TEAM Software by WORKWAVE

Dashboards Module
TEMPLACMS

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COMMERCIAL STATEMENT

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INTRODUCTION

The Dashboards module of TemplaCMS builds on the power of the existing analytical reports to deliver instant access to critical data in user defined graphical dashboards.

To support the production of dashboards, modifications have been applied to TemplaCMS, and some of these available even when the dashboards module is not installed. The below areas are discussed in detail in the following sections of this document:

- Filters – Relative dates
- Aged debtors and creditors
- Analysis reporting – Formulas
- Analysis reporting - Conditions
- Saving and loading results
- Scheduling reports
- Dashboards

MODIFICATIONS

Filters (Core System)

Many areas of TemplaCMS support the use of complex filtering criteria, each of which can be saved and re-used. This allows common useful lists of data to be used time and again without the need to re-define the criteria each time. Where filters contain specific date fields, or user defined property date fields, a new checkbox has been added:

☐ All dates are relative?

When this checkbox is ticked, all dates held on the filter are automatically adjusted based on the current date each time the filter is used. For example, if you setup a filter with a date 4 weeks ahead of the current date, then re-accessing that filter on a later date will automatically adjust to maintain the date as 4 weeks ahead of the new current date. In this way, defining a filter to monitor employees whose visa is due to expire within the next 4 weeks can be achieved without the need to change the filter each time it is used.

Aged Debtors and Creditors Reports (Core System)

Both of these reports have now been enhanced to allow the extraction of the top N debtors or creditors. Whilst intended to allow a succinct picture of the debtors/creditors to be seen on a dashboard, this facility can still be used when running the reports directly.

Analysis Reporting – Formulas (Core System)

Within the analysis reports, 'formula' measures allow simple or complex mathematical operations to be performed using other measures, other formulas and literal values:
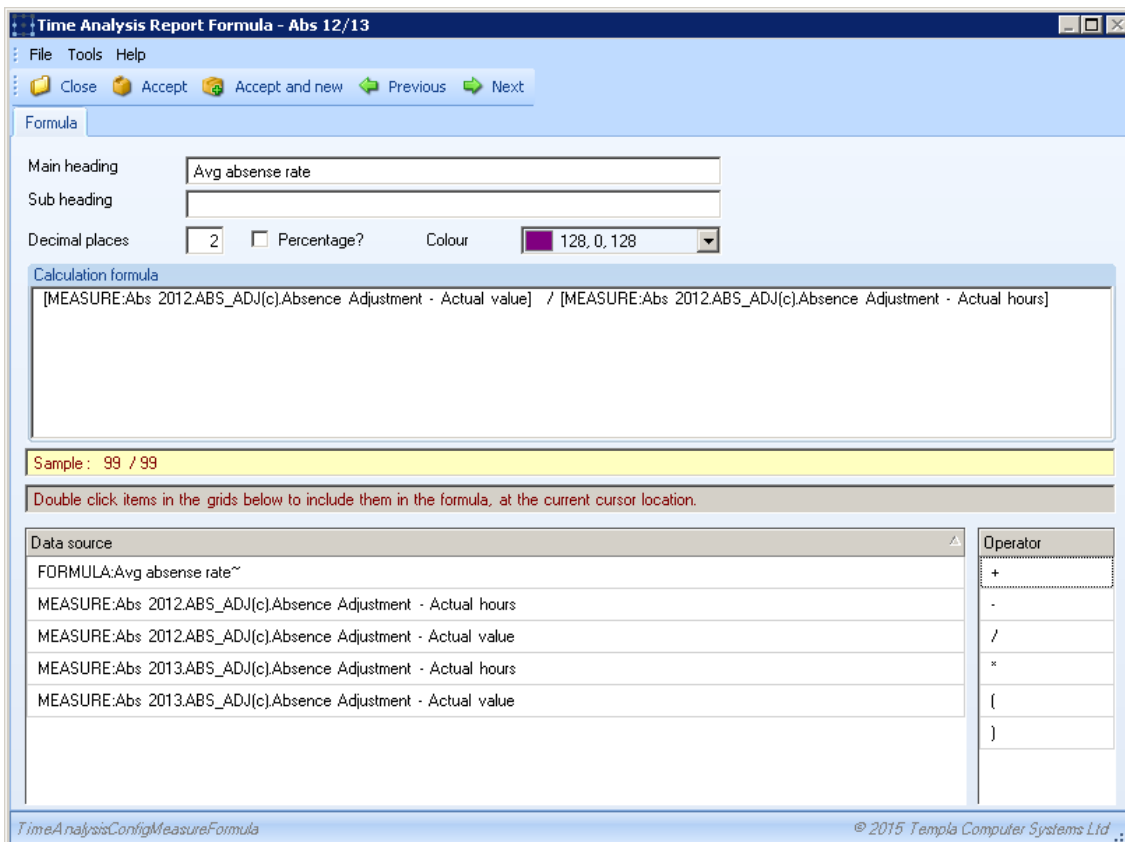
The result of a formula is shown as an additional column on the resulting report.

