

## SSRS REPORTING IN ECHOVANTAGE

The following guide gives a step by step process to create an SSRS report that will work in the echoVantage menu.

### CREATING MENU DRIVEN REPORT

1. The first step before opening SSRS Report Builder is to identify the data that you need to report and create a stored procedure in SQL.
  - a. We'll use the `sp_rpt_template` to create the stored procedure.
  - b. The first table in the stored procedure will be the main table of the form that you're creating the report for.
  - c. From SQL Management Studio > Locate the main table > Right click on table > Select Script table as > Select to > Clipboard.
  - d. Paste (ctrl-v) this within your stored procedure template between the BEGIN and FROM keywords.
  - e. Delete the USE [DatabaseName] and the GO at the top of what was pasted.
  - f. Delete the GO after the FROM
  - g. Replace the existing FROM [dbo].(Table Name) with your table name and create a table alias of t.
    - i. Qualify each of your columns within the Select statement. Find and Replace ,[ with ,t.[
    - ii. Add t. to the [id] column then give it an alias of Group1 so it looks like this: t.[id] as Group1
  - h. Double click on `sp_rpt_template` and select Ctrl-H to find and replace the name > Change the name from `sp_rpt_template` to `sp_rpt_YourTableName` > Save it to your R:\SSRS\Stored Procedures directory.
  - i. Take any checkboxes (using `dbo.f_cbvc()`) into account in your select statement.
  - j. Take any User/Table System Validations into account within your select and joins.
  - k. Execute the stored procedure to create it within the database.
2. Open up SSRS Reports Builder
  - a. <https://aztools.echoehr.com/RDWeb/Pages/en-US/default.aspx>
3. Select Connect from bottom left.
  - i. SAAS/Azure platform: <http://saaswssrs1/reportserver>
4. Open an existing echoVantage Template.
  - a. The Client template (SSRS\_Template\_Portrait\_Client) includes a List item and Rectangle which allows you to place objects on the report.
  - b. Keep the DatabaseServerName and DatabaseName parameters as they are used to communicate with echoVantage.
5. Save the Report as another name specific to the report in the Echo Vantage > Agency folder.

\*NOTE – this is the name that front end users will see within the Report Menu – please use normalized language. If this report is for a specific form then use the Form's Caption as the name.

6. Create/Modify a Dataset – this is the SQL that executes when you run the report.
  - a. SSRS\_Template\_Portrait\_Client
    - i. Leave the Client List, Client Information and Branding Image datasets alone.
    - ii. Select DataSet1 and Right click on it then select Dataset Properties to associate the stored procedure that was created previously.
      1. Verify that dsForProduction is the Data Source.
      2. Choose Stored Procedure as Query Type
      3. Select the Stored Procedure that was created for the report.
      4. Select Refresh Fields after selecting the stored procedure.
      5. Select OK to exit the dataset properties.
  - b. dev\_template\_landscape (skip if using the SSRS\_Template\_Portrait\_Client)
    - i. Leave the brandingQuery, defaultOrganizaiton and PrintDate datasets alone.
    - ii. Select ClientData and modify to be specific to your report.
      1. Right click and select Dataset Properties.
      2. Place your SQL in the box or associate your stored procedure to the dataset.
7. From the bottom left select Details under Row Groups
  - a. Use arrow on the right of (Details) to select Group Properties.
  - b. On the General tab > Select Add under Group expressions.
  - c. Select Group1 from the list.
    - i. By default, this will ensure that a page break is at the main Group level from the stored procedure.
  - d. If the report should be ordered in a specific manner, select Sorting from the Group Properties window, and identify the fields to sort the report by.
8. Start Adding fields to your report.
  - a. Select Insert tab from the top of the Toolbar at the top of SSRS.
  - b. Select Text Box and drag and drop on the Report within the tablex.
  - c. The suggested font is Segoe UI as that is the default font when copying and pasting a data object.
  - d. The first object should start at the left most position within the report.
  - e. When adding fields please ensure that there are 5 points vertical spacing between rows.
9. If your Form has Containers with One to Many relationships, then you will need to Insert a Table into the main List of the Report.
  - a. Select Insert > Table.
  - b. Select the items that you would like to show within the table from your Form Dataset.
  - c. Place the table in the correct position on the report.
  - d. Select the table
    - i. Select Details1 under Row Groups
    - ii. Use arrow on the right of (Details1) to select Group Properties.
    - iii. On the General tab > Select Add under Group expressions.
    - iv. Select your primary ID of the detail table from the list.
10. A Signature sub-report can be inserted to show the signatures on the report.
  - a. Select your main List item > Right Click in the left-hand side margin.
  - b. Select Insert Row > Inside Group - Below.

- c. Select Insert > Sub-report > Place inside the new row.
- d. Right Click on <Subreport> Select Subreport properties.
- e. Browse to find your Signatures subreport.
- f. Select the Parameters tab. Add the 3 parameters and associate to the main report parameters.
  - i. Select Add > Select the Name of the parameter.
  - ii. Select fx (function) > Parameters > Match the two parameters based on name. Double click on the Parameter Value: DatabaseServerName so it shows like this in the Set expression for: Value box: =Parameters!DatabaseServerName.Value
    - 1. Do this for DatabaseName, too.
  - iii. The TargetID parameter will need to be matched with Group1 from the main reports Form dataset.

11. Create a button report from an existing Menu report

- a. Open SQL Management Studio
- b. Open the existing Menu stored procedure
  - i. Rename by appending Button to the end of the name.
    - 1. Double click on current name > select ctrl-h for find and replace.
  - ii. Save as the new name.
  - iii. Remove the stored procedure parameters (ClientCode, BeginDate, EndDate).
  - iv. Add @id char(36) as a parameter.
  - v. Remove the parameters from the WHERE statement
  - vi. Add where @id = t.id (where t.id is the primary key of the main table in the report).
  - vii. Add the following field to your select statement for use in the hidden Report parameters to display within the Report Header and Footer. Change the time zone to be specific to your time zone.

```

,c.FullName as ClientName
,c.ClientCode
,CONVERT(datetime, SWITCHOFFSET(getdate(), DATEPART(TZOFFSET,
getdate() AT TIME_ZONE 'Eastern Standard Time')) as ReportDateTime

```

- viii. Execute stored procedure.
- c. Open Microsoft Report Builder
  - i. Open the Menu report that you want to change into a button report.
  - ii. Select File > Save As
    - 1. Save in the Agency > Custom folder (without spaces in the name) and append Button on the end of the name.
    - 2. Remove the ClientList and ClientInformation Datasets.
    - 3. Change the main Dataset from your Menu stored procedure to your button stored procedure.
    - 4. Move the @id parameter to the third parameter position below DatabaseName.
    - 5. Modify the ClientFullName, ClientCode, ReportDateTime and any other parameters so that they pull from your main dataset instead of the ClientInformation dataset.
      - a. Right Click Parameter > Select Properties

- b. Check Allow Blank and Allow Null
  - c. Select Hidden as the parameter visibility.
  - d. Go to the Available values tab and verify None is selected.
  - e. Go to Default Values tab
    - i. Select Get values from a query > select main dataset.
    - ii. Select the column from the Dataset.
  - f. Do this for each of the parameters.
  - g. Delete @UserID, @BeginDate, @EndDate
6. Save report.
- d. Refer to the online documentation for adding a button report to a Form DesignEHR form. <http://webhelp.echoehr.com/form-desgneh/quick-reference-guide-adding-multiple-ssrs-report-links>