

RADS

Introduction to Reporting

<https://github.com/radservice/rad-community/fork>

Prerequisites

1. Basic understanding of reporting means.
2. Basic understanding of using SQL to generate report.
3. Jaspersoft Studio is optional for one of the chapters.

Content

1. Introduction
2. Chart
3. JasperReports
4. Dashboard
5. Report Builder

A short horizontal bar with a black left half and an orange right half.

Chapter I

Introduction

Introduction

- This module would introduce you to some of the basic reporting means available in RADS.
- We will be covering Chart, JasperReports, and Dashboard Userview Menus.



Chapter 2

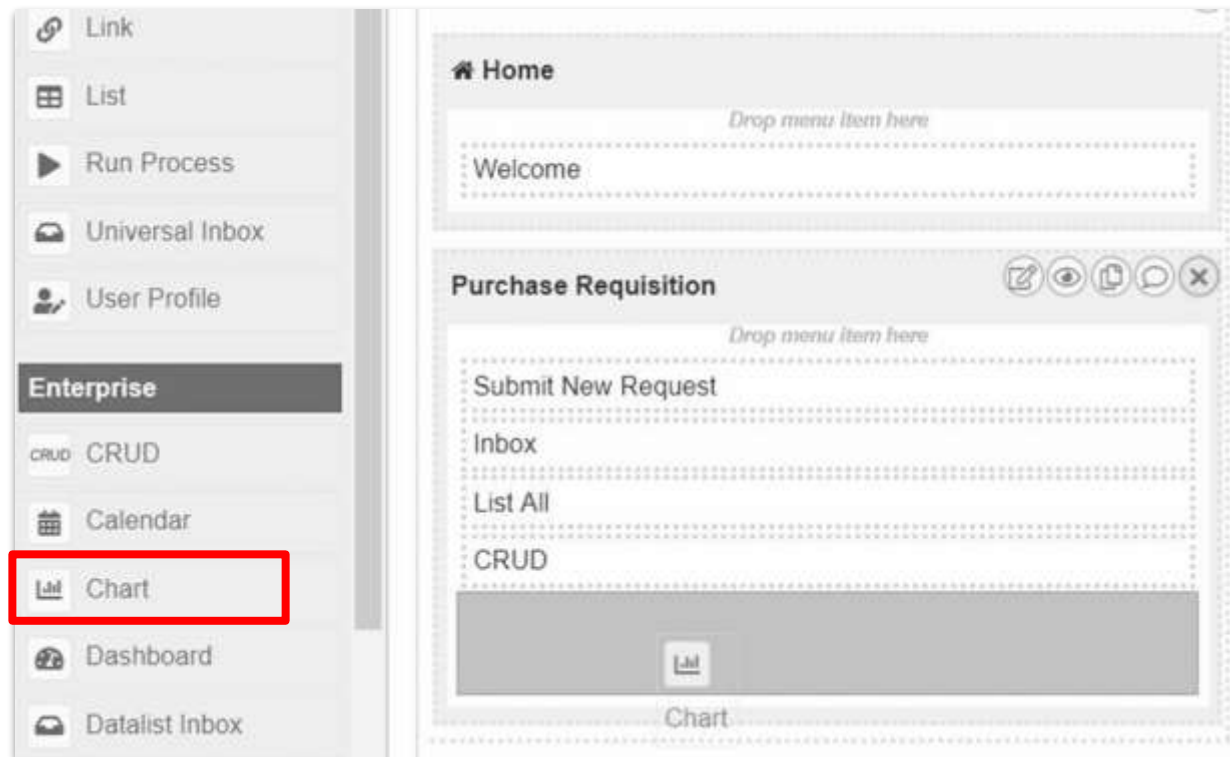
Chart

Chart

- Chart is a Userview Menu that generate graphs based on the defined data binder or datasource.
- Reference: <https://docs.rads.purwana.net/SQL+Chart>

Exercise

- Import the base app, **13.jwa** into your RADS.
- Edit the Userview, add a Chart. Configure accordingly.



Edit Chart ?

Edit Chart > Datasource > Chart Options > Advanced > Performance & Offline

Custom ID

Label *

Request Approval Chart

Chart Type *

Bar Chart

Chart Title

Request Approval Chart

DatasourceEdit Chart > **Datasource** > Data Binder (Advanced Form Data Binder) > Data Binder & Chart Data Mapping > Chart Options > Advanced > Performance & Offline

Datasource ?