The ability to define formula measures has existed in 'site analysis' reporting for some time, and has now been extended to be allowed in all the analysis reports:

- Site analysis
- Time analysis
- Stores analysis
- QA analysis

Analysis Reporting – Conditions (Core System)

'Condition' measures are similar in construct to 'formula' measures, but are used to highlight data that meets a condition, rather than showing additional columns on the end report.

Each condition defines the item that should be highlighted, and the formula that will result in a 'true' or 'false' condition:
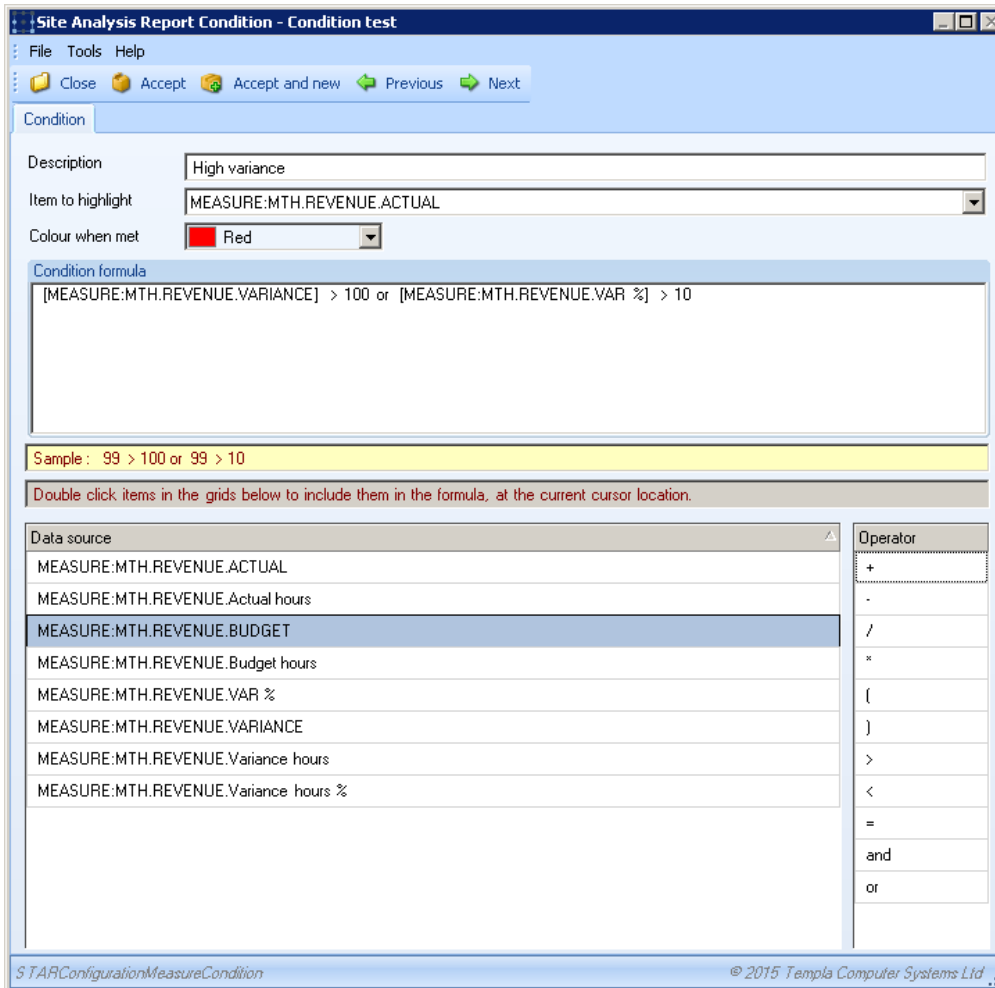
As you can see, the condition formula can be based on other measures, formulas, and literals, and can contain grouped and/or operations if required.

