255) NOT NULL,
  `cfields` varchar(500) NOT NULL,
  `cat_names` varchar(500) NOT NULL,
  `minorTickSteps` int(11) NOT NULL,
  `majorTickSteps` int(11) NOT NULL,
  `length` int(11) NOT NULL,
  `label_dgree_rotate` int(11) NOT NULL DEFAULT '90',
  PRIMARY KEY (`caxes_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Category Axis Configuration Settings' DEFAULT CHARSET=utf8;


CREATE TABLE IF NOT EXISTS `#__jgrid_chart_common_label` (
  `chart_label` int(11) NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  PRIMARY KEY (`chart_label`)
) ENGINE=MyISAM AUTO_INCREMENT=1 COMMENT='This table stores JGrid
```

```
Chart Common Label Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_gauge_axes` (
  `gaxes_id` int(11) unsigned NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `position` varchar(50) NOT NULL,
  `minimum` int(11) NOT NULL,
  `maximum` int(11) NOT NULL,
  `steps` int(11) NOT NULL,
  `margin` int(11) NOT NULL,
  PRIMARY KEY (`gaxes_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Gauge Axis Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_legend` (
  `legend_id` int(11) NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `position` varchar(50) NOT NULL,
  `x` int(11) NOT NULL,
  `y` int(11) NOT NULL,
  `padding` int(11) NOT NULL,
  `itemSpacing` int(11) NOT NULL,
  `boxFill` varchar(50) NOT NULL,
  `labelFont` varchar(255) NOT NULL,
  PRIMARY KEY (`legend_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Legend Configuration Settings' DEFAULT CHARSET=utf8;


CREATE TABLE IF NOT EXISTS `#__jgrid_chart_numeric_axes` (
  `naxes_id` int(11) unsigned NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `title` varchar(500) NOT NULL,
  `grid` varchar(10) NOT NULL,
  `position` varchar(100) NOT NULL,
  `fields` varchar(300) NOT NULL,
  `minimum` int(11) NOT NULL,
  `minorTickSteps` int(11) NOT NULL,
  `majorTickSteps` int(11) NOT NULL,
  `width` int(11) NOT NULL DEFAULT '0',
  PRIMARY KEY (`naxes_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Numeric Axes Configuration Settings'  DEFAULT CHARSET=utf8;


CREATE TABLE IF NOT EXISTS `#__jgrid_chart_numeric_axes_fields` (
  `num_axes_field_id` int(11) NOT NULL AUTO_INCREMENT,
  `numeric_axes_id` int(11) NOT NULL,
  `field_value` varchar(255) NOT NULL,
  `chart_id` int(11) NOT NULL,
  PRIMARY KEY (`num_axes_field_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
```

```
Chart Numeric Axis Fields Configuration Settings'  DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_radial_axes` (
  `raxes_id` int(11) unsigned NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `fields` varchar(255) NOT NULL,
  `position` varchar(50) NOT NULL,
  `label` varchar(250) NOT NULL,
  `steps` varchar(250) NOT NULL,
  `maximum` int(11) NOT NULL,
  `minimum` int(11) NOT NULL,
  PRIMARY KEY (`raxes_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Radial Axis Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_series` (
  `series_id` int(11) NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `stacked` varchar(6) DEFAULT 'false',
  `series_type` varchar(50) NOT NULL,
  `highlight` varchar(500) NOT NULL,
  `showInLegend` tinyint(1) NOT NULL DEFAULT '1',
  `xField` varchar(255) NOT NULL,
  `yField` varchar(255) NOT NULL,
  `axis` varchar(100) NOT NULL,
  `serise_label_id` int(11) NOT NULL,
  `field` varchar(255) NOT NULL,
  `donut` int(11) NOT NULL,
  `showMarkers` tinyint(1) NOT NULL DEFAULT '0',
  `markerConfig_id` int(11) NOT NULL,
  `series_style` int(11) NOT NULL,
  `needle` tinyint(1) NOT NULL,
  PRIMARY KEY (`series_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Series Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_series_markerConfig` (
  `marker_config_id` int(11) unsigned NOT NULL AUTO_INCREMENT,
  `series_id` int(11) NOT NULL,
  `type` varchar(50) NOT NULL,
  `radius` int(11) NOT NULL,
  `fill` varchar(100) NOT NULL,
  `size` int(11) NOT NULL,
  PRIMARY KEY (`marker_config_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_series_label` (
  `serise_label_id` int(11) unsigned NOT NULL AUTO_INCREMENT,
  `serise_id` int(11) NOT NULL,
  `display` varchar(50) NOT NULL,
  `color` varchar(30) NOT NULL,
  `contrast` tinyint(1) NOT NULL,
```

```
  `field` varchar(255) NOT NULL,
  `orientation` varchar(20) NOT NULL,
  `font` varchar(255) NOT NULL,
  PRIMARY KEY (`serise_label_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Series Label Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_chart_time_axes` (
  `taxes` int(11) NOT NULL AUTO_INCREMENT,
  `chart_id` int(11) NOT NULL,
  `title` varchar(300) NOT NULL,
  `position` varchar(50) NOT NULL,
  `fields` varchar(300) NOT NULL,
  `dateFormat` varchar(20) NOT NULL,
  `fromDate` varchar(50) NOT NULL,
  `toDate` varchar(50) NOT NULL,
  PRIMARY KEY (`taxes`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Chart Time Axis Configuration Settings' DEFAULT CHARSET=utf8;

CREATE TABLE IF NOT EXISTS `#__jgrid_document_graph` (
  `id` int(11) NOT NULL AUTO_INCREMENT,
  `document_id` int(11) DEFAULT NULL,
  `parent_id` int(11) DEFAULT NULL,
  `ordering` int(11) DEFAULT NULL,
  `column_id` int(11) DEFAULT NULL,
  `column_graph_title` varchar(25) NOT NULL,
  `grid_id` int(11) NOT NULL,
  `num_axis_title` varchar(255) NOT NULL,
  `num_axes_position` varchar(100) NOT NULL,
  `num_field_val` varchar(555) NOT NULL,
  `chart_grid_option` varchar(15) NOT NULL,
  `cat_axes_position` varchar(50) NOT NULL,
  `cat_title` varchar(255) NOT NULL,
  `cat_field_val` varchar(500) NOT NULL,
  `chat_type` varchar(255) NOT NULL,
  `serise_axis_id` varchar(50) NOT NULL,
  `stacked_chart_opt` varchar(10) NOT NULL,
  `chart_highlight_opt` varchar(10) NOT NULL,
  `chart_category` varchar(20) NOT NULL,
  `last_updated` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP ON
UPDATE CURRENT_TIMESTAMP,
  PRIMARY KEY (`id`),
  KEY `document_id` (`document_id`)
) ENGINE=MyISAM AUTO_INCREMENT=0 COMMENT='This table stores JGrid
Document Graph Configuration Settings' DEFAULT CHARSET=utf8;
```