



SHAREPOINT911

THE SHAREPOINT AUTHORITY

# SSRS Easy Reporting

by Laura Rogers  
SharePoint MVP



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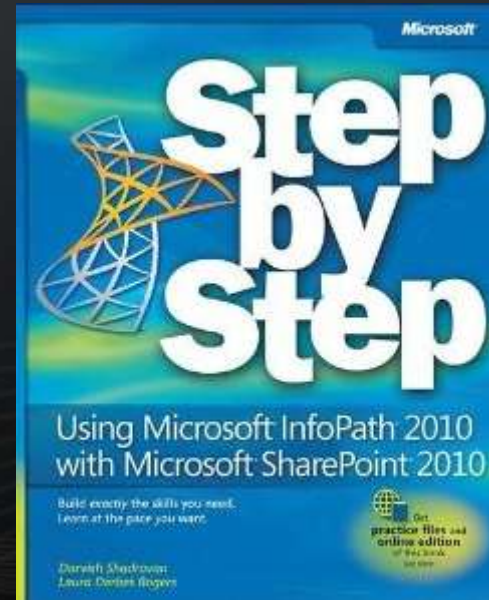
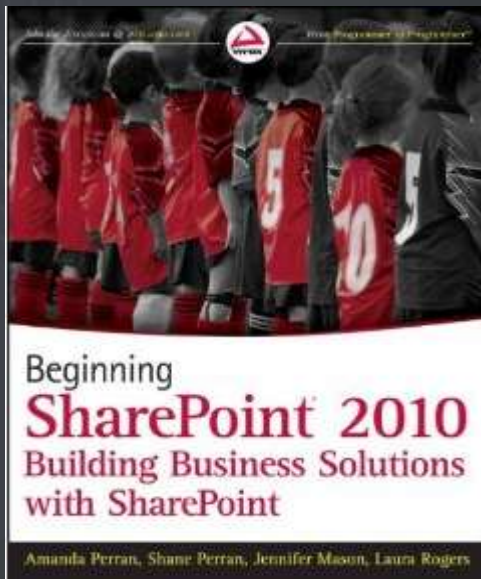
# About Me

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# My Latest Books

- *Beginning SharePoint 2010: Building Business Solutions with SharePoint*
- *Using Microsoft InfoPath 2010 with Microsoft SharePoint 2010 Step by Step*



# Agenda

- Background information about SSRS installation
- SQL Version differences
- Methods for creating reports
- Report Builder 3.0
- Data sources – SharePoint list data
- Datasets
- Report builder web part
- Using Parameters



# SSRS Background Info

- Install it on a SharePoint Web Front End server (WFE)
- During SQL installation process, select only Reporting Services and Business Intelligence Development Studio
- With SharePoint 2010, there's a reporting services add-in that is already installed.
- Go through the reporting services configuration manager on the server
- Go to SharePoint central admin General Application Settings, Reporting Services section.



# SQL Version Differences

- SQL 2008 – Report Builder 2.0, not 3.0
- SQL 2008 R2 – Report Builder 3.0 and a plethora of new and cool reporting features.
- If you have R2, definitely use it, it's much better.
- <http://msdn.microsoft.com/en-us/library/dd207010.aspx>

# Methods for Creating Reports

- Business Intelligence Development Studio (BIDS)
  - A more advanced tool
  - Create reports and deploy them to SharePoint with no end user interaction.
- Report Builder
  - Similar to BIDS, but simplified so that end users can create reports.
  - Reports can be created from within a SharePoint library.

# Report Builder 3.0

- There are 3 content types for creating reports
  - Report Builder Report
  - Report Builder Model
  - Report Data Source
- Add one or more of these content types to any document library.
- What's New in Report Builder 3.0  
<http://technet.microsoft.com/en-us/library/ee633667.aspx>
- Getting Started With Report Builder 3.0  
<http://technet.microsoft.com/en-us/library/dd220460.aspx>

# Report Builder 3.0

- End users create reports based on a data source using **Report Builder Report** content type.
- Need .Net 3.5 on client computer.
- Reports can be created once a data source exists.
- Pick and choose which library uses which content type

# Data Sources – SharePoint List

- From the NEW button in the library, click to create a new Report Data Source

Use this page to edit a data source that can be shared by reports, models, or shared datasets.