Using Data Binder

Data Binder *

Advanced Form Data Binder

Configure Advanced Form Row Data Binder ?Edit Chart > Datasource > **Configure Advanced Form Row Data Binder** > **Advanced** > Data Binder & Chart Data Mapping > Chart Options > Advanced > Performance & Offline

Form *

2-Approve / Reject Request

Joins Form Data Table

FORM DATA TABLE NAME *	FIELD	JOIN FIELD ID *
+		

Aggregate Query

Group By ?

category
createdBy
createdByName
dateCreated
dateModified
id
items
modifiedBy

approval

Aggregate Fields

FIELD *	FUNCTION *
approval	Count

+

Data Binder & Chart Data Mapping

Edit Chart > Datasource > Data Binder (Advanced Form Data Binder) > **Data Binder & Chart Data Mapping** > Chart Options > Advanced > Performance & Offline

Order By

Order

ASC

X-axis Value *

Approval

Y-axis Values *

NUMBER VALUE *	LEGEND VALUE *
Approval (COUNT)	Requests

+

Chart Options

Edit Chart > Datasource > Data Binder (Advanced Form Data Binder) > Data Binder & Chart Data Mapping > **Chart Options** > Advanced > Performance & Offline

X-axis Label *

Status

X-axis display as

Category

Y-axis Label *

Category of Requests

Y-axis Prefix

Show Legend?



Show Value Label in Chart?



Stack Series?



Display as Horizontal Chart?



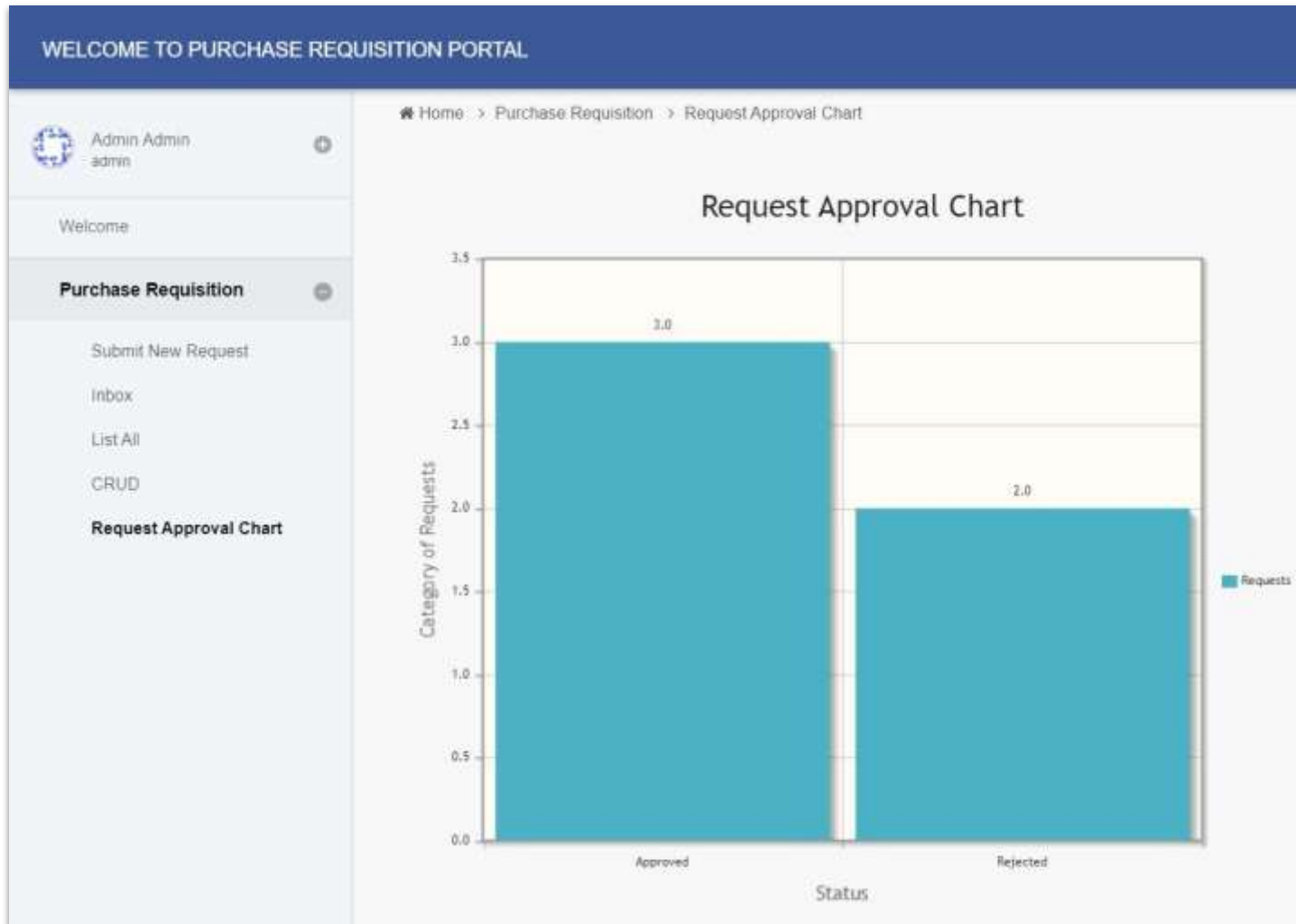
Width *

60%

Height *

50%

This Is How the Chart Should Look like in Runtime.



