



X-Docx

REPORT GENERATION

SSM INFOTECH SOLUTIONS PVT. LTD.



Exercise 1: Report Generation: Create SP

Introduction:

In this exercise we will study about How to Create Stored Procedures (SP) to Generate the Report. Report Output depend upon Stored Procedures (SP) and Store procedure (SP) Create in Data Database. Stored Procedures (SP) create as per Requirement. In SP Pass Parameters and when Execute SP then in Parameters Pass Inputs and on Given Inputs Proper Output Generate as Per Requirement of Report.

Database:

Data Database

Procedure:

1. Create Stored Procedures(SP):

a. To Create Stored Procedures(SP) Following Steps:

- In Data Database -> Tables -> Programmability -> Stored Procedures-> New Stored Procedure
- As per Requirement Create SP and in SP Following Parameters are compulsory :
 - DatabaseName
 - Table name

Example:

1. Create Stored Procedures(SP):

a. Simple example Of Stored Procedures(SP) as following:

```
USE [BPCL_Data]
GO
/***** Object: StoredProcedure [dbo].[SP_ExpenditureStatus]    Script Date: 2/17/2016
9:36:27 AM *****/
SET ANSI_NULLS ON
GO
SET QUOTED_IDENTIFIER ON
GO
-- =====
-- Author:          <Author,,Name>
-- Create date:    <Create Date,,>
-- Description:    <Description,,>
-- =====
ALTER PROCEDURE [dbo].[SP_ExpenditureStatus]
    -- Add the parameters for the stored procedure here
```



```
@DatabaseName varchar(40),
@TableName Varchar(Max),
@Start_Date Varchar(50),
@End_Date Varchar(50)
AS
BEGIN
-- SET NOCOUNT ON added to prevent extra result sets from
-- interfering with SELECT statements.
SET NOCOUNT ON;
Declare @query as Varchar(Max)

-- Insert statements for procedure here
Set @query='SELECT Plant_Name,Planned,Actual,Variation,Reason from '+@TableName+'
Where Date_Entered between'''+@Start_Date+'''+and'''+@End_Date+'''+and deleted=0'

exec(@query)
END
```



Exercise 2: Create Basic Report Format

Introduction:

In this exercise we will study about Report Format. Normally Report format given by user and Report Format create as per requirement.

Procedure:

1. **Create Basic Report Format:**
 - a. Basic Report Format Create as per requirement.

Example:

2. **Create Basic Report Format:**
 - a. Basic Report Format Example that attach Following:
 - [Click Here Basic Format of Report](#)



Exercise 3: Command: SPCustom

Introduction:

In this exercise we will study Basic Command Use in Report format for retrieve data from Database through Stored Procedure (SP).

Procedure:

1. Command:

- a. Basic Command for retrieve data from Database through Stored Procedure (SP) that Command List File attach Following:

- [Click Here Command List](#)

Example:

1. Command:

- a. Example of Basic Command for retrieve data from Database through Stored Procedure (SP) that Command as Following:

```
<CMD = SPCustom | SPName = SP_ExpenditureStatus | Parameters =Start_Date,End_Date|Header = 0 |  
Priority = 0 | Pagesize = 0 | Mode =INS|DatabaseName = BPCL_Data | OrderBy = | TableName  
=Expenditute_Status>
```

➤ CMD arguments Description as Following:

○ Here ,

- **CMD=SPCustom:** It is use when We use SP from Retrieve data from database
- **SPName:** ExpenditureStatus is Stored Procedure Name (SP Name).
- **Parameters:** Parameters that are pass in Stored Procedure (SP).
- **Header:** Either header of column should be print or not. If 0 then header of column should be not print and if 1 then header of column should be print.
- **Priority:** Particular command should be execute first for whole excel sheet, then other next .If 0 then Particular



command should be execute as by default sequence. If 1 then command should be execute as per seted priority.

- **Pagesize:** To give Page size to excel sheet, For Example if we give Pagesize=100 then data from 101th data row will be printed on new sheet.
- **Mode:** Use to copy paste or copy insert. For copy paste write Mode=Copy. It should be Copy data row in excel sheet and For Copy insert write Mode=INS. It should be Insert data in new row.
- **DataBaseName:** Name of Database.
- **OrderBy:** Name of field according to which the result should be in ordered/sequence.
- **TableName:** Name of Table from which you want Output.



