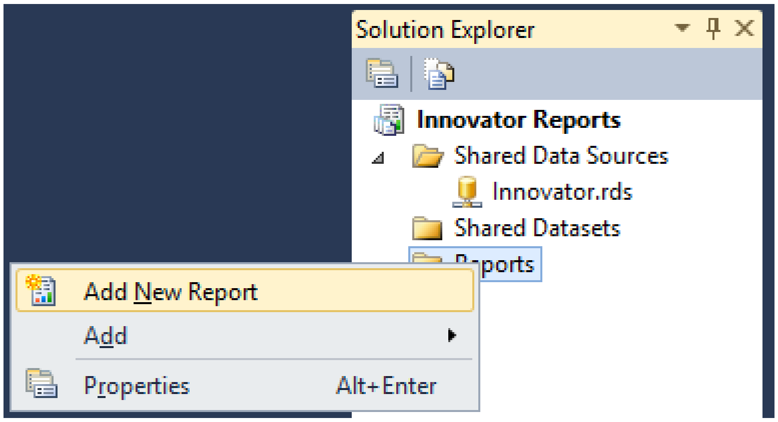
Creating your First Report

This section describes how to create a new Report using the Report Wizard. We will create a simple User Directory Report showing the User's First Name, Last Name, Email, Phone Number, and Company Name.

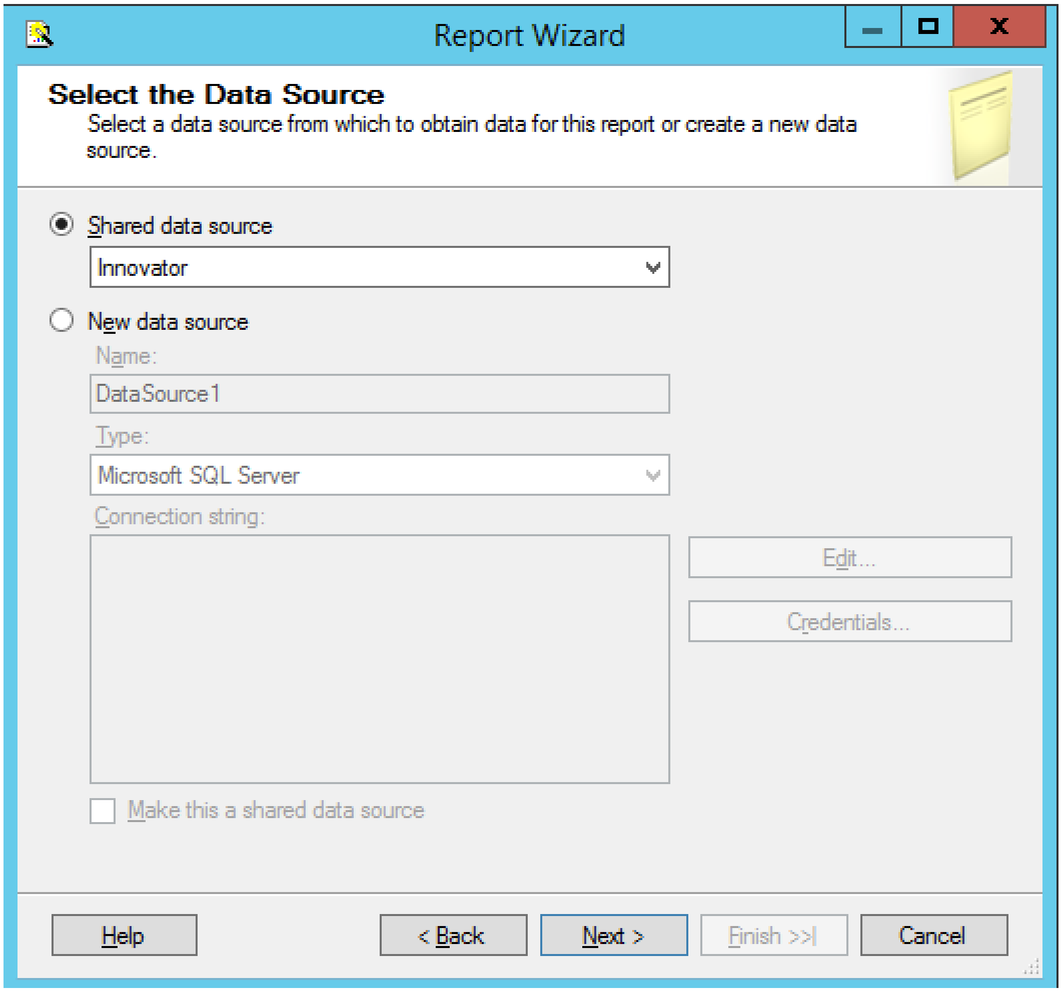
Start a New Report using the Wizard

In the **Solution Explorer** panel, right-click the **Reports** folder, and select the **Add New Report** context menu choice.