Materials

- “Purchase Requisition Portal” userview definition can be obtained at **14.2.1.txt**

Chapter Review

- Able to use the Chart.



Chapter 3

JasperReports

JasperReports

- JasperReports offers better reporting means through integration with JasperReports report definition.

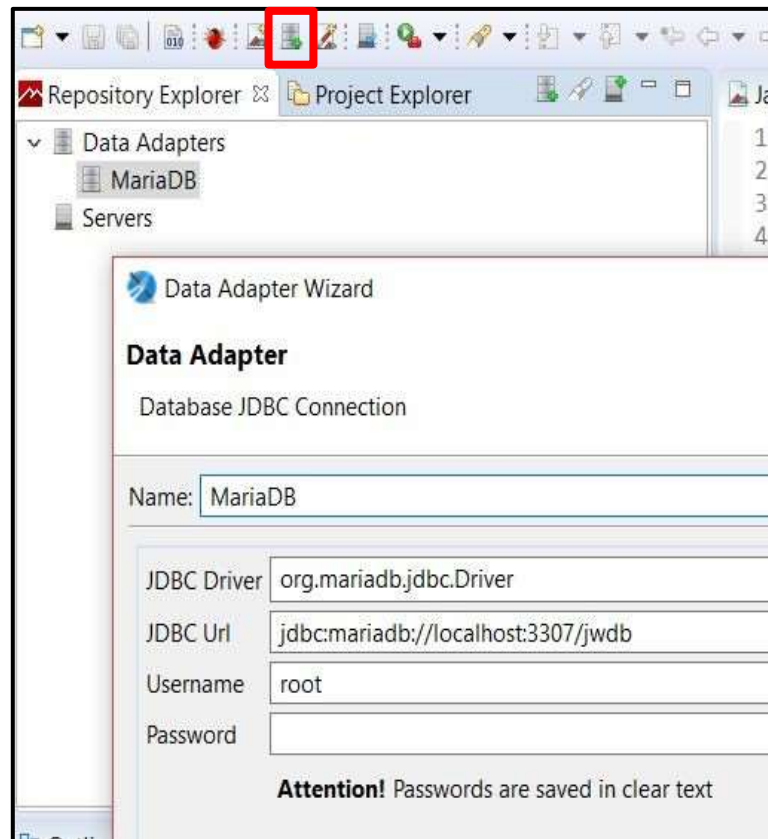
- Reference: <https://docs.rads.purwana.net/JasperReports>

Exercise - Optional

- Continue to use the app from the previous chapter.
- Add a JasperReports element into the Userview.
- Configure the newly added element.
 - Label: JasperReports Request Approval Chart
 - JasperReport Definition (JRXML): (Obtain from file **14.3.1.txt**)
 - Datasource: Default Datasource

FY.I - For JasperSoft Studio beginners

1. When opening JasperSoft Studio for the first time, you will need to set up a Data Adapter. Select “Database JDBC Connection”, then key in the same datasource settings as your current RADS installation.