OK Cancel

<b>Name *</b>	ContosoTeamSite .rsds
<b>Data Source Type</b>	Microsoft SharePoint List
<b>Connection string</b> Enter a connection string for accessing the report data source.	http://team.contoso.com
<b>Credentials</b> Enter the credentials used by the report server to access the report data source.	<input checked="" type="radio"/> Windows authentication (integrated) or SharePoint user <input type="radio"/> Prompt for credentials Provide instructions or example: Type or enter a user name and password to access: <input type="checkbox"/> Use as Windows credentials <input type="radio"/> Stored credentials User Name: Password: <input type="checkbox"/> Use as Windows credentials <input type="checkbox"/> Set execution context to this account <input type="radio"/> Credentials are not required Test Connection
<b>Availability</b>	<input checked="" type="checkbox"/> Enable this data source

# SharePoint Data Source

- Name  
Since you can have one data source for reporting off of any list or library on the site, you can name it with just the name of the site, like "Contoso Team Site"
- Data Source Type  
Microsoft SharePoint List
- Connection String  
Just the URL to your site: <http://team.contoso.com>
- Credentials  
Use Windows Authentication, so that existing SharePoint security will apply.

# Report Creation

- Wizard

(note that you will always need a dataset, decide whether it needs to be shared for other reports.)

The screenshot shows a 'Getting Started' window for report creation. On the left, there are four main categories: 'New Report' (highlighted in yellow), 'New Dataset', 'Open', and 'Recent'. 'New Report' is described as displaying data from various sources in tables, charts, and other formats. 'New Dataset' is for sharing queried data among multiple reports. 'Open' is for opening a saved report. 'Recent' is for opening a recently used report. On the right, there is a heading 'Create a report from a wizard or from a blank report.' followed by four options: 'Table or Matrix Wizard' (guides through choosing data source connection, layout, and style), 'Chart Wizard' (guides through creating column, line, pie, bar, and area charts), 'Map Wizard' (displays report data against a geographical background), and 'Blank Report'.



# Dataset

- Create a dataset based on an existing data source.
- A DataSet is a subset of a Data Source. Examples:
  - The data source is the whole site, and a specific SharePoint List can be a dataset
  - The data source is a whole SQL database, and a specific table can be a dataset
- Shared Datasets can be created (not non-R2)
- Browse to the document library where the data source already exists. Click Create.

# Dataset

**Getting Started**

**New Report**  
Display data from various data sources in tables, charts, and other formats.

**New Dataset**  
Share queried data among multiple reports.

**Open**  
Open a saved report.

**Recent**  
Open a recently used report.

Don't show this dialog box at startup.

Choose a data source connection or model to create a shared dataset.

**ContosoTeamSite.rds**  
<http://team.contoso.com/Reports>

[Browse other data sources...](#)

Create



# Dataset

- Pick one SharePoint list on the left
- Apply any needed filters, especially if there are thousands of items. Click **Save**, give the dataset a name.

The screenshot displays the Query Designer interface. The top ribbon includes buttons for 'Select', 'Set Options', 'Edit as Text', 'Import...', 'Show Hidden Fields', and 'Run Query'. The main area is divided into three sections:

- SharePoint Lists:** A list of available lists, including 'Hold Reports', 'Holds', 'Images', 'Links', 'List Template Gallery', 'Long Running Operation Status', 'Master Page Gallery', 'Meetings', 'Notification List', 'Pages', 'Phone Call Memo', 'Policies', 'ProjectTasks', 'Quick Deploy Items', 'Relationships List', 'Reporting Metadata', 'Reporting Templates', 'Reports', 'Resources', 'Reusable Content', 'Shared Documents', 'Site Assets', and 'Site Collection Documents'. 'ProjectTasks' is selected.
- Selected fields:** A list of fields to be included in the query, including 'ID', 'Content Type', 'Title', 'Modified', 'Created', 'Created By', 'Modified By', 'Version', 'Attachments', 'Edit (link to edit item)', and 'Title (linked to item)'. 'ID' is selected.
- Applied filters:** A table with columns 'Field name', 'Operator', 'Value', and 'Parameter'. It is currently empty.