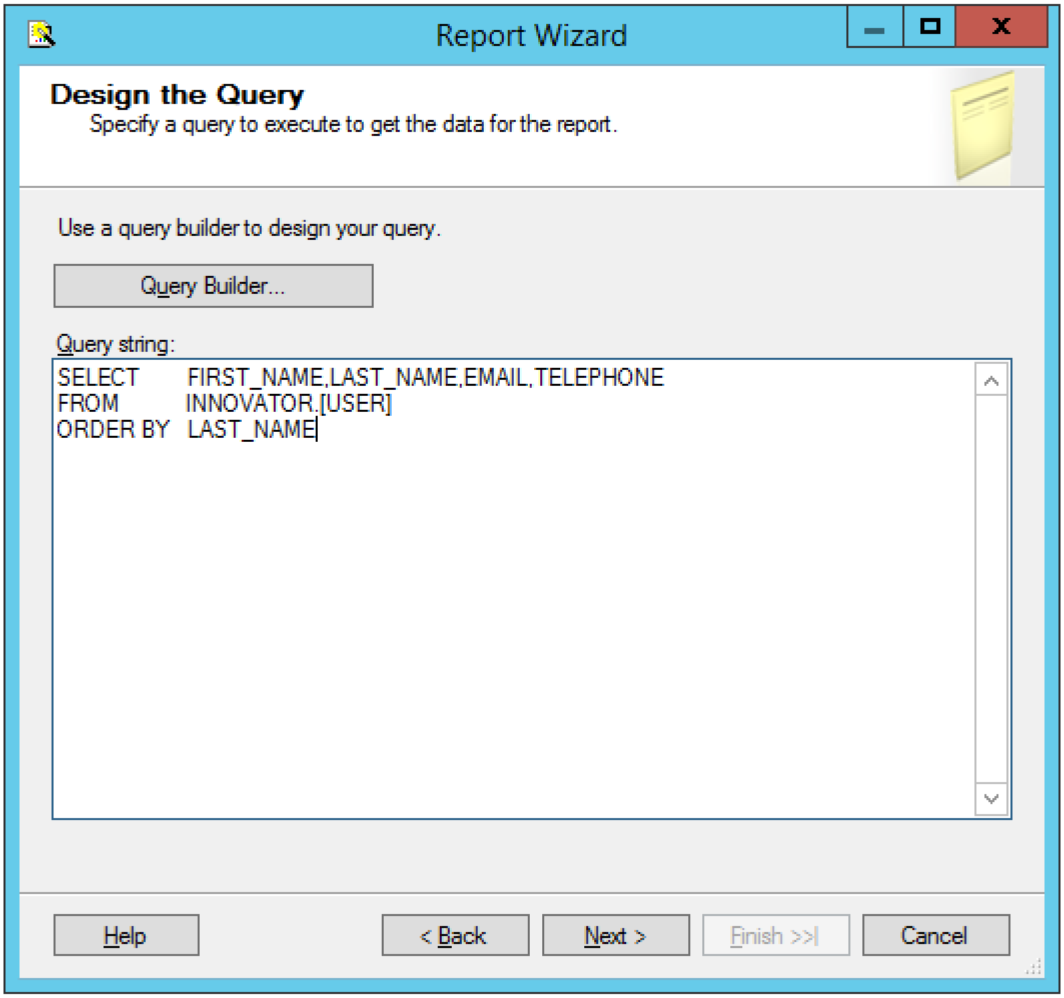
Select the Data Source

You can create a unique Data Source for this Report, but you would typically use the default Shared Data Source that you created.



Design the Query

You need to provide the `SELECT` SQL query that fetches data for the Report. In many cases, you can enter a simple `SELECT` clause directly in the dialog box.



