

## How to Use the PROJECT in a box 2.5 Portfolio Reporting Extensions

The 2.5.0 pre release version provides extended reporting capability for customer's additional data sets allowing control as to how they are added at a project and portfolio level. Content can be added for reporting in this way on existing projects but it is setting it up via Method templates that we are going to look at here.

Two basic modes are supported by the mechanism as follows:

**Combine method** – here the same data structure from each project is combined together with instructions for the reporting about whether cells C5 from each project are to be added, averaged, multiplied etc to give a single output result in the same format.

**Append method** – here a list of items can be combined and ordered i.e. top three risks from each project ordered by risk rating when using four projects will give twelve risks in a table in risk rating order.

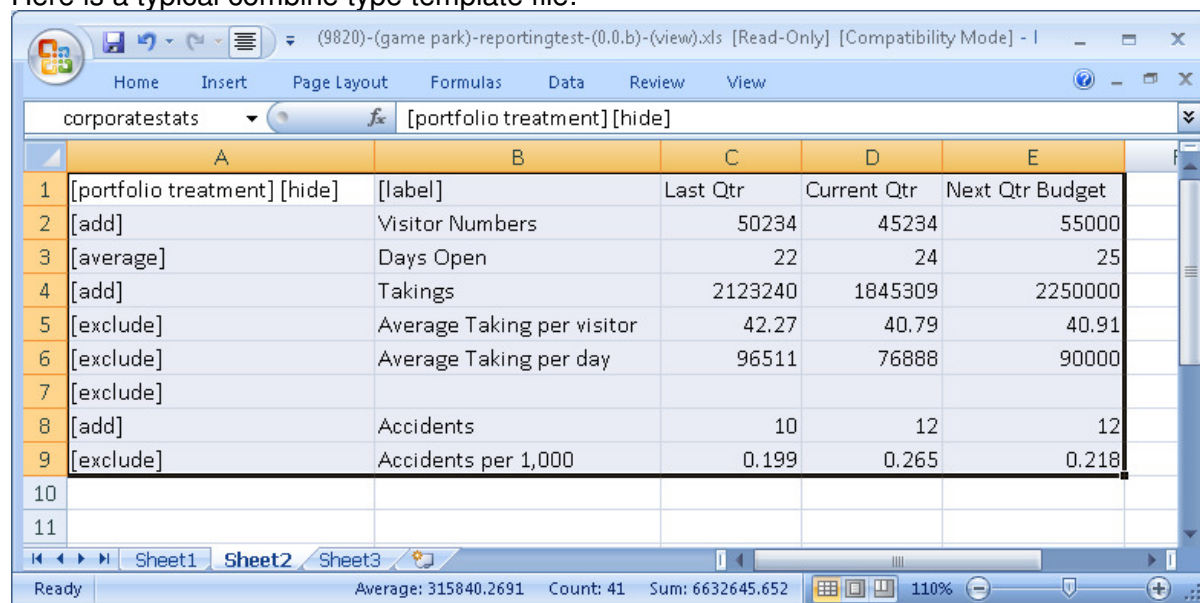
The same pattern is used for both modes as follows:

1. Add the required additional data blocks into the source spreadsheets in the method template (including the codes which the reporting engine uses to treat the data and using a named range)
2. Tell the Method Template that a new standard reporting source has been provided.
3. Create projects from the method template and add data in the normal way.
4. When setting up the reporting sources in the Project Summary Info form map the source file and named range in the spreadsheets tab.
5. Select “include user specified spreadsheet tables” option on reports to have the content included

Unpacking this with an example, firstly the Combine mode

### Step 1 – create the template file

Here is a typical combine type template file:



	A	B	C	D	E
1	[portfolio treatment] [hide]	[label]	Last Qtr	Current Qtr	Next Qtr Budget
2	[add]	Visitor Numbers	50234	45234	55000
3	[average]	Days Open	22	24	25
4	[add]	Takings	2123240	1845309	2250000
5	[exclude]	Average Taking per visitor	42.27	40.79	40.91
6	[exclude]	Average Taking per day	96511	76888	90000
7	[exclude]				
8	[add]	Accidents	10	12	12
9	[exclude]	Accidents per 1,000	0.199	0.265	0.218
10					
11					

