

# Opportunity Object

## Creating and populating the Opportunity Object

The Opportunity object represents the contents of the current Bidding Board. They are basically proposals that need to be assigned to a Project Manager. This is the entry point to the entire organization. 75% come from email, 25% phone.

Opportunities should be the default grid view seen by Project Managers. The grid should support row coloring, with white being the default row color, with yellow appearing if the opportunity is due in 3 or less days, and red if the opportunity is due within 1 day.

A trigger should be used to convert an opportunity to (using a button interface) to create the proposal record and copy the opportunity documents to the proposal documents. Documents should include any emails, site plans, drawings, etc. which are applicable to the project.

Once converted, the opportunity record, and corresponding document records, should be deleted. (Saves record count). Note: Records can be kept as well, and flagged as complete.

When creating this object, be sure to turn on the Task and Workflow attribute. We'll discuss each more in depth below.

By default, with an attribute of Task, you get a required field called Task Subject. As we have a text field entitled Job Name, we're going to rename the task subject to this name and not add a new field.

Opportunity	
<b>Integer</b>	id
<b>Text</b>	name
<b>DateTime</b>	dateOfContact
<b>Date</b>	dueDate
<b>Text</b>	status (New, Assigned)
<b>Rich Text</b>	messageContent
<b>Text</b>	location
<b>Text</b>	jobName
<b>Text</b>	neededBy
<b>Text</b>	requestedBy
<b>Text</b>	specialConcreteRequirements
<b>Text Area</b>	notes
Attributes	
<b>Attribute</b>	Workflow
<b>Attribute</b>	Task
Relationships	
<b>Relationship</b>	Customer
<b>Relationship</b>	Opportunity Document
<b>Relationship</b>	Customer Contact
Triggers	
<b>Trigger</b>	convertToProposal
<b>Trigger</b>	changeStatus
Permissions	
<b>Permission</b>	should be available to all
Views	
<b>View</b>	new
<b>View</b>	edit
<b>View</b>	view
Reports	
<b>Report</b>	openOpportunities
Templates	
<b>Template</b>	statusEmailUpdate

## Form Design

Review each of the three primary forms (New/Edit/View) and arrange them to taste. For now, I've only updated the New form, and mine looks like this:

### New Opportunity

#### Original Email Contents and Notes

Email

Another mid-term job

Path: p

Notes

Due Friday

Path: p

#### Opportunity Information

Workflow Status: Created

Job Name:

Assigned To:

Customer:

Location:

Special Concrete Requirements:

Due Date:

Priority:

Requested By:

Go ahead and enter in several new opportunities. Per the design specification, we want any opportunity with a due date 4 days or longer to appear in white, 2-3 days in yellow, and due today in red. After you enter those records, we'll go ahead and discuss row colors.

## Row Colors


Now that we have several jobs on our list, and we've edited the columns of the default view, we are ready to discuss row colors. Currently my grid looks like this:

All Opportunities  All Opportunities

Select

Opportunities

Action	Opportunity	Date Entered	Due Date	Customer	Requested By
<input type="checkbox"/> Edit   Del	Another Mid-Term Job	04/01/2014 09:49 AM	04/04/2014	Progress Software	Bob Z.
<input type="checkbox"/> Edit   Del	Mid range job	04/01/2014 09:46 AM	04/04/2014		Craig
<input type="checkbox"/> Edit   Del	Long Term Job	04/01/2014 09:35 AM	04/15/2014	Demo Company	Fred Flintstone
<input type="checkbox"/> Edit   Del	Progress Pacific	04/01/2014 09:33 AM	04/02/2014	Progress Software	Dave Johnson

To adjust row colors, click on the  button, and then the “Edit Row Colors” menu option.