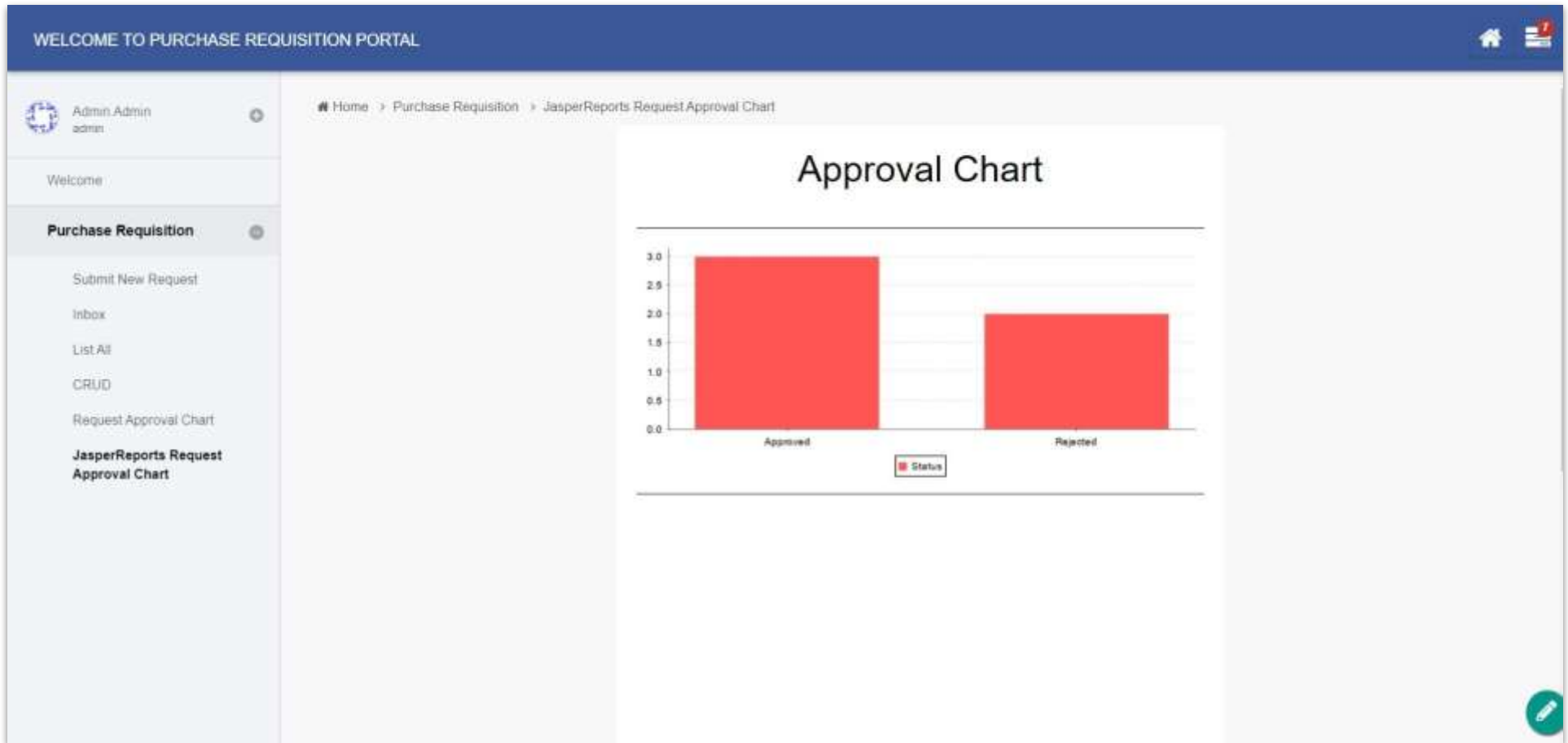


F.Y.I- For JasperSoft Studio beginners

2. Create a new JasperReport, select any template.
3. Click on Source view, copy and paste in the definition provided earlier.

- The screenshot displays the Jaspersoft Studio environment. On the left, the 'Repository Explorer' shows the 'Data Adapters' section with 'MariaDB' selected. The 'Outline' pane on the left lists the report structure, including 'Styles', 'Parameters', 'Fields', 'Sort Fields', 'Variables', 'Scripts', 'Title', 'Page Header', 'Page Footer', 'Summary', and 'Text Fields'. The main workspace shows the 'Design' view of the 'Request Approval Chart'. The chart is a grouped bar chart with three series: 'Total' (red), 'Approved' (blue), and 'Rejected' (green). The x-axis represents different request types: 'New', 'Old', 'Time', 'Free', 'Free', 'Be', 'Down', and 'Full'. The y-axis represents the count, ranging from 0.0 to 8.0. The 'Preview' tab on the right shows the rendered output of the chart, which is a grouped bar chart with three series: 'Approved' (blue), 'Rejected' (green), and 'Total' (red). The x-axis labels are 'Approved' and 'Rejected'. The y-axis represents the count, ranging from 0.0 to 2.1. The 'Preview' tab also shows the report title 'Request Approval Chart' and the page number 'Page 1 of 1'.

This Is How the Chart Should Look like in the Runtime.



Chapter Review

- Able to add a JasperReports element into a RADS app.



Chapter 4

Dashboard

Dashboard

- Dashboard menu displays multiple menu items from a selected Userview in a resizable grid layout.
 - See important information from various userview elements in a single glance.
 - Able to edit some information on the same page!
-
- Reference: <https://docs.rads.purwana.net/Dashboard>

Exercise

- Continue to use the app from the previous chapters.
- Dashboard element works by reading the elements available in a selected Userview, so let's create a new Userview with the details below:

Remember to click on this! You can use this feature to duplicate from another Userview.

The screenshot shows a web form titled "CREATE NEW USERVIEW". Under the "USERVIEW DETAILS" section, there are three fields: "ID" with the value "dashboard", "Name" with the value "Dashboard", and "Description" which is a large text area. At the bottom of the form, there is a link labeled "Hide Advanced Options" which is highlighted with a red rectangular box. Below this link, there is a section titled "DUPLICATE USERVIEW FROM:" with a dropdown menu showing "App Purchase Requisition" and another dropdown menu showing "Userview #118n.app.welcome# to Purchase Requisition Portal".

Exercise

- Remove all other userview elements until only these elements remain.