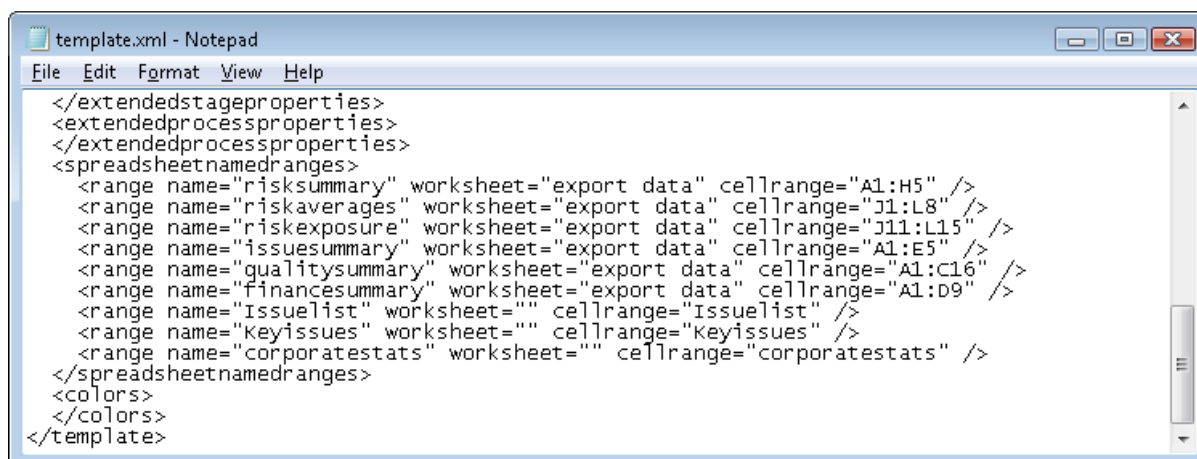
The entire area required to complete the reporting requirement is defined in a named range (see cell ref area top left). The following rules apply:

- All PIAB codes are in square brackets and will be removed on display
- The codes are case sensitive and must be reproduced exactly
- The [hide] code in the first cell of a column will remove the entire column from display in the output
- The [label] code in the first cell of a column will prevent the portfolio treatment being applied to the contents of that column.
- The first row of the data set will be displayed in bold as titles.
- When presented in a project report the data will be displayed as collected with no portfolio treatment applied.
- When the projects are included in a portfolio report the operators in the [portfolio treatment] column are applied to data in each row. The following ones can be used:
  - [add] adds the data from the each project together and places a total in the cell.
  - [average] adds the data from each cell together, divides by the number of cells totalled and places the result in the cell. (beware of the risks of averaging an average).
  - [multiply] multiplies the data from each cell together and places the result in the cell.
  - [min] collects the data from the cell in each project and returns the smallest value
  - [max] collects the data from the cell in each project and returns the highest value
  - [exclude] this tells the portfolio to not show data from the underlying projects. Where an average has been used at a project level the exclude returns a blank cell in the portfolio

## Step 2 – define the reporting source in the method template

Make sure Method manager is closed. Go to the Template folder and open the template.xml for the method required.

Find the spreadsheet named ranges elements and add a new range name for your data source. We recommend a copy/paste edit approach to ensure the structure is correct. We also recommend naming the range the same as the named range used in the spreadsheet. Save your changes. If you reopen Method Manager the range should now show in template properties for your project.



```
</extendedstageproperties>
<extendedprocessproperties>
</extendedprocessproperties>
<spreadsheetnamedranges>
  <range name="risksummary" worksheet="export data" cellrange="A1:H5" />
  <range name="riskaverages" worksheet="export data" cellrange="J1:L8" />
  <range name="riskexposure" worksheet="export data" cellrange="J11:L15" />
  <range name="issuesummary" worksheet="export data" cellrange="A1:E5" />
  <range name="qualitysummary" worksheet="export data" cellrange="A1:C16" />
  <range name="financesummary" worksheet="export data" cellrange="A1:D9" />
  <range name="issuelist" worksheet="" cellrange="issuelist" />
  <range name="keyissues" worksheet="" cellrange="keyissues" />
  <range name="corporatstats" worksheet="" cellrange="corporatstats" />
</spreadsheetnamedranges>
<colors>
</colors>
</template>
```

## Step 3 – create project and add data

All the normal stuff here, check out and in the spreadsheet to add data, best not to make changes to the named range etc so often good to have this in a separate locked worksheet.