Important

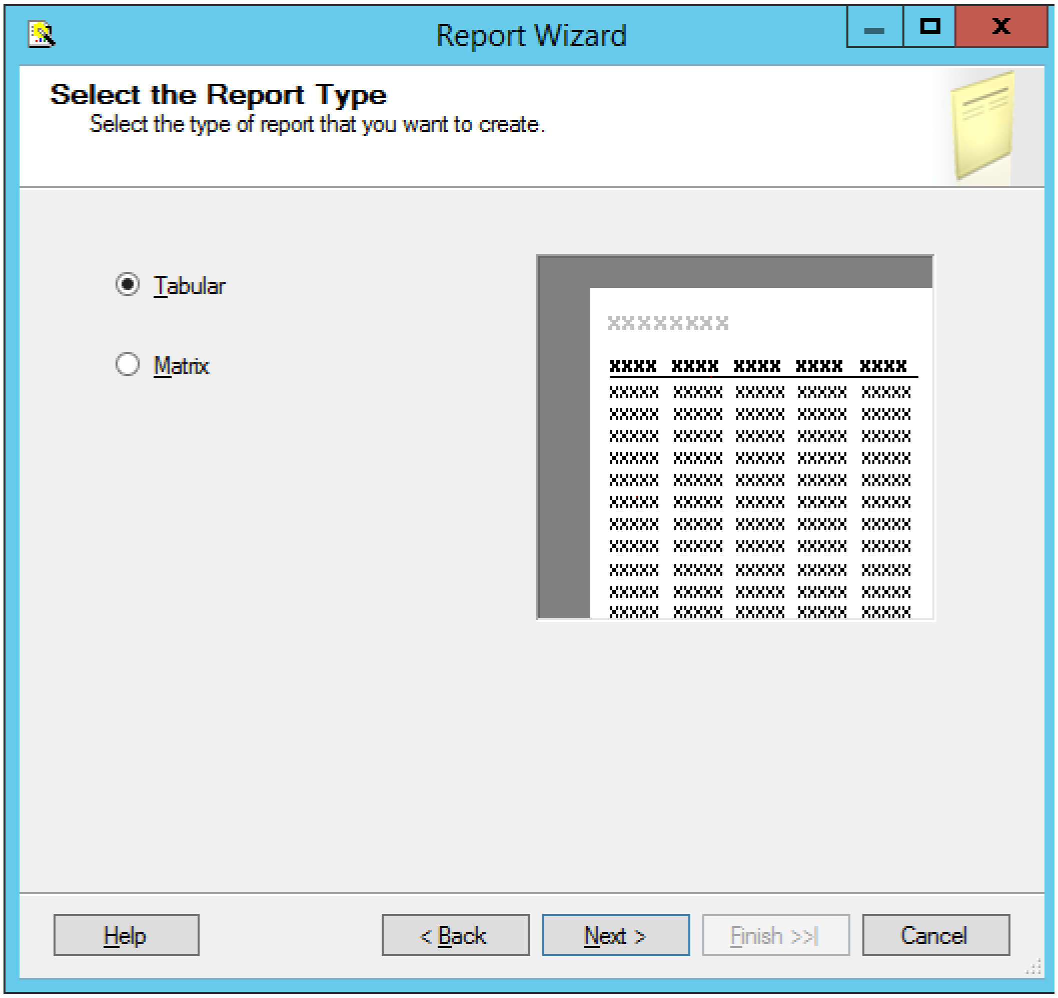
It is possible to pass Named Parameters into the query such as: SELECT * FROM [PROJECT] WHERE id=@ID
The **Edit…** button opens a Query Builder interface, which is covered later in more detail.

Select the Report Type

There are two choices for the Report Type:

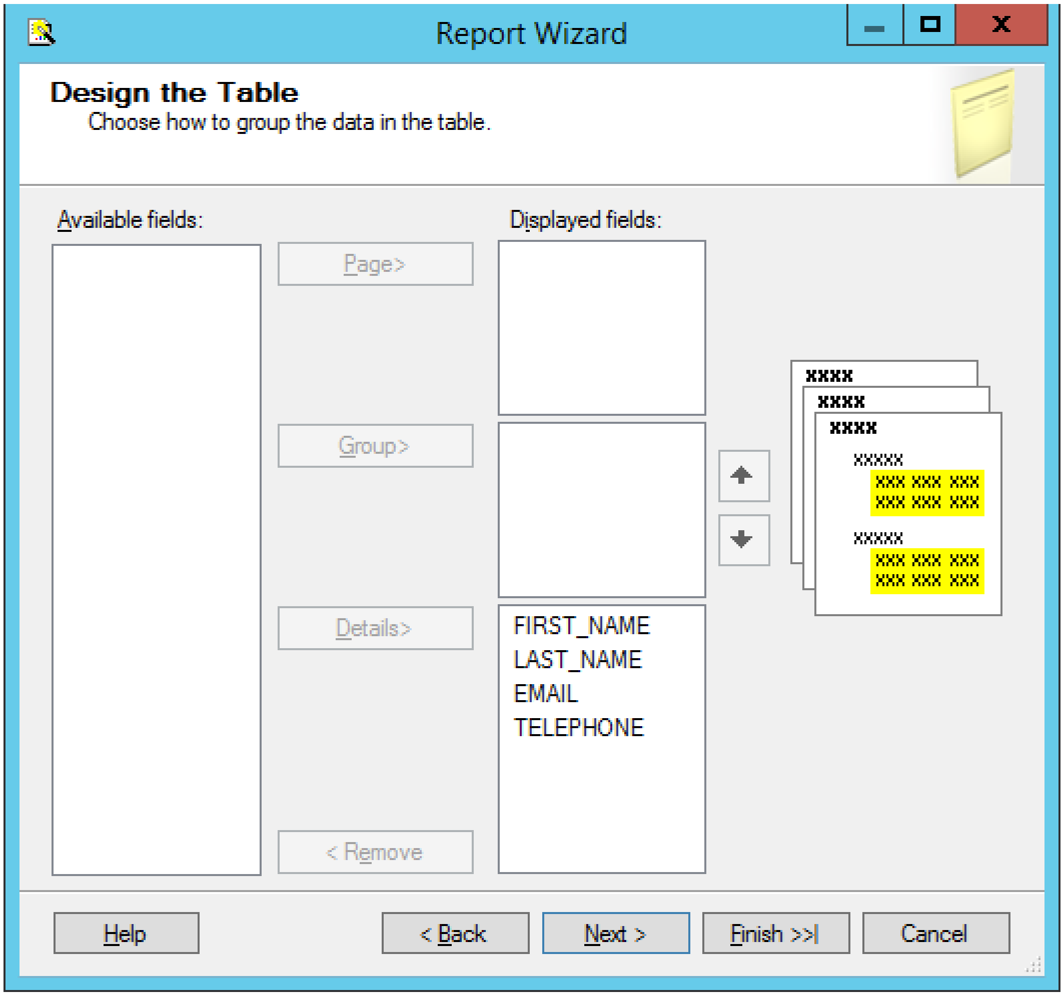
- **Tabular**: column layout.
- **Matrix**: rows and columns layout.

Select the **Tabular** type.