Opportunity: Color Code View: All Opportunities


Save Cancel





Color Codes

1	Due Date	less or equal	TODAY + 1	<input checked="" type="checkbox"/> FF7070
2	Due Date	less or equal	TODAY + 3	<input checked="" type="checkbox"/> EFFF08
3	--None--	--None--		<input type="checkbox"/> FFFFFFFF
4	--None--	--None--		<input type="checkbox"/> FFFFFFFF
5	--None--	--None--		<input type="checkbox"/> FFFFFFFF

As specified, we want our rows to be different colors, based on due dates. By default, the row color is FFFFFFFF (White). We do not need to make that a specification on this list, but we do need to flag the yellow and red rows. **IMPORTANT:** Shortest durations need to be at the top, because as you move down the list of 5 Color Codes, if the date criteria is met (say for a red record with a due date of tomorrow), it exits the logic, meaning it would not test TODAY + 3 for the yellow rows. Also note the use of the “TODAY” token. Rollbase recognizes this as the current system date. Also note, the “red” for urgent records is a softer red. If you use a full red (like in the word IMPORTANT above), the row is very hard to read. With these color settings, our grid now looks like this:

All Opportunities [New Opportunity](#)  All Opportunities  Filter

Select  More actions...



Opportunities    

Action	Opportunity	Date Entered	Due Date	Customer	Requested By
<input type="checkbox"/> Edit   Del	Another Mid-Term Job	04/01/2014 09:49 AM	04/04/2014	Progress Software	Bob Z.
<input type="checkbox"/> Edit   Del	Mid range job	04/01/2014 09:46 AM	04/04/2014		Craig
<input type="checkbox"/> Edit   Del	Long Term Job	04/01/2014 09:35 AM	04/15/2014	Demo Company	Fred Flintstone
<input type="checkbox"/> Edit   Del	Progress Pacific	04/01/2014 09:33 AM	04/02/2014	Progress Software	Dave Johnson

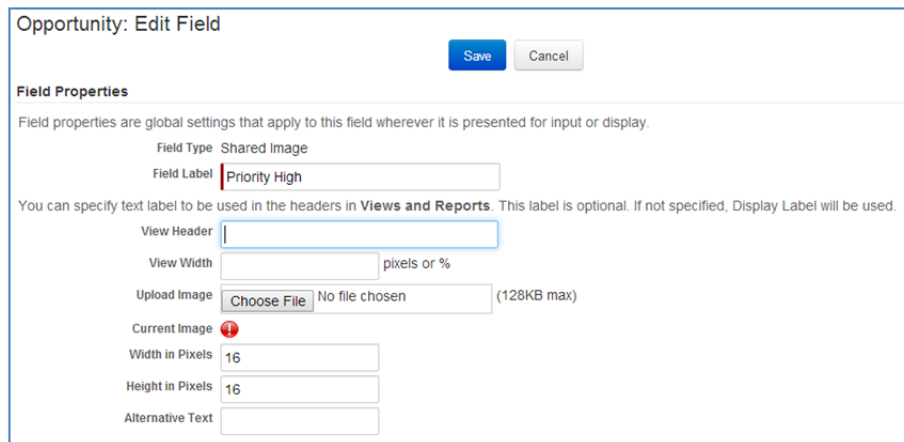
## Creating an Icon to Reflect Priority

To add a little bit of flair to this view, it is desired to have some icons display based on the Priority of the opportunity. The opportunity object has three priorities (High, Normal and Low). If an opportunity is a high priority, we want to display a red icon, and if it’s a low priority, we want a green arrow icon. If the priority is Normal we won’t display an icon, as Normal is the default status and it is felt that if every record had an icon, it would be visually distracting. This is a two-step process. The first step is to create “Shared Image” fields to upload your chosen image. Secondly, we will create a formula field to determine the Priority and display the proper icon.

## Shared Image Fields

We need two shared image fields; one for the high importance  icon and one for the low importance  icon. Try not to use JPG images, as the background of a shaped object will not look good. I have created two GIF files with transparent icons for this task.

Under the object definition page for Opportunity, create a new  **Shared Image** field. Call this field “Priority High”, click on the “Choose File” button and browse to where you saved your GIF file, and then specify a height and width of 16 pixels. Click “Save” when done.



Opportunity: Edit Field

**Field Properties**

Field properties are global settings that apply to this field wherever it is presented for input or display.

Field Type Shared Image


Field Label

You can specify text label to be used in the headers in **Views and Reports**. This label is optional. If not specified, Display Label will be used.