Exercise 4: Edit Page for Report Generation

Introduction:

In this exercise we will study about how to configure custom report in database and create edit page for Report.

Database:

Configuration Database

Database Objects:

Tables:

1. tbl_int_edit
2. tbl_int_editcolumns
3. tbl_int_ReportGenerate
4. tbl_int_tree

Procedure:

1. Create Edit Page for Report Generation:

- a. For Creating Edit Page we have to do entry in followings Tables:

Column	Description
ID	Unique Identity
ParentID	It should be ID of function
Name	Name of Edit Page. (Normally Same as function Name)
TransID	NULL otherwise same as Name
Description	This field is used to display name of Edit Page at User side. (Normally it is same as Name)
TableName	If Report Configure in Database the TableName should be <session.configdatabasename>.dbo.tbl_int_ReportGenerate
PKColumnName	Name of Column which have Primary key constraint
IsPkIdentity	Normally it is 1.
ApprovalColumn	NULL (Used when we want to make approval functionality)
ReadOnlyLogic	Write Query which return 0 or 1. Otherwise it should be NULL



AfterSaveURL	URL which we want to redirect after records are save
AfterEditURL	Redirect URL after Editing records
AfterContinueURL	Redirect URL after save and Continue button is click
AfterCancelURL	Redirect URL after Cancel Button is click
SaveAfterLogic	We can put query here after Edit Page Records are saved e.g. if we want to set flag after save the Edit page then we can put our logic here. Otherwise it should be NULL
SaveBeforeLogic	We can put query here Before Edit Page Records are saved e.g. if we want to set flag Before saving records of the Edit page then we can put our logic here. Otherwise it should be NULL
IsSave	If 0 then records cannot be save and if 1 then Records can be save
IsBtnSaveTopVisble	If 1 then Save Button of Top is visible otherwise it is Disable
IsBtnCancelTopVisble	If 1 then Cancel Button of Top is visible otherwise it is Disable
IsBtnSaveAndContTopVisble	If 1 then SaveAndContinue Button of Top is visible otherwise it is Disable
IsBtnSaveBottomVisble	If 1 then Save Button of Bottom is visible otherwise it is Disable
IsBtnCancelBottomVisble	If 1 then Cancel Button of Bottom is visible otherwise it is Disable
PageType	If Report Configure in Database then PageType should be Report
XMLControlValueColumn	If Report Configure in Database then XMLControlValueColumn should be XMLParameter
BtnCaption	If Report Configure in Database then BtnCaption should be Generate
Columns	If Report Configure in Database then Columns should be Generate

Table 4.1: Fields of tbl_int_edit



- b. After Make entry in above Table we have to make entry in tbl_int_editcolumns table having ParentID is same as ID of Edit Table:

Column	Description
ID	Unique Identity
ParentID	ID of Edit Page
TableName	Name of Table where you want to save records
Name	Name of column in table where you want to save data
ColumnType	Type of column like pk, string, date, numeric, etc.
ColumnLabel	Name of column which you want to display at user side
ColumnDescription	Same as above field
ColumnToolTip	Text which you want to show as ToolTip
ControlType	Name of control which you want to use like textbox, label, dropdown etc.
CmbLnkTableVisible	These fields are used For Link table Otherwise it should be NULL
cmbLnkTableTableName	
cmbLnktableTextFieldName	
CmbLnkTableValueFieldName	
cmbLnkTableWhereExpression	
cmbLnkTableOrderbyExpression	
cmbLnkTableType	
CmbLnkTableCallBackControl	
SingleColumn	It canbe 1 or 0 as per user requirement
ColumnStyle	We can set width and height as per requirement e.g. width:100%;
ColumnCellStyle	We can set columncellStyle otherwise it should be NULL
outputformat	Mostly used for Datetime format otherwise it should be NULL
Readonly	If 1 then readonly otherwise 0
Visible	If 1 then control is visible otherwise 0
saveornot	If 1 then value save in particular column otherwise 0
refTableName	These fields are used when we want to save particular fields with other table fields. Otherwise it should be NULL
refTableColumn	
refTableRelationColumn	
txtDefaultValue	Default value of control
txtRegExpression	Regular Expression for validation