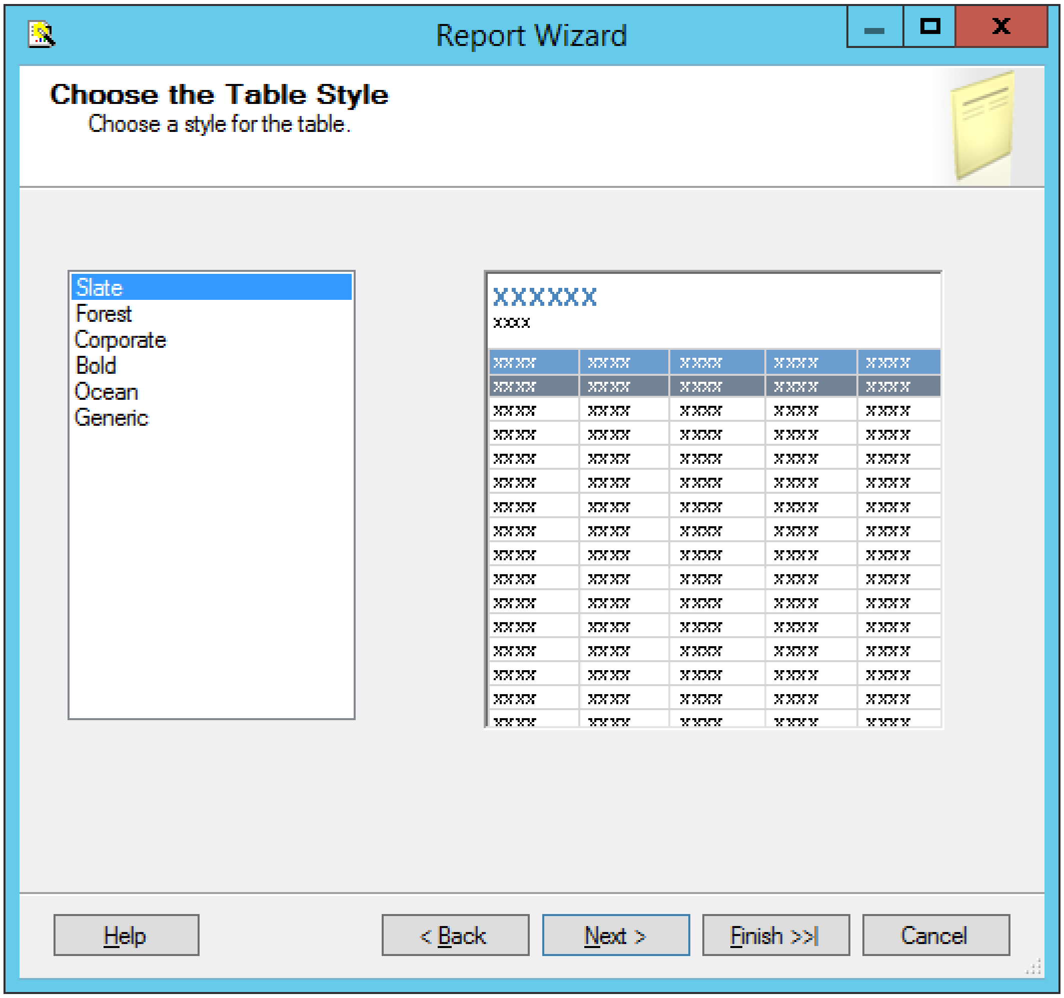
Design the Table

Select the fields that you want to show on the Report. In this case, we were selective about which fields to return from the query select clause, so we want all the fields.



Choose the Table Style

Select the table style for the Report. This example simply uses the default **State** style.

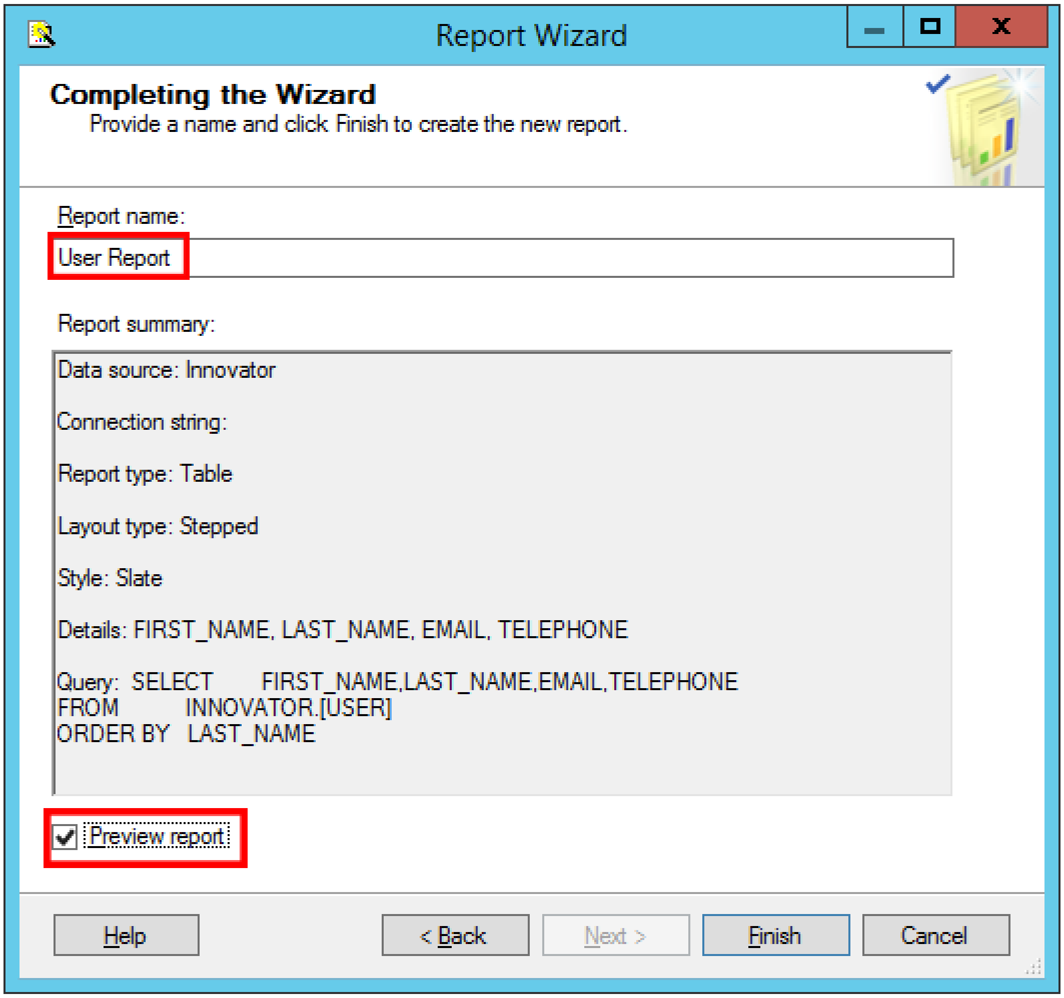


Name the Report

The final step in the Report wizard is to name the Report.