- To make our Dashboard more informative, go ahead and **add in** another **Chart** element! Configure accordingly.

Edit Chart ?

Edit Chart > Datasource > Data Binder (Advanced Form Data Binder) > Data Binder & Chart Data Mapping > Chart Options > Advanced > Performance & Offline

Custom ID	
Label *	Category Demand Chart
Chart Type *	Bar Chart ▼
Chart Title	Category Demand Chart

Datasource

Edit Chart > **Datasource** > Data Binder (Advanced Form Data Binder) > Data Binder & Chart Data Mapping > Chart Options > Advanced > Performance & Offline

Datasource ?	Using Data Binder
Data Binder *	Advanced Form Data Binder

Configure Advanced Form Row Data Binder ?

Edit Chart > Datasource > **Configure Advanced Form Row Data Binder** > Advanced > Performance & Offline

Form *	3-Acknowledge Approved
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Aggregate Query

Group By ?

approval
createdBy
createdByName
dateCreated
dateModified
id
items
modifiedBy

category

Aggregate Fields

FIELD *	FUNCTION *
category	Count

Data Binder & Chart Data Mapping

Edit Chart > Datasource > Data Binder (Advanced Form Data Binder) > **Data Binder & Chart Data Mapping** > Chart Options > Advanced > Performance & Offline

Order By

Order

ASC

X-axis Value *

Category

Y-axis Values *

NUMBER VALUE *	LEGEND VALUE *
Category (COUNT)	Demand



Chart Options

Edit Chart > Datasource > Data Binder (Advanced Form Data Binder) > Data Binder & Chart Data Mapping > **Chart Options** > Advanced >

X-axis Label *

Category

X-axis display as

Category ▼

Y-axis Label *

Amount

Y-axis Prefix

Show Legend?



Show Value Label in Chart?



Stack Series?



Display as Horizontal Chart?



Width *

60%

Height *

50%

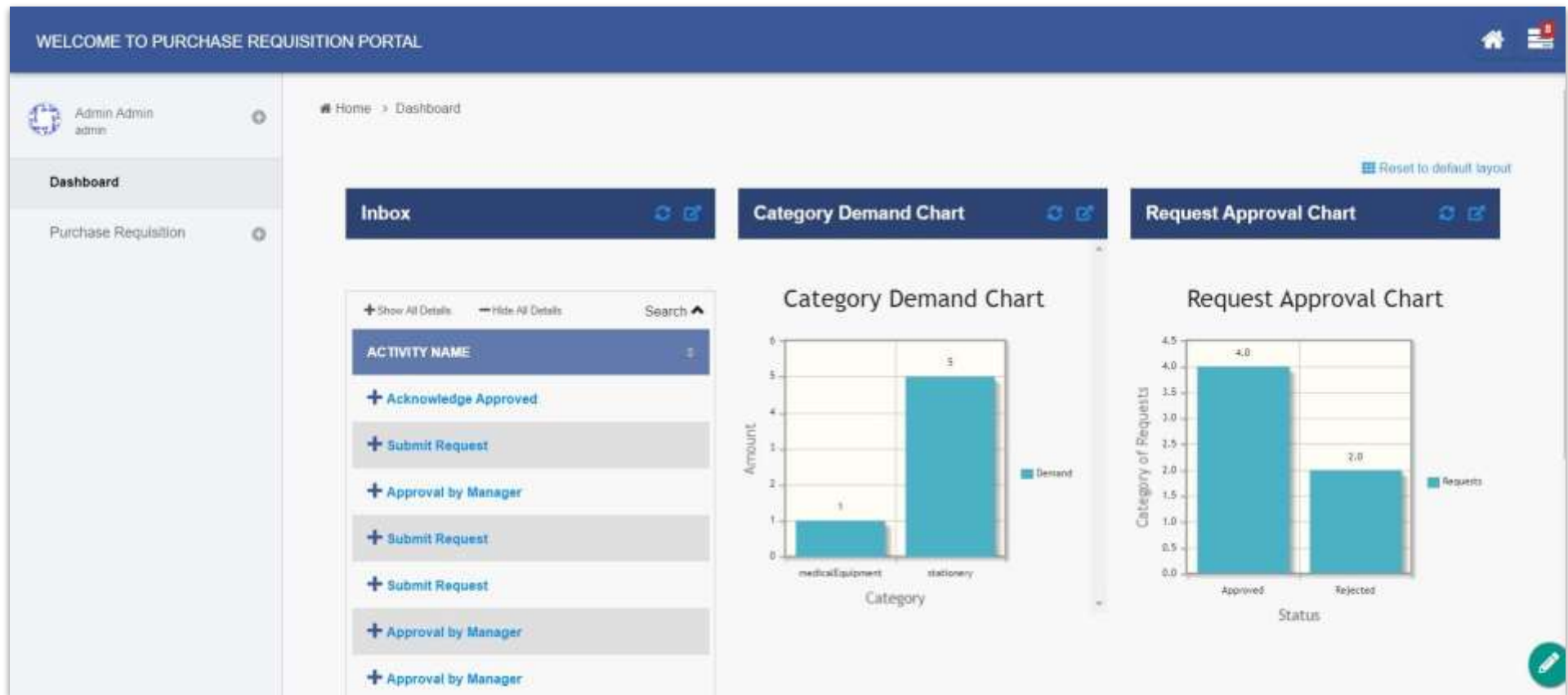
- By now, you should have just 1 inbox and 2 chart elements.
Save the Userview.
- Now go to the Userview Builder of **Purchase Requisition Portal**. **Remove** the “Welcome” menu and replace with a Dashboard menu. Configure accordingly. Remember to save your changes!