TxtRegularExpressionMsg	Message for that particular regular expression
TxtRequiredField	If 1 then required field validation is work otherwise 0
TxtRequiredFieldMsg	Message which you want to display for required Field
cmbDefaultValue	Default value of combobox
CmbDefaultValueView	Default value display for combobox
cmbTextEditable	If 1 then cmbtext is editable otherwise 0
cmbTableName	Name of Table or View form data are coming
cmbTextFieldName	Fieldname which you want to display for combobox
cmbValueFieldName	Fieldname where you want save data
cmbWhereExpression	Expression for filtering data from cmbTableName
cmbOrderByExpression	OrderBy fieldname from cmbTableName
cmbText2FieldName	Fieldname which you want to concatenate with cmbTextFieldName for display
cmbText3FieldName	Same as above
cmbType	Type of cmb like table,list,query,distinct etc.
cmbCallBackControl	Fieldname which are callback after change this particular control. Multiple callback control field names are used with comma (",") separated
cmbInitialLoad	If 1 then initial load is work otherwise 0
Updatecodeblock	Here we can write query for updating the particular control value according to other control value
Logiccolumn	If 1 then logic before save is work otherwise 0
AutoPostBack	If 1 then autopostback otherwise 0
AutoIncrement	If 1 then auto increment will work
AutoIncrementBy	We can set autoincrement by any number
dtMinDate	We can set min date
Audit	By default it should be 'n'
AutoDefaultValue	We can set auto default value
TxtCompareValidator	If 1 then compare validator work otherwise 0
TxtCompareValidatorMsg	Message that we want to print
CompareControlName	Name of field in table where we want to compare particular field



ResourceNumer	It should be NULL
numericDecimalStep	If 1 then followings three fields work
numericDecimalDigit	We can set decimal digit here
numericMinValue	We can set min value of decimal digit
numericMaxValue	We can set max value of decimal digit
TxtMaxLength	We can set maximum length of Text
SaveAsXml	If 1 then it will save as XML
IsAdd	If True then AddUrl field work
AddUrl	We can add link near particular control
mColumnStyle	We can set width of the column

Table 4.2: Fields of tbl_int_EditColumns

- c. In Edit page for Report Generation Following Fields are compulsory and in Stored Procedure Passes Parameters are also compulsory in Edit page For Report Configuration:

Field Name	Description
StepID	ID If Step
StepName	Name Of Step
TemplateFileName	Template or Report Format File Path with Report Format file name
DestinationFileName	Report Destination File Name with Destination File Storage Path
BackUpStoragePath	Give Generated Report Backup Storage Path
StepTypeName	Name Of StepType
ReportType	Name Of Report Type like XLSX,PDF,HTM,etc.

Table 4.3: Require Fields of Edit page for Report Generation

**Example:****1. Create Expenditure Status Report Edit Page for Report Generation**

- a. In this example we will create one Edit page for Report Generation called as Expenditure Status Report First we have to make entry on tbl_int_Edit as following:

Column	Description
ID	53bb5633-cbed-457e-a1cb-98a67fc7929b
ParentID	NULL
Name	Expenditure Status Report
TransID	NULL
Description	Expenditure Status Report
TableName	<session.configdatabasename>.dbo.tbl_int_ReportGenerate
PKColumnName	ID
IsPkIdentity	1
ApprovalColumn	NULL
ReadOnlyLogic	NULL
AfterSaveURL	ShowReport.aspx?id=<session.pkchildid>&blnfilename=True
AfterEditURL	NULL
AfterContinueURL	NULL
AfterCancelURL	edit.aspx?Name=Expenditure Status Report
SaveAfterLogic	NULL
SaveBeforeLogic	NULL
IsSave	1
IsBtnSaveTopVisble	1
IsBtnCancelTopVisble	1
IsBtnSaveAndContTo pVisble	1
IsBtnSaveBottomVisb le	1
IsBtnCancelBottomVi sble	1
PageType	Report



XMLControlValueColumn	XMLParameter
BtnCaption	Generate
Columns	Generate

Table 4.4: Tbl_int_Edit Entry for Report Configure

b. Now ,We have to make entry in tbl_int_editcolumns for Report Generation compulsory Fields that Entries are Following:

i. Following are necessary Entry of **stepid** :