Important

The chosen **Report Name** must be meaningful and should be the same name you set as the name of the **Report** Item in Aras Innovator.



Wizard Report Results

The Report wizard builds the report.

User Report

FIRST NAME	LAST NAME	EMAIL	TELEPHONE
ES	Admin		
Innovator	Admin		
Vault	Admin		
Super	User		

Once the Report is opened in the **Layout** Tab, you can make further changes as required.

Visual Studio Layout

The **Report** pane has three Tabs:

- **Data**: for editing the query for the Report. Look at the appendix in this document to see a more complex Report query example, using the graphical query builder instead of the wizard.
- **Layout**: for visually designing the Report with drag and drop functionality.
- **Preview**: for viewing the finished report with real data.

The **Properties** panel on the right is used for setting fonts, color, and other visual properties.

The **Fields** panel on the left is used to drag database fields onto the report.

The **Toolbox** panel also on the left is for dragging Report controls onto the **Report** layout. This is how you can add tables, labels, images, and charts to the **Report** layout.

Important

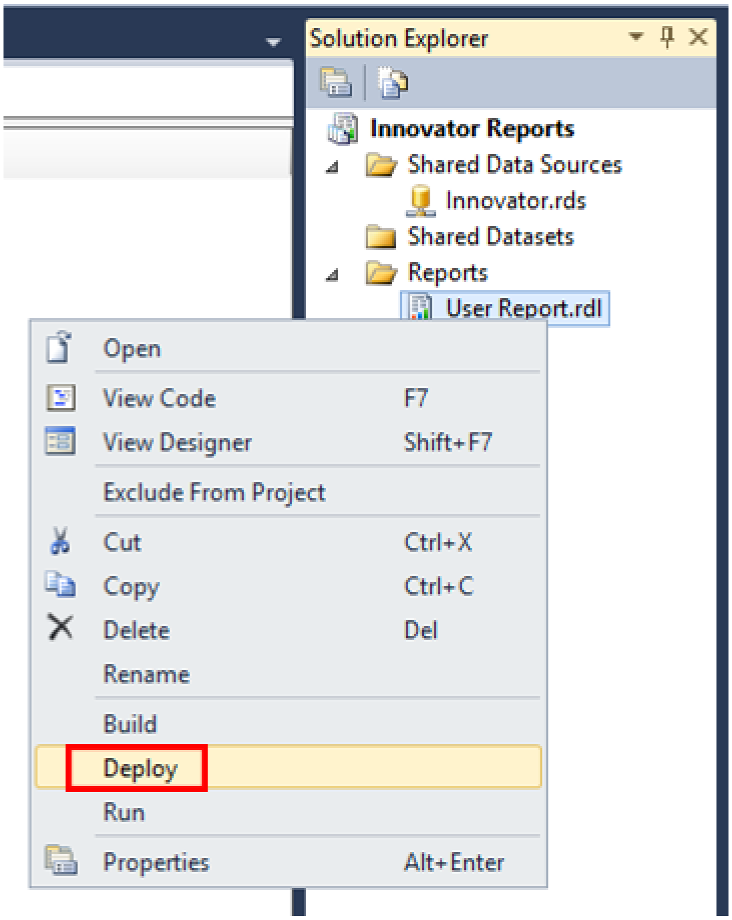
Use **View --> Fields** to open the **Fields** panel when in the **Layout** mode.
Use **View --> Toolbox** to open the **Toolbox** panel.
To open the Header and Footer, right-click to open the context menu in the pink field in the **Report** layout.

Deploying the Report

Once you are satisfied with the Report query and layout as viewed from the **Preview** Tab, you need to deploy the Report to the Reporting Service:

- In the **Solution Explorer** panel, right-click the User Directory Report item and select the **Deploy** context menu choice.

Watch for error messages in the output window at the bottom of the frame.



Confirm Deployment

To confirm the new Report has been deployed:

1. Open a browser and go to http://localhost:80/Reports .
   You should see the **Innovator Reports** folder.
2. Click that link.
   You should see the report you created.
3. Select the hyperlink for the new Report.
4. Run the Report.