Configure Dashboard ?

Configure Dashboard > UI > Advanced > Performance & Offline

Custom ID	
Label *	Dashboard
Configuration Mode	Using Userview ▼
Userview *	Dashboard ✕ ▼ 🔗

This Is How the Dashboard Should Look Like in Runtime.



Materials

- Completed App from previous chapters' exercises can be obtained at **14.jwa**.

Chapter Review

- Able to configure Dashboard for RADS apps.



Chapter 5

Report Builder

Report Builder

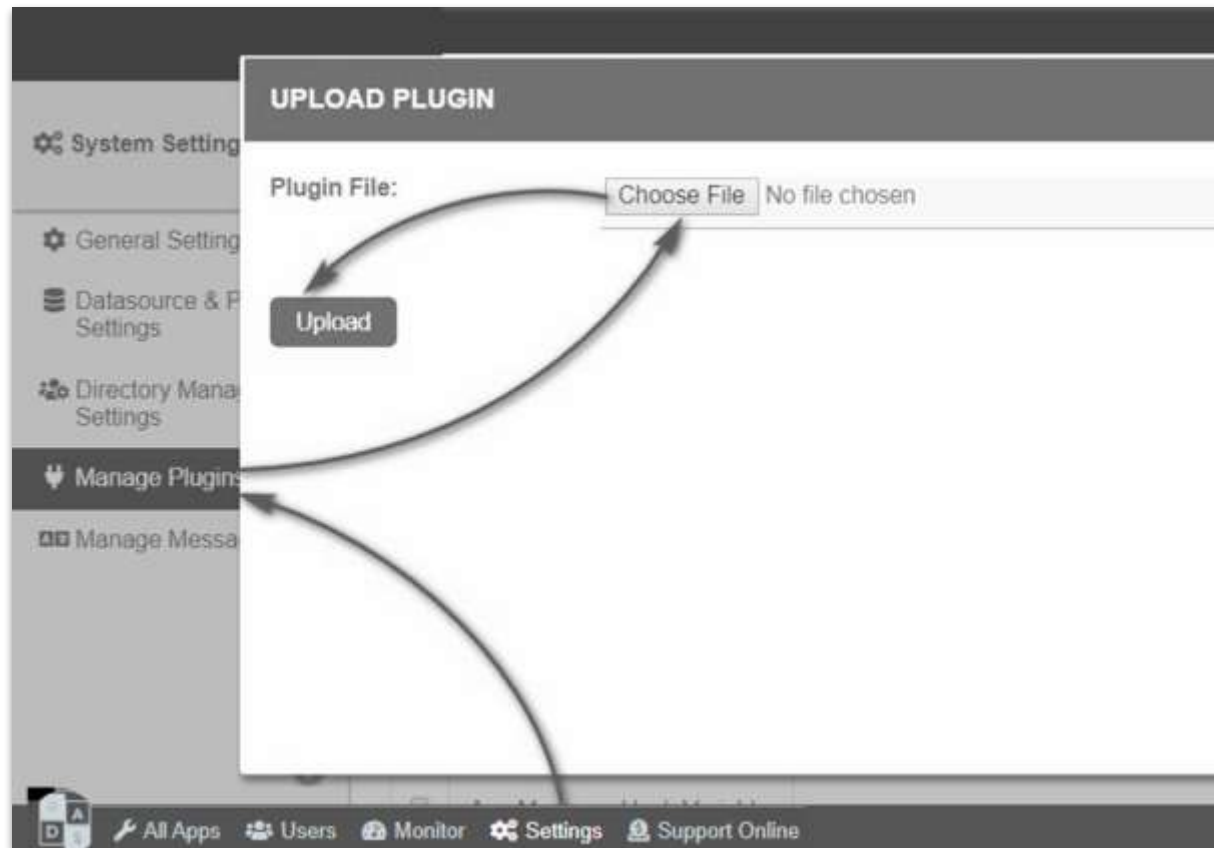
- Report Builder belongs to a new plugin type called Custom Builder.
- Allows one to create your own customized report.