View Header

View Width  pixels or %

Upload Image  No file chosen (128KB max)

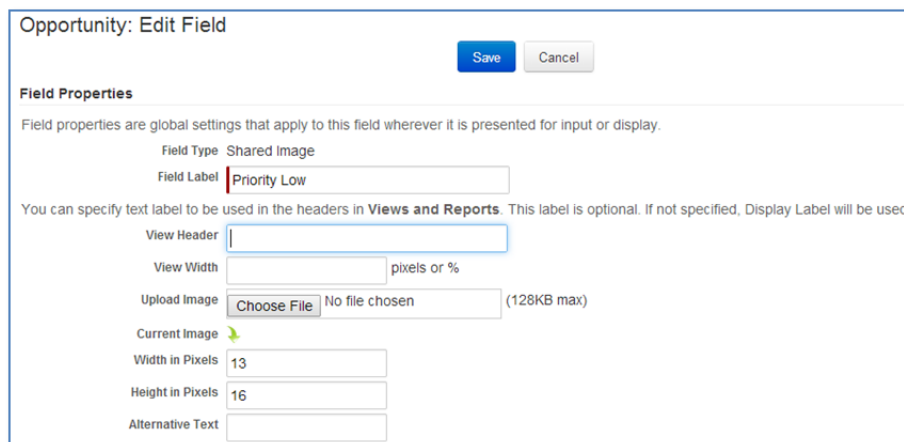
Current Image 

Width in Pixels

Height in Pixels

Alternative Text

Create another  **Shared Image** field. Call this field “Priority Low”, click on the “Choose File” button and browse to where you saved your GIF file, and then specify a width of 13 pixels and a height of 16 pixels. (Note: This icon is not truly “square”, and you are not forced to use the same pixel value) Click “Save” when done.



Opportunity: Edit Field

**Field Properties**

Field properties are global settings that apply to this field wherever it is presented for input or display.

Field Type Shared Image


Field Label

You can specify text label to be used in the headers in **Views and Reports**. This label is optional. If not specified, Display Label will be used.

View Header

View Width  pixels or %

Upload Image  No file chosen (128KB max)


Current Image 

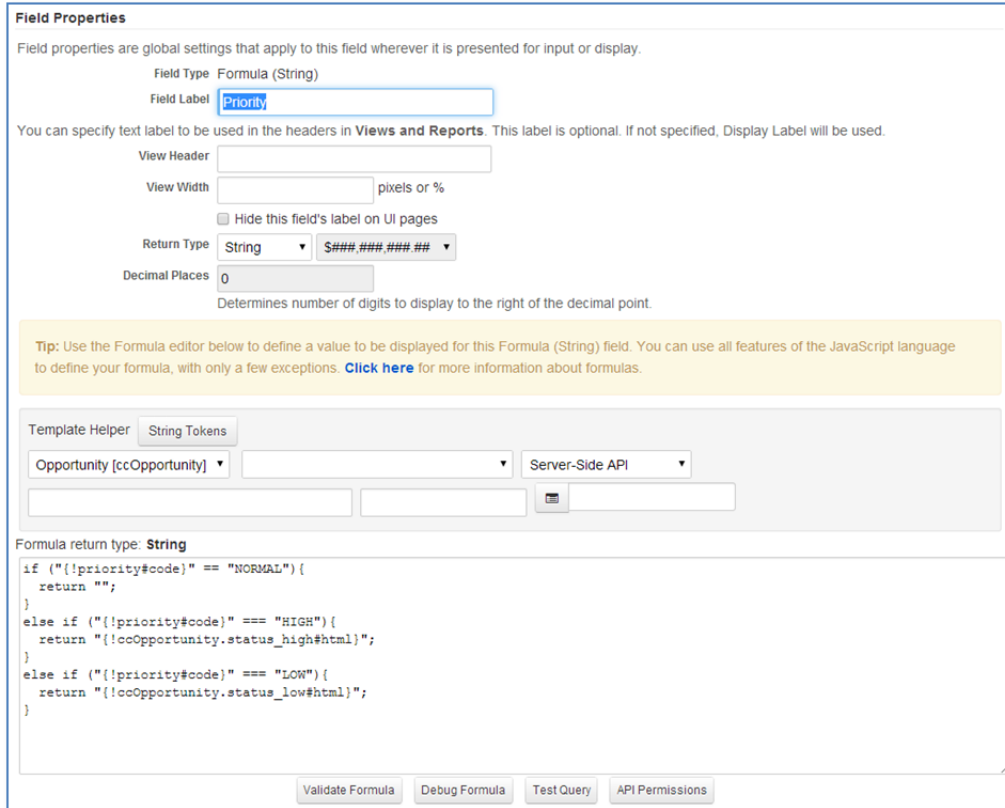
Width in Pixels

Height in Pixels

Alternative Text

## Formula Fields

We need to now create a . Click this button (located to the normal blue New Field button). Give it a field label of “Priority”, select a return type of “String” and enter the formula as shown below, including double quotes. It is testing the CODE property of our original Priority field. The valid codes are equal to the quoted strings “HIGH, NORMAL and LOW”. The integration name for the two