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	10
TableName	NULL
Name	stepid
ColumnType	string
ColumnLabel	stepid
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Textbox
SingleColumn	1
outputformat	NULL
Readonly	0
Visible	0
saveornot	0
txtDefaultValue	6
txtRegularExpression	NULL
TxtRegularExpressionMsg	NULL
TxtRequiredField	0
TxtRequiredFieldMsg	NULL
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	6
SaveAsXml	1

Table 4.5: tbl_int_editcolumns Entry of stepid



ii. Following are necessary Entry of **StepName**:

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	110
TableName	NULL
Name	StepName
ColumnType	String
ColumnLabel	StepName
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Textbox
SingleColumn	1
outputformat	NULL
Readonly	0
Visible	0
saveornot	0
txtDefaultValue	Expenditure Status Report Format<runtime.now(yyyyMMdHHmm)>
txtRegularExpression	NULL
TxtRegularExpressionMsg	NULL
TxtRequiredField	0
TxtRequiredFieldMsg	NULL
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	Expenditure Status Report Format<runtime.now(yyyyMMdHHmm)>
SaveAsXml	1

Table 4.6: tbl_int_editcolumns Entry of StepName

iii. Following are necessary Entry of **TemplateFileName**:

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	130
TableName	NULL
Name	TemplateFileName
ColumnType	String
ColumnLabel	Template File
ColumnDescription	NULL
ColumnToolTip	NULL



ControlType	Textbox
SingleColumn	1
outputformat	NULL
Readonly	0
Visible	0
saveornot	1
txtDefaultValue	<runtime.servermappath>ReportFormat\Expenditure Status Report.xlsx (Template or Report Format File Path)
txtRegExpression	.*
TxtRegExpressionM sg	NULL
TxtRequiredField	0
TxtRequiredFieldMs g	NULL
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	<runtime.servermappath>ReportFormat\Expenditure Status Report.xlsx (Template or Report Format File Path)
SaveAsXml	1

Table 4.7: tbl_int_editcolumns Entry of TemplateFileName

iv. Following are necessary Entry of **DestinationFileName**:

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	140
TableName	NULL
Name	DestinationFileName
ColumnType	String
ColumnLabel	DestinationFilePath
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Textbox
SingleColumn	1
outputformat	NULL
Readonly	0
Visible	0
saveornot	1



txtDefaultValue	<runtime.servermappath>Cache\Expenditure Status Report<runtime.now(yyyyMMddHHmm)> (Generated Report Storage path)
txtRegularExpression	.*
TxtRegularExpressionMsg	NULL
TxtRequiredField	0
TxtRequiredFieldMsg	NULL
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	<runtime.servermappath>Cache\Expenditure Status Report<runtime.now(yyyyMMddHHmm)> (Generated Report Storage path)
SaveAsXml	1

Table 4.8: tbl_int_editcolumns Entry of DestinationFileName

v. Following are necessary Entry of **BackUpStoragePath**:

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	150
TableName	NULL
Name	BackUpStoragePath
ColumnType	String
ColumnLabel	BackUpStoragePath
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Textbox
SingleColumn	1
outputformat	NULL
Readonly	0
Visible	0
saveornot	1
txtDefaultValue	<runtime.servermappath>bk\Expenditure Status Report<runtime.now(yyyyMMddHHmm)> (BackUp Storage path Of Generated Report)
txtRegularExpression	NULL
TxtRegularExpressionMsg	NULL
TxtRequiredField	0
TxtRequiredFieldMsg	NULL



Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	<runtime.servermappath>bk\Expenditure Status Report<runtime.now(yyyyMMddHHmm)> (BackUp Storage path Of Generated Report)
SaveAsXml	1

Table 4.9: tbl_int_editcolumns Entry of BackUpStoragePath

vi. Following are necessary Entry of **StepTypeName**:

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	170
TableName	NULL
Name	StepTypeName
ColumnType	String
ColumnLabel	StepTypeName
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Label
SingleColumn	1
outputformat	NULL
Readonly	0
Visible	0
saveornot	0
txtDefaultValue	generate report
txtRegularExpression	NULL
TxtRegularExpressionMsg	NULL
TxtRequiredField	0
TxtRequiredFieldMsg	NULL
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	generate report
SaveAsXml	1

Table 4.10: tbl_int_editcolumns Entry of StepTypeName



vii. Following are necessary of **ReportType**:

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	180
TableName	NULL
Name	ReportType
ColumnType	String
ColumnLabel	Report Type
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Dropdown
SingleColumn	1
outputformat	NULL
Readonly	"<session.isadmin>"="false"
Visible	1
saveornot	1
txtDefaultValue	HTM
txtRegularExpression	NULL
TxtRegularExpressionMsg	NULL
TxtRequiredField	1
TxtRequiredFieldMsg	Please Select Report Type
cmbDafaultValue	HTM
CmbDefaultValueView	HTM
cmbTextEditable	0
cmbTableName	NULL
cmbTextFieldName	XLSX,PDF,HTM
cmbValueFieldName	XLSX,PDF,HTM
cmbType	List
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	HTM
SaveAsXml	1

Table 4.11: tbl_int_editcolumns Entry of ReportType



- viii. Following are necessary of **Start_Date** that Pass as a parameter in Stored Procedure(SP):

Column	Description
ParentID	53bb5633-cbed-457e-a1cb-98a67fc7929b (ID of Edit Page)
Srno	101
TableName	NULL
Name	Start_Date
ColumnType	Date
ColumnLabel	StartDate
ColumnDescription	NULL
ColumnToolTip	NULL
ControlType	Dtpicker
SingleColumn	1
ColumnStyle	width:200px;
outputformat	dd-MMM-yyyy
Readonly	0
Visible	1
saveornot	0
txtDefaultValue	<runtime.now>
txtRegularExpression	NULL
TxtRegularExpressionMsg	NULL
TxtRequiredField	0
TxtRequiredFieldMsg	NULL
Logiccolumn	0
AutoPostBack	0
Audit	n
AutoDefaultValue	<runtime.now>
SaveAsXml	1

Table 4.12: tbl_int_editcolumns Entry of Start_Date

- ix. Following are necessary of **EndDate** that Pass as a parameter in Stored Procedure (SP): same as above entry Only Name change that is **EndDate**.

- c. Now , Created Edit Page for Report Generation that Display in Web Application So, Do Following entry in tbl_int_tree:

Column	Description
ParentID	2580 (ID Of Parent Node)
Name	Expenditure Status Report
NodeType	Static
Srno	1
NodeURL	REDIRECT#edit.aspx?name=Expenditure Status Report&pagemode=insert
ImageId	15[Image of icon image]
SelectedImageID	15
ExpandedImageID	15
IsLoad	1

Table 4.13: tbl_int_tree Entry of EditPage for Report Generation Display in Web Application

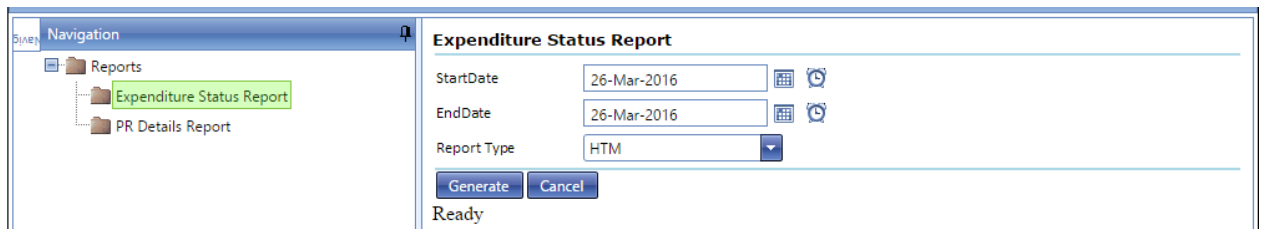


Fig. 4.1: Edit Page of Expenditure Status Report

- Read More Detail about Report Generation attachment as Following:
 - [Click Here Report Configuration and Development](#)



Exercise 5: Generate Report with Scheduler Application

Introduction:

In above Exercise we have done study about How to Generate Report with Scheduler Application. When Generate Report with Scheduler Application then in Background Scheduler Application Running.

Database:

Configuration Database

Database Objects:

Tables:

1. tbl_int_ReportGenerate

Procedure:

1. Generate Report With Scheduler Application:

- a. Report Format Put on Following Path:

C:\inetpub\wwwroot\PublishFolder\ ReportFormat

- b. Scheduler Application Running in Background and Report Generate From Web Application.
- c. **Create Schedule Task:** We can also Schedule Task Report from Web Application.

