**SQL SERVER Reporting Services**

Introduction to SSRS

Installation of SSRS

SSRS has two modes

Native Mode

SharePoint Integrated mode

Interaction with SSRS

We can interact with SSRS by following ways

Web Portal or SharePoint Add-in and SQL Server Data Tools

Installation

SQL Report Services is a Windows services relies on two databases hosted by instance of the SQL Server database engine.

But in Sharepoint integrated mode, SSRS run as a sharepoint shared service.

With basic installation of Native Mode, server side and client side components are installed on single server.

Reporting Service Database are also installed

Install SQL Server 2016 with reporting services on a computer

Insert the SQL Server 2016 DVD and run the setup and except all default options

SQL Server Edition 2016

SQL Server Instance name (SQL2016)

Checking SSRS is working

After installation completion, we can test verify the installation using below links

<http://localhost/reports_instance_name> or <http://localhost/reports>

<http://localhost/reports_SQL2016> or <http://localhost/reportserver_sql2016>

Reporting Services Tools

Two tools are available

1. Visual Studio Report Designer

Report Designer give full control on report to developer. Report Designer is accessible through SSDT. SSDT is available through Visual Studio. SSDT download separately and integrate with existing installation of visual studio.

Report Designer is divided into tabs:

* + 1. Design
    2. Preview

1. Report Builder

Report Builder is a report designer with capabilities similar to SSDT Report Designer but it is look like outlook. Report Builder is single document centric report design toll created with the self-service report user in mind.

It is available as a standalone download, from web portal interface.

1. Web Portal

Web Portal is replacement of previous Report Manager web interface. Web Portal is report presentation tool that provide access to report and other items.

Web Portal is available for reporting services if it is in Native Mode.

1. SharePoint Libraries and Web Parts

Reporting service running in SharePoint Integration mode, reports are presented as SharePoint Libraries and Managed as Sharepoint contents.

1. Reporting Services Configuration Manager

RSCM let us to access system critical settings. Allow support for administrative task such as RS application Database, Backing up and restoring encryption keys.

1. SQL Server Management

We can manage some part of SSRS from management studio as well.

1. Command Line Utilities

Rs.exe

Rsconfig.exe

Rskeymgmt.exe

**Report Layout and Formatting (Chapter No. 4 )**

**Creating Report using Report Builder**

1. Open Web Portal using <http://localhost/reports_sql2016>
2. Click + sign and create a folder with name WroxSSRS2016
3. Open Report Builder 🡪 if not installed, download from

<https://www.microsoft.com/en-us/download/details.aspx?id=53613>

and install

1. close getting started window
2. right click on data sources in report data pane 🡪 click add data source

🡪 give name () 🡪 choose use connection embedded in report 🡪

select connection type (SQL server) 🡪 click build button 🡪 select server name and enter user name & password and select database and test connection.

1. Right click Dataset 🡪 click add dataset 🡪 give name (SalesSummary)
2. Select data source created in step 5
3. Click Query Designer button
4. Expend view folder and choose Salessummaryyearproduct

**Designing the Report Layout**

1. Enter report title (Sales Summary)
2. Click insert 🡪 click table 🡪 move mouse pointer to canvas and click
3. Add fields to the report from dragging data pane to table
4. Run the report to preview
5. Select the header row and change the backgroup color from paint bukct
6. Select Sales Amount Column and from Ribbon, choose $ sign
7. Save the report give name (Sales Summary)

**Grouping Data by Product Name**

1. Open report in Desgin Mode
2. In row Group area in botton 🡪 click detail 🡪 Group property 🡪 Group on (ProductName) 🡪 Click OK
3. Now make sure in OrderQuantity and SalesAmount are with SUM Function
4. To add sum function to these column, just re-select it in column value.

**Deploying Report to Web Portal**

1. Open Web Portal
2. Click the Arrow key 🡪 select the report save in Report Builder 🡪 click open

**Data Access and Query Basic(Chapter No. 5)**

**Creating SQL Query using SSMS**

Open SQL Server Management Studio 🡪 Expend WroxSSRS2016 database 🡪 create a query and copy the query and paste in report builder and create report based on this query in report builder.

**Grouping & Total (Chapter No. 6)**

SQL Server Data Tools for visual studio. It was known as Business Intelligence Development Studio in earlier version.