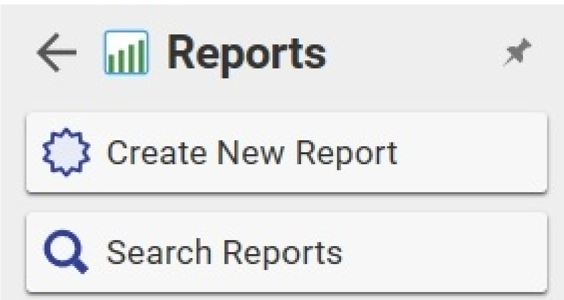
Running the Report from within Aras Innovator

For users to run the new Reporting Services Report from within Aras Innovator, you need to create an **Innovator Report** Item. The important settings to enable the Innovator Reporting Services interface are:

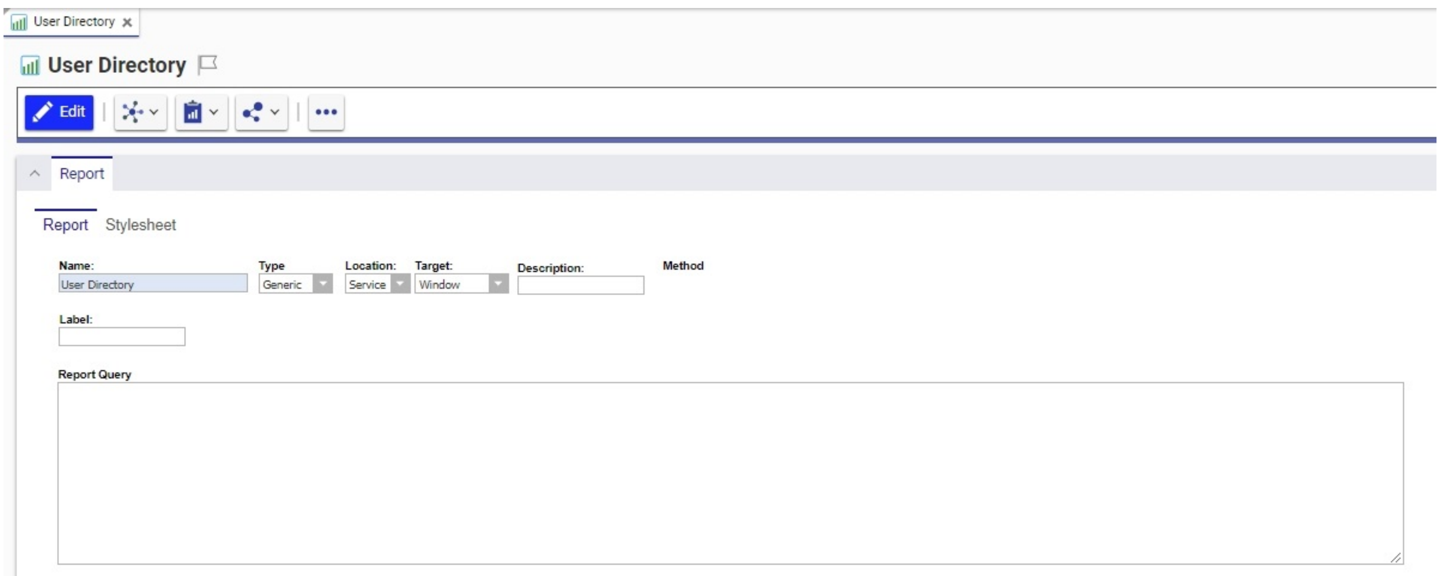
- The **Innovator Report** Item name must be the same as the Reporting Services Report name.
- The **Location** Field choice must be set to the new **Service** option.
- The **Report Query** Field specifies the parameters that are passed to the Report Server.

Adding Aras Innovator Report Item

1. Log into Aras Innovator as administrator.
2. In the **Navigation** pane, go to **Administration --> Reports**. The menu shown in Figure 47 appears.



3. Click **Create New Report.** A blank Report form appears:



4. Enter the name of the Report.

> **Important**
>
> Again, this is the name you specified when you created the Report in Visual Studio.

5. Select the Report Type, which in this case is **Generic**, meaning this Report is always available.
6. Select the Report Location, which in this case is **Service**.
7. Select the Report Target, which in this case is **Window**.

Because this sample Report is of type ItemType, there is no Report query Value.

> **Important**
>
> If you use Firefox, you have to manually enter a stylesheet under the **Stylesheet** tab.

8. Test the Report by clicking the **Reports** main menu bar choice.
   You should see the new **User Report** choice.
9. Click the **menu** choice.
   You should see a new dialog opened with the **User Directory** Report.