- Reference:

<https://docs.rads.purwana.net/marketplace/Report+Builder>

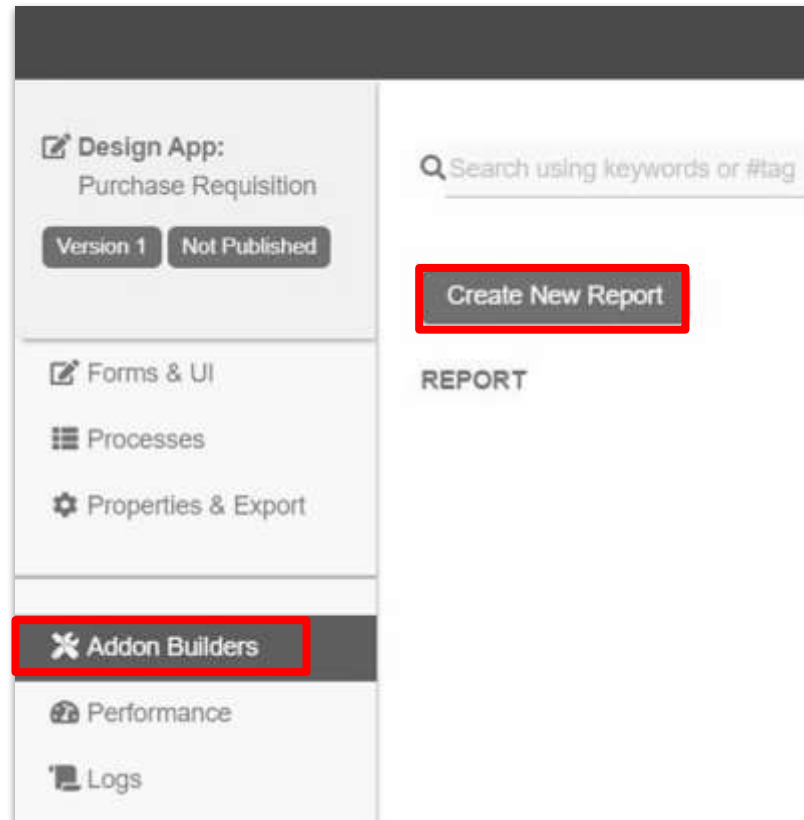
Installing Report Builder

- Download the plugin from RADS Marketplace and import it into your RADS platform via Manage Plugin.