### Step 4 – Set up sources in Project Summary Info form

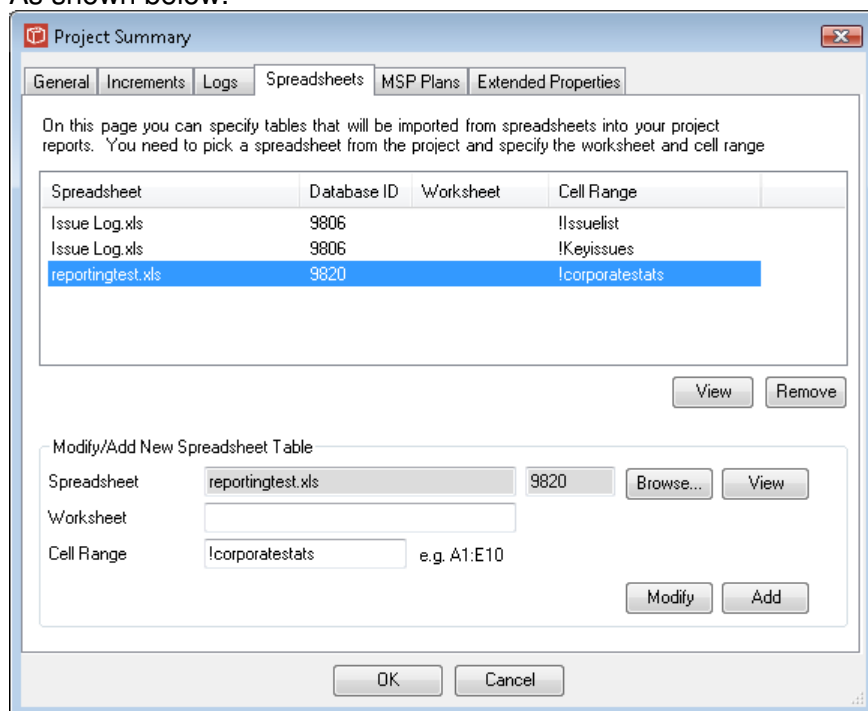
For each of your project in addition to setting up the usual PIAB logs and MSP plans as reporting sources the new standard ones should also be set up using the spreadsheets form.

This form has been available for some time to show project specific content in project reports, and this use still persists so PMs can add additional specific content in the usual way. To add one of your custom templated sources to be rolled up at a portfolio level you browse to identify the spreadsheet but instead of identifying the worksheet and cell range (or normal named range approach) do the following:

In the cell range area specify the range name as defined in the method template and proceed this with an exclamation mark i.e. for this example use “!corporatestats” . The engine picks up the ! and then goes to the method template to locate the data source and activate the portfolio treatment. It is for this reason that it is good to have the names consistent in summary:

	format	Example
<b>Spreadsheet named range</b>	name1	reportingdataset
<b>Range name in Method Template</b>	name1	reportingdataset
<b>Project Summary form</b>	!name1	!reportingdataset

As shown below:



### Step 5 – include spreadsheets in the reports

When the flag is set to include in the reports the following outputs are achieved:

At a project level, note heading style and hidden treatment row and codes but data is in ‘raw form.

Document: 'Reports' File: 'reportingtest.xls' Version: 0.0.b Date: 2009-05-20 22:39:42

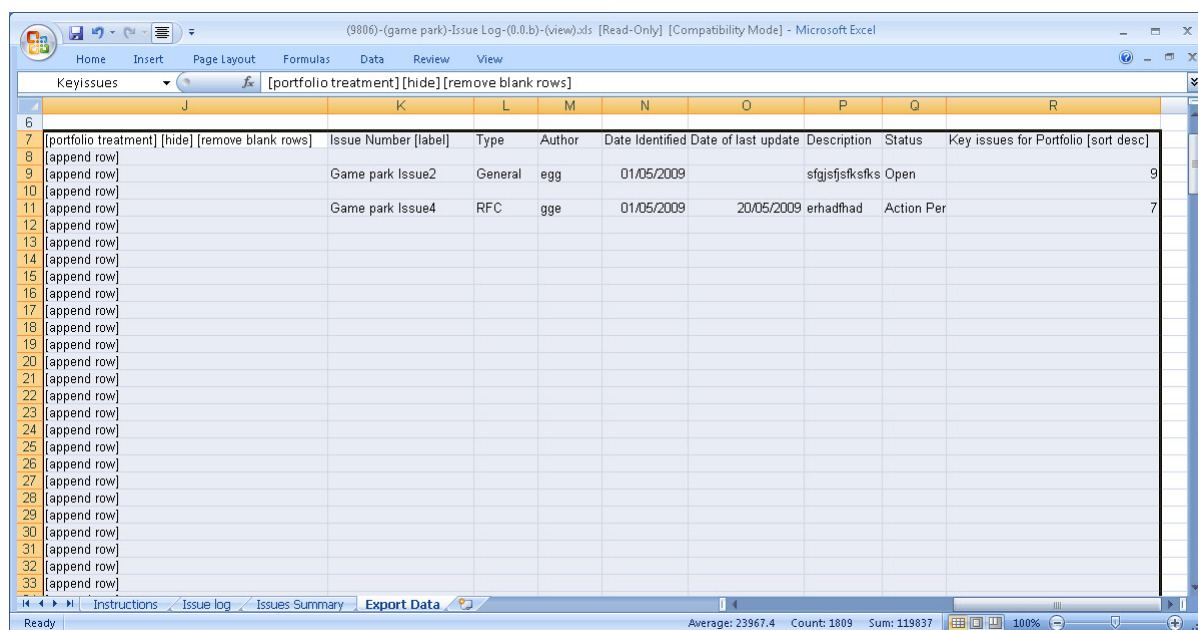
	Last Qtr	Current Qtr	Next Qtr Budget
Visitor Numbers	50234	45234	55000
Days Open	22	24	25
Takings	2123240	1845309	2250000
Average Taking per visitor	42.27	40.79	40.91
Average Taking per day	96511	76888	90000
Accidents	10	12	12
Accidents per 1,000	0.199	0.265	0.218

At a portfolio level, note the information about number of contributing data sets, treatment of data (formatting cannot be specified so beware of lack of commas in large numbers and many decimal places in averages and the handling of exclusion rows

Aggregated from 3 Project(s).

	Last Qtr	Current Qtr	Next Qtr Budget
Visitor Numbers	417613	419931	430000
Days Open	25.33333333333333	26.33333333333333	26.66666666666667
Takings	8793084	7779993	9050000
Average Taking per visitor			
Average Taking per day			
Accidents	42	47	40
Accidents per 1,000			

When looking at the Append mode the approach is very similar but the codes used in the definition spreadsheet are different as shown below:



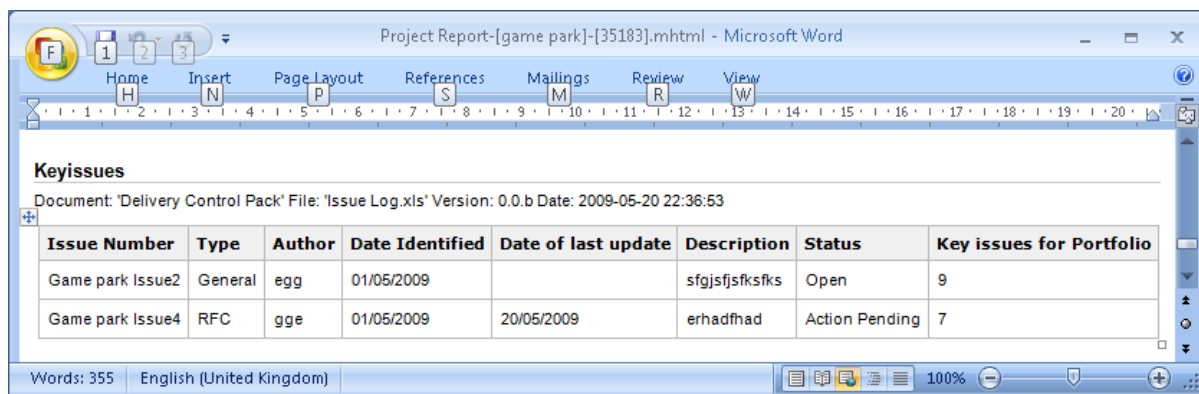
The entire area required to complete the reporting requirement is defined in a named range (in this case it is large, 200 rows long). The following rules apply:

- All PIAB codes are in square brackets and will be removed on display
- The codes are case sensitive and must be reproduced exactly
- The [hide] code in the first cell of a column will remove the entire column from display in the output
- The [label] code in the first cell of a column will prevent the portfolio treatment being applied to the contents of that column.
- The first row of the data set will be displayed in bold as titles.
- Inclusion of [remove blank rows] in the first cell will only display rows which contain content. Careful use of this enables a large area to be selected as source and then only the required bits being populated into the resulting report. As you will see below.
- When presented in a project report the data will be displayed as collected with the [sort type applied] and the blank rows removed.
- When the projects are included in a portfolio report all [append rows] will be included from constituent spreadsheets (blanks removed) and the required ordering applied. The following [sort] options can be used:
  - [sort desc] for numeric data, largest first to smallest, followed by any blanks
  - [sort asc] for numeric data, smallest first through to largest followed by any blanks
  - [sort desc string] alphabetic descending sort a-z followed by blanks
  - [sort asc string] alphabetic ascending sort z-a followed by blanks
  - [sort desc date] date order descending newest to oldest followed by blanks
  - [sort asc date] date order ascending oldest to newest followed by blanks

Same approach for naming and setting up content and the following outputs are achieved:

At a project level, note that the sort order has been applied at project level as well and the blank rows removed.

How to Use the PROJECT in a box 2.5 Portfolio Reporting Extensions



At a portfolio level, rows have been appended from three projects, merged and ordered.