Passing Named Parameters to the ReportServer

As per step 4 in section Installing Reporting Services, in this section, we configure the Reporting Services using the Report Manager by adding the **Innovator Reports** Folder and a Shared Data Source, which the Reports use to connect to the database. Installing Reporting Services, the value of the **report_query** Innovator Report Item Property is appended to the ReportServer URL, providing additional parameters to control the ReportServer. For example, the ID of the Item can be passed as the Named Parameter @ID for the SQL Select for the Reporting Services Report as in this example:

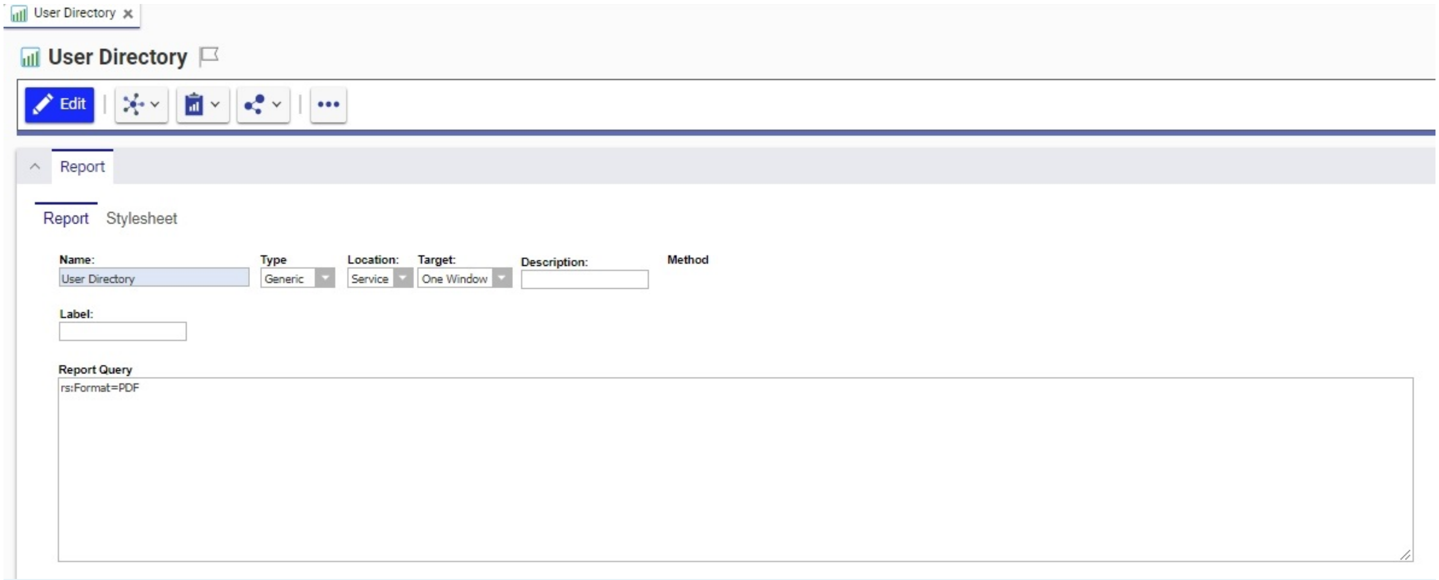
```
SELECT * FROM [PROJECT] WHERE id=@ID
```

To pass the ID for the context Item (the selected Item) on the URL to the ReportServer, the Innovator Report Item report_query Property would look like this:

```
np:id=<xsl:value-of select="@id"/>
```

This is actually an XSLT stylesheet fragment and is the directive for Innovator to add the string &id=ACBDEF0123456789ACBDEF0123456789 to the end of the ReportServer URL (but the actual ID value is used). In this case, the Innovator Report is of the `Generic` type, so no ID is required, but perhaps we want the Reporting Services Report to be returned in the PDF or Excel format. We can control the ReportServer by adding the following parameter as the **report_query** value for the **User Directory** Report:

```
rs:Format=PDF
```



Important

If you need to include more than one parameter for the **report_query** value, you need to use the **&** Entity rather than the actual **&** symbol to delimit the parameters. Recall that the **report_query** value is eventually part of the **query_string** for the URL to the ReportServer but is actually an XSLT stylesheet fragment and so the special symbols like **<**, **>**, and **&** need to be protected in XML need to be entered as Entities **< &gt**; and **&** respectively.

For example, to pass the Named Parameter ID and the Format PDF in the same **report_query**, the value would look like this:

```
np:id=<xsl:value-of select=”@id”/>&amp;rs:Format=PDF
```