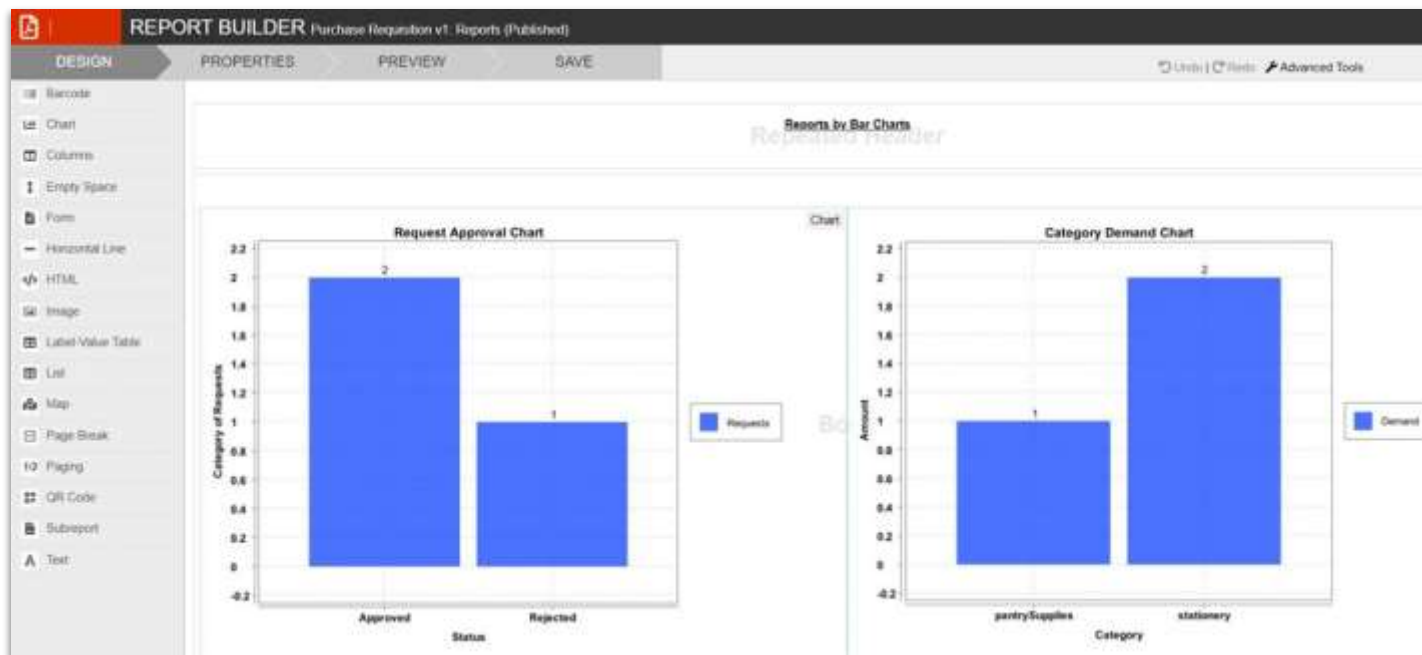
Exercise

- Continue to use the app from the previous chapters.
- Click on the new menu Addon Builders and click on Create Report.



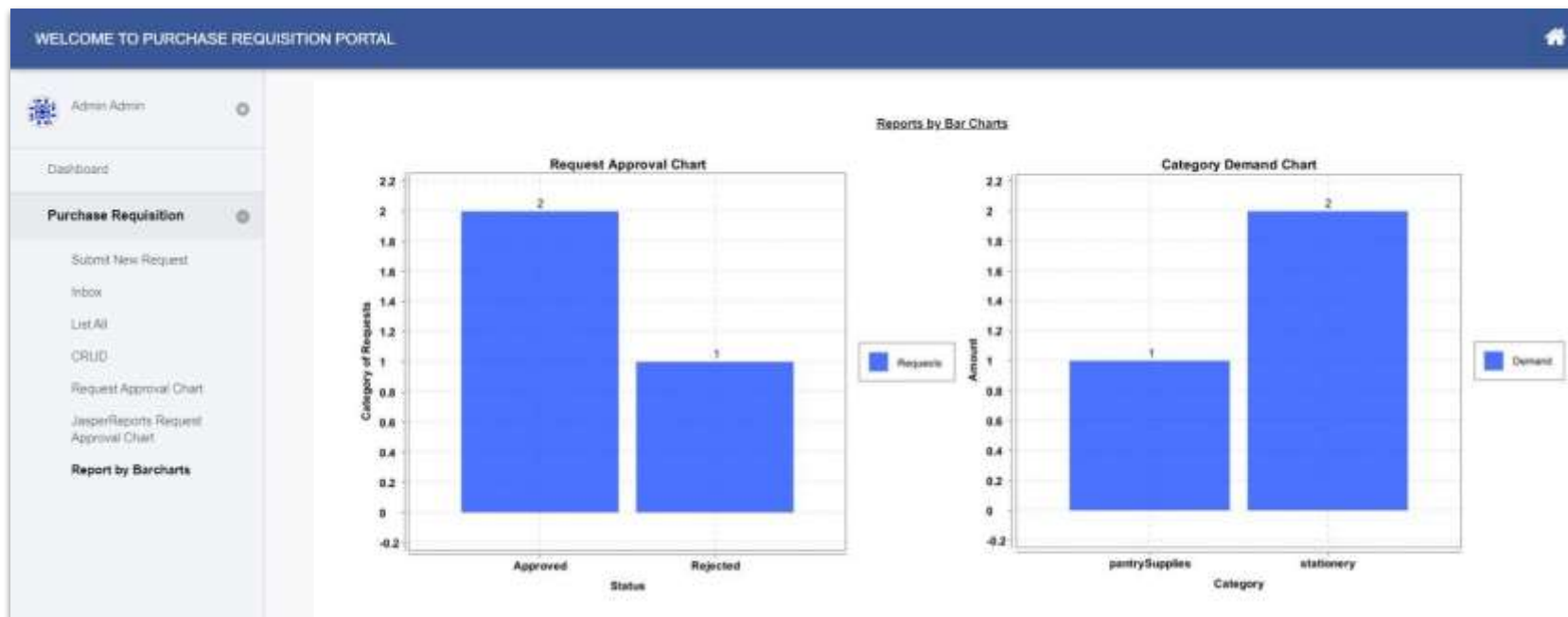
Exercise

- Create 2 columns and create 2 charts side by side.
- Use the previous 2 charts:
 - Request Approval Chart
 - Category Demand Chart



Exercise

- Now go to the Userview Builder of **Purchase Requisition Portal**. Add the **Report** element and configure accordingly. Remember to save your changes!



Materials

- Completed App from all the chapters' exercises can be obtained at **14b.jwa**.

Chapter Review

- Able to create a report by using the Report Builder for RADS apps.

Module Review

1. Introduction
2. Chart
3. JasperReports
4. Dashboard
5. Report Builder

Stay Connected With RADS

- rads.purwana.net
- <https://github.com/radservice/rad-community>