➤ **Read More Detail about Schedule Task attachment as Following:**

- [Click Here Schedule Task](#)

Example:

1. Generate Report With Scheduler Application:

- a. Report Format Put on Following Path:

C:\inetpub\wwwroot\PublishFolder\ ReportFormat

- b. Scheduler Application Running in Background and Report Generate From Web Application.

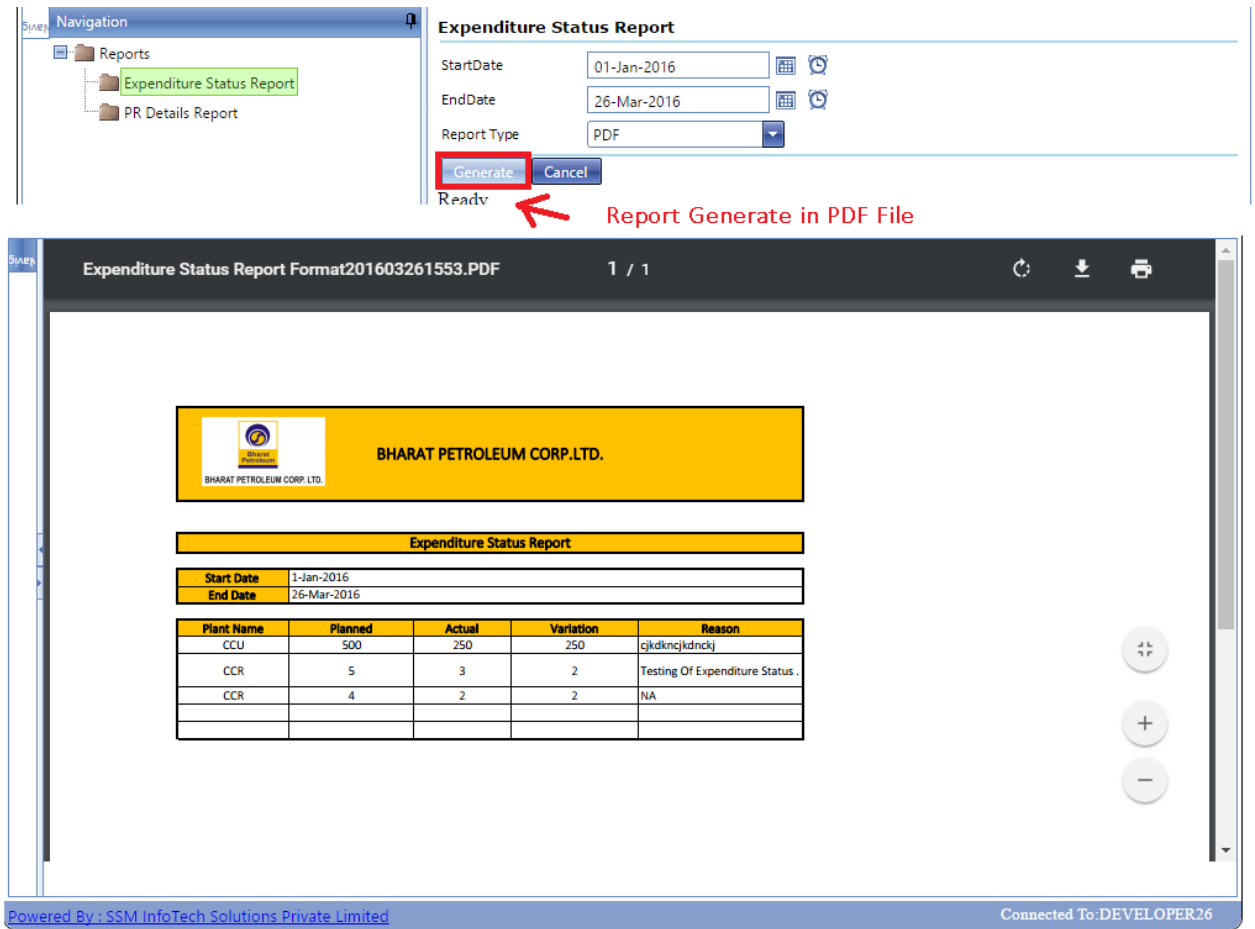


Fig. 5.1: Example of Report Generate in PDF with Scheduler Application