The screenshot shows the 'Field Properties' dialog for a 'Formula (String)' field. The 'Field Label' is 'Priority'. The 'Return Type' is 'String' with a dropdown menu showing '\$###.###.###.###'. The 'Decimal Places' is set to 0. A tip box suggests using the Formula editor. Below the tip is a 'Template Helper' section with 'String Tokens' selected, showing 'Opportunity [ccOpportunity]' and 'Server-Side API'. The 'Formula return type: String' section contains the following JavaScript code:

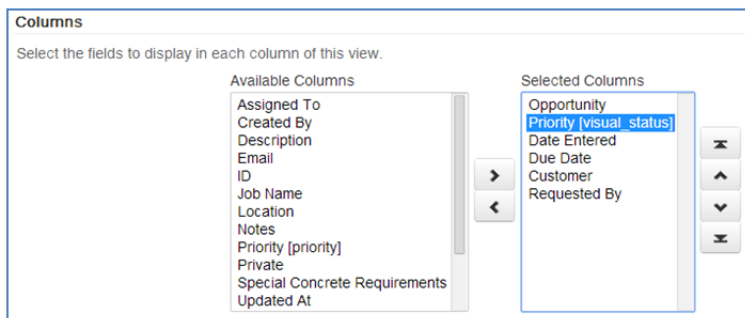
```
if ("!{priority#code}" == "NORMAL"){
    return "";
}
else if ("!{priority#code}" === "HIGH"){
    return "!{ccOpportunity.status_high#html}";
}
else if ("!{priority#code}" === "LOW"){
    return "!{ccOpportunity.status_low#html}";
}
```

Buttons at the bottom include 'Validate Formula', 'Debug Formula', 'Test Query', and 'API Permissions'.

shared image fields (in my example) are “status\_low” and “status\_high”. You will notice that the return items are surrounded in double quotes AND that we picked the “#html” token. The resulting string returned will be an HTML representation of the image. For the priority of NORMAL, an empty string is returned. After you have completed the formula, save your changes and return back to the opportunity grid.

## Adding the Icon to the Grid

Locate the formula field you just created and add it to the selected columns. I decided to make that the second column. If all works correctly, you should now see your grid with icons, as shown on the next page.



The screenshot shows the 'Columns' dialog box. It has two panes: 'Available Columns' and 'Selected Columns'. The 'Available Columns' list includes: Assigned To, Created By, Description, Email, ID, Job Name, Location, Notes, Priority [priority], Private, Special Concrete Requirements, and Updated At. The 'Selected Columns' list includes: Opportunity, Priority [visual\_status], Date Entered, Due Date, Customer, and Requested By. The 'Priority [visual\_status]' field is highlighted in blue. Navigation arrows are visible between the panes.

All Opportunities		New Opportunity	All Opportunities	Filter	Opportunities		
Action	Opportunity	Priority	Date Entered	Due Date	Customer	Requested By	
<input type="checkbox"/> Edit   Del	Low Priority Job		04/01/2014 10:58 AM	04/25/2014	Demo Company	wilma	
<input type="checkbox"/> Edit   Del	Another Mid-Term Job		04/01/2014 09:49 AM	04/04/2014	Progress Software	Bob Z.	
<input type="checkbox"/> Edit   Del	Mid range job		04/01/2014 09:46 AM	04/04/2014		Craig	
<input type="checkbox"/> Edit   Del	Long Term Job		04/01/2014 09:35 AM	04/15/2014	Demo Company	Fred Flintstone	
<input type="checkbox"/> Edit   Del	Progress Pacific		04/01/2014 09:33 AM	04/02/2014	Progress Software	Dave Johnson	