There is no limit to the number of conditions that can be defined, and multiple conditions can target the same 'item to highlight' in order to apply a graduated series of colours (e.g. red, orange, green) to it.

The ability to define condition measures applies to all the analysis reports:

- Site analysis
- Time analysis
- Stores analysis
- QA analysis

Saving and Loading Results (Dashboards)

This applies to the following reports:

- Site analysis
- Time analysis
- Stores analysis
- QA analysis
- Aged debtors
- Aged creditors
- Profit & Loss

Traditionally, when a report is run it requires the data to be extracted, summarised and formatted for display, whilst the user waits. This means that the user always sees 100% up to date information, but may well have to wait in order to get it.

Each of these reports has now been enhanced to allow for report results to be saved and re-loaded, by the introduction of 2 new toolbar buttons:

SAVING RESULTS

On selecting to 'save results', the user is presented with the following window:
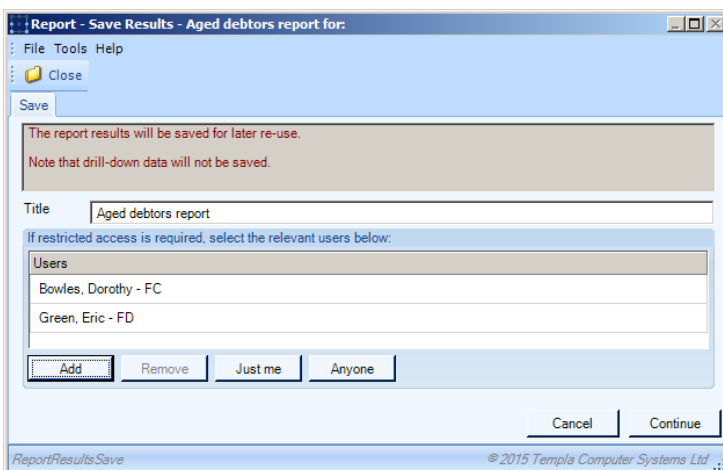
Here, the report can be given a title, and optionally restricted to only allow access to a nominated list of users.

On pressing 'continue' the report data is saved (as XML, to a 'reports' sub-folder of the 'document store').

LOADING RESULTS

On pressing the 'select saved results' button, the user is presented with a list of saved report results to which they are authorised:
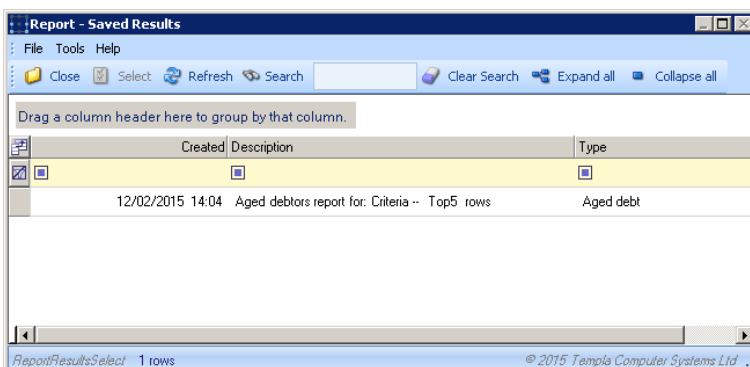
Selecting a report will display the data without the need to perform extractions or calculations. Note that a saved report will only save the first level of information, and as such use of the 'drill down' functions will always be into current live data. Depending on the age of the report, and the volatility of the underlying data, the drill down may not match up to the saved report. If the report is more than 24hours old, the user will be warned of this when the drill down function is used.

Managing Saved Reports (Dashboards)

Whilst each report provides access to load the pre-saved report, a standalone option has also been added to the navigator, under 'Reports → Reports Admin':

This option provides access to all saved reports to which the user is authorised:

| St	Created	Description	Type
	12/02/2015 14:05	YTD actual vs budget revenue	Site analysis
	12/02/2015 14:04	Aged creditors report for: Criteria -- Top5 rows	Aged credit
	12/02/2015 14:04	Aged debtors report for: Criteria -- Top5 rows	Aged debt
	12/02/2015 14:04	Regional revenue YTD	Site analysis
	12/02/2015 14:02	Low avg scores	QA analysis
	12/02/2015 14:02	Stores JHT	Stores analysis
	12/02/2015 14:02	Abs 12/13	Timesheet analysis
	12/02/2015 14:02	Under deliver	Stores analysis
	12/02/2015 14:02	Standard P&L for Month May 2014 to Apr 2015 : all	Profit and Loss
	12/02/2015 14:01	Condition test	Site analysis
	12/02/2015 14:01	Abs 2012/2013 - period : 2014/13	Timesheet analysis
	12/02/2015 14:01	Standard P&L for Month May 2014 to Apr 2015 : all	Profit and Loss

From here, the user can view and delete the reports.

Scheduling Reports (Dashboards)

Going hand in hand with the ability to save and load report results, is the new scheduling facility:

This allows any report that can save results to be run on a defined schedule:
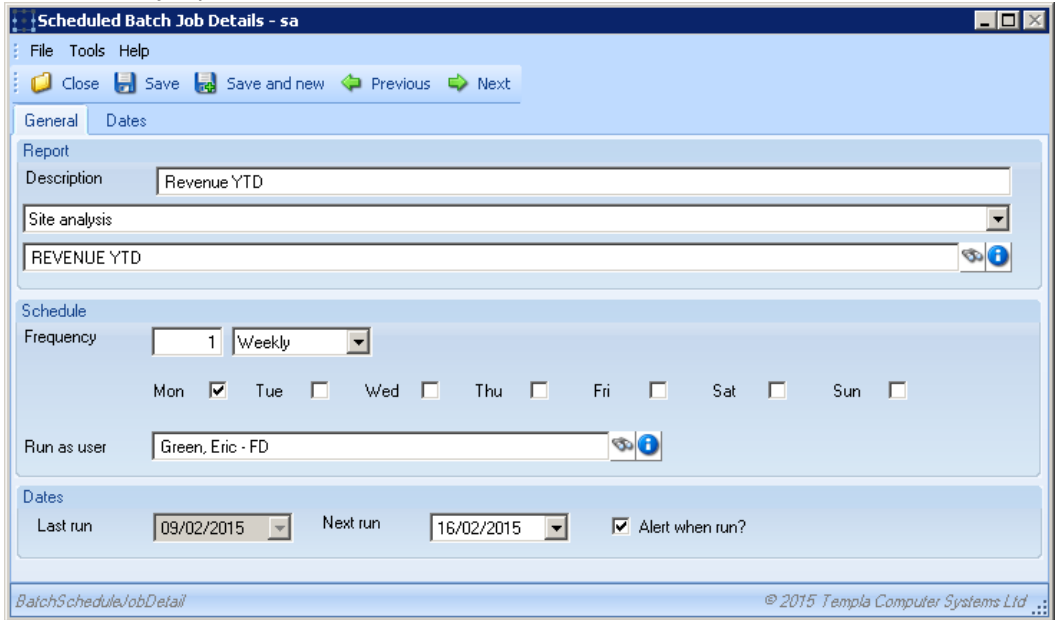
The above example would therefore run the 'Revenue YTD' site analysis report every Monday, using the authority level of 'Eric Green', and alerting him when the report results have been saved, and are therefore ready to be viewed.

The frequency options allow for reports to be run:
- N weekly, on one or more nominated days (e.g. every Mon/Wed/Fri)
- N monthly, on a nominated date of the month (e.g. the 1st of every month)
- N monthly, on one or more nominated days of a nominated week (e.g. Friday in the last week of each month)

DASHBOARDS

Any number of dashboards may be defined to TemplaCMS, and each dashboard may have any number of items on it, and each item is user defined.

Defining Dashboard Items

Every item to be displayed on a dashboard must be defined as a 'dashboard item':