# Report Wizard

- Choose existing dataset, navigate to the library.
- Pick fields for grouping and/or details. Next.

**New Table or Matrix**

### Arrange fields

Arrange fields to group data in rows, columns, or both, and choose values to display. Data expands across the page in column groups and down the page in row groups. Use functions such as Sum, Avg, and Count on the fields in the Values box.

**Available fields**

- ID
- Content\_Type
- Title
- Modified
- Created
- Created\_By
- Modified\_By
- Edit\_link\_to\_edit\_item\_
- Title\_linked\_to\_item\_
- Title\_linked\_to\_item\_with\_edit\_me...
- Type\_icon\_linked\_to\_document\_
- Item\_Child\_Count
- Folder\_Child\_Count
- Predecessors
- Priority
- Task\_Status
- ID\_Complete
- Assigned\_To
- Description
- Start\_Date
- Due\_Date

**Column groups**

**Row groups**

- Priority

**Σ Values**

- Title
- Task\_Status
- Assigned\_To
- Start\_Date
- Due\_Date

Help < Back Next > Cancel

# Report Wizard

- Click through the different layout options in order to see examples.
- Hint: I like to leave these boxes checked. It's easier to remove this stuff later than it is to add later. Next.

**New Table or Matrix**

### Choose the layout

If you choose to show subtotals and grand totals, you can place them above or below the group. Stepped reports show hierarchical structure with indented groups in the same column.

Options:

- Show subtotals and grand totals
  - Blocked, subtotal below
  - Blocked, subtotal above
  - Stepped, subtotal above
- Expand/collapse groups

Preview

Priority	Title	Task Status	Assigned To	Start Date	Due Date
[Priority]	[Title]	[Task_Status]	[Assigned_To]	[Start_Date]	[Due_Date]
Total					

# Report Wizard

- Pick a color scheme. **Finish.**

New Table or Matrix

Choose a style

Styles feature different fonts and color schemes, but do not affect the basic layout. You can customize the style after you finish the wizard.

Styles: Preview

Corporate	
<b>Forest</b>	
Generic	
Mahogany	
Ocean	
Slate	

Priority	Title	Task Status	Assigned To	Start Date	Due Date
[Priority]	[Title]	[Task_Status]	[Assigned_To]	[Start_Date]	[Due_Date]
Total					

# Chart Wizard

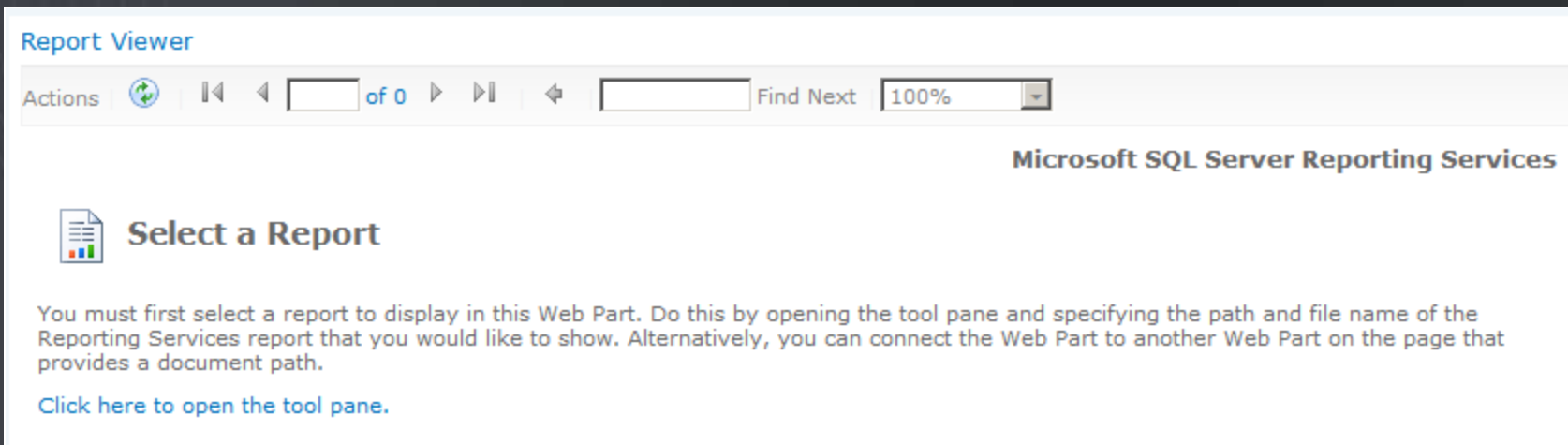
- Pick a dataset. Pick the fields to use. The value must be an aggregate function such as Count or Sum.

The screenshot shows a 'New Chart' window with the following components:

- Arrange chart fields**: A heading for the configuration section.
- Instructional text**: 'Add data fields to the chart. For most chart types, a field in the Categories list is displayed on the x-axis. A field in the Values list shows aggregated data on the y-axis. A field in the Series list creates a new series in the chart.'
- Available fields**: A list of fields including ID, Content\_Type, Title (highlighted), Modified, Created, Created\_By, Modified\_By, Edit\_\_link\_to\_edit\_item\_, Title\_\_linked\_to\_item\_, Title\_\_linked\_to\_item\_with\_edit\_me..., Type\_\_icon\_linked\_to\_document\_, Item\_Child\_Count, Folder\_Child\_Count, Predecessors, Priority, Task\_Status, ID\_\_Complete, Assigned\_To, Description, Start\_Date, and Due\_Date.
- Series**: A list containing 'Priority'.
- Categories**: An empty list.
- Values**: A list containing 'Count(Title)' with a dropdown arrow.

# Web Part

- Category is SQL Server Reporting
- Web part is SQL Server Reporting Services Report Viewer
- Click to open the tool pane, navigate to your report.
- There are a ton of web part options around the toolbar.



The screenshot shows the 'Report Viewer' web part interface. At the top, there is a toolbar with 'Actions', a refresh icon, navigation arrows, a page indicator 'of 0', a search box labeled 'Find Next', and a zoom level dropdown set to '100%'. Below the toolbar, the text 'Microsoft SQL Server Reporting Services' is displayed. A document icon is followed by the heading 'Select a Report'. The main content area contains the following text: 'You must first select a report to display in this Web Part. Do this by opening the tool pane and specifying the path and file name of the Reporting Services report that you would like to show. Alternatively, you can connect the Web Part to another Web Part on the page that provides a document path.' Below this text is a blue hyperlink: 'Click here to open the tool pane.'

Click here to open the tool pane.

provides a document path.

Reporting Services report that you would like to show. Alternatively, you can connect the Web Part to another Web Part on the page that

you would like to show. Alternatively, you can connect the Web Part to another Web Part on the page that



# Calculated Fields

- By default, date fields show date and time.

Project Tasks					
Priority	Title	Task Status	Assigned To	Start Date	Due Date
☐ (1) High	Write project charter	Completed	Todd Klindt	1/15/2012 12:00:00 AM	1/30/2012
	Gather requirements	In Progress	Laura Rogers	2/2/2012 12:00:00 AM	2/15/2012
	Project Completion	Not Started	John Ross	6/1/2012 12:00:00 AM	6/10/2012

- You want to show just the date, like the due date column?
- Here's how, an expression:  
=FormatDateTime(Fields!Due\_Date.Value,DateFormat.ShortDate)
- Any kind of calculated field can be created here.

# Parameters

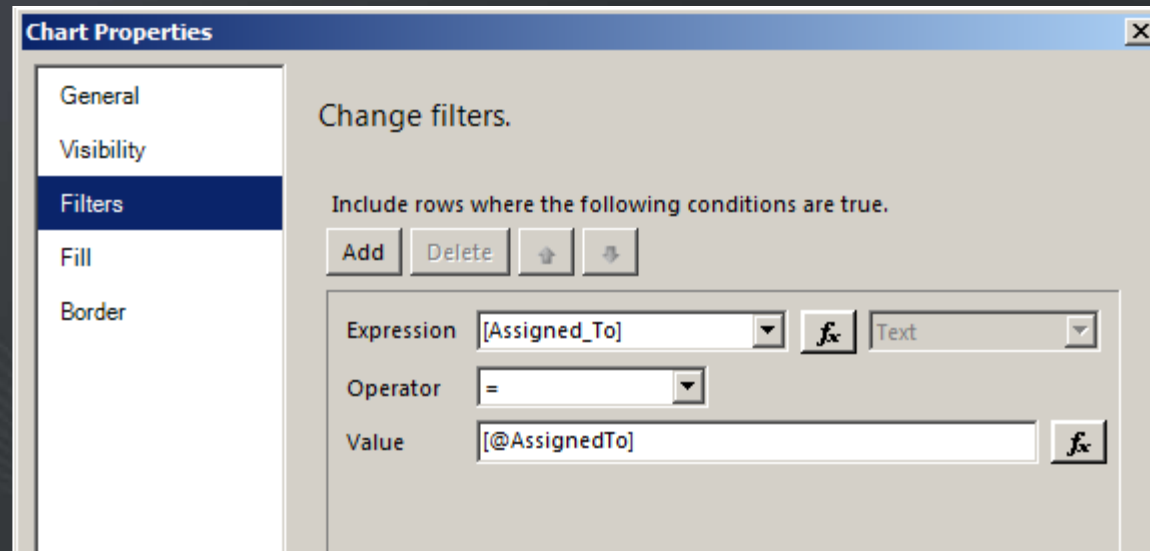
- A parameter is just a value that can be passed to the report from somewhere else, such as another report or a web part connection.
- Want to show the logged in user their own chart? Create a parameter as so:

The screenshot shows the 'Report Parameter Properties' dialog box with the following configuration:

- Name:** AssignedTo
- Prompt:** Assigned To
- Data type:** Text
- Allow blank value ("")
- Allow null value
- Allow multiple values
- Select parameter visibility:**
  - Visible
  - Hidden
  - Internal

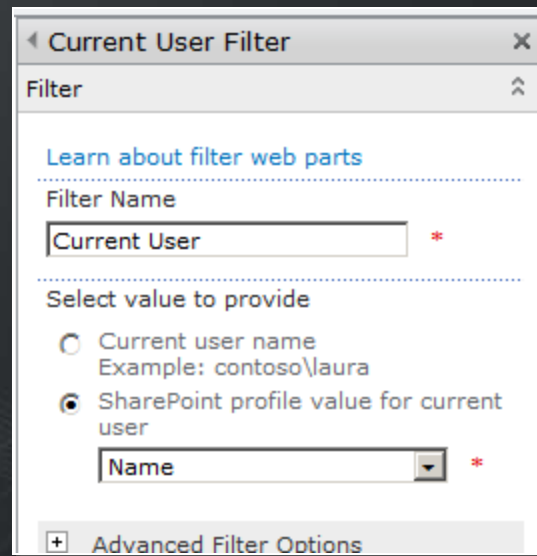
# Parameters

- After the AssignedTo parameter has been created, the chart must be filtered to only show that value.
- The filter needs to be: AssignedTo is equal to AssignedTo Parameter.



# Web Part Connection

- Add the Current User Filter to the page, send the parameter to the report viewer web part.
- The "Name" value is the FirstName LastName, which is the same syntax as the "Assigned To" field value.



The screenshot shows the configuration interface for the 'Current User Filter' web part. The title bar reads 'Current User Filter'. Below the title, there is a 'Filter' section with a 'Filter Name' text box containing 'Current User'. A section titled 'Select value to provide' contains two radio button options: 'Current user name' (with example 'contoso\laura') and 'SharePoint profile value for current user' (which is selected). Below the selected option is a dropdown menu with 'Name' selected. There are expandable sections for 'Advanced Filter Options' at the bottom.

# Extra SSRS Topics

- Drill down charts
- Subscriptions





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# Thank you for attending!

Laura Rogers

<http://sharepoint911.com/blogs/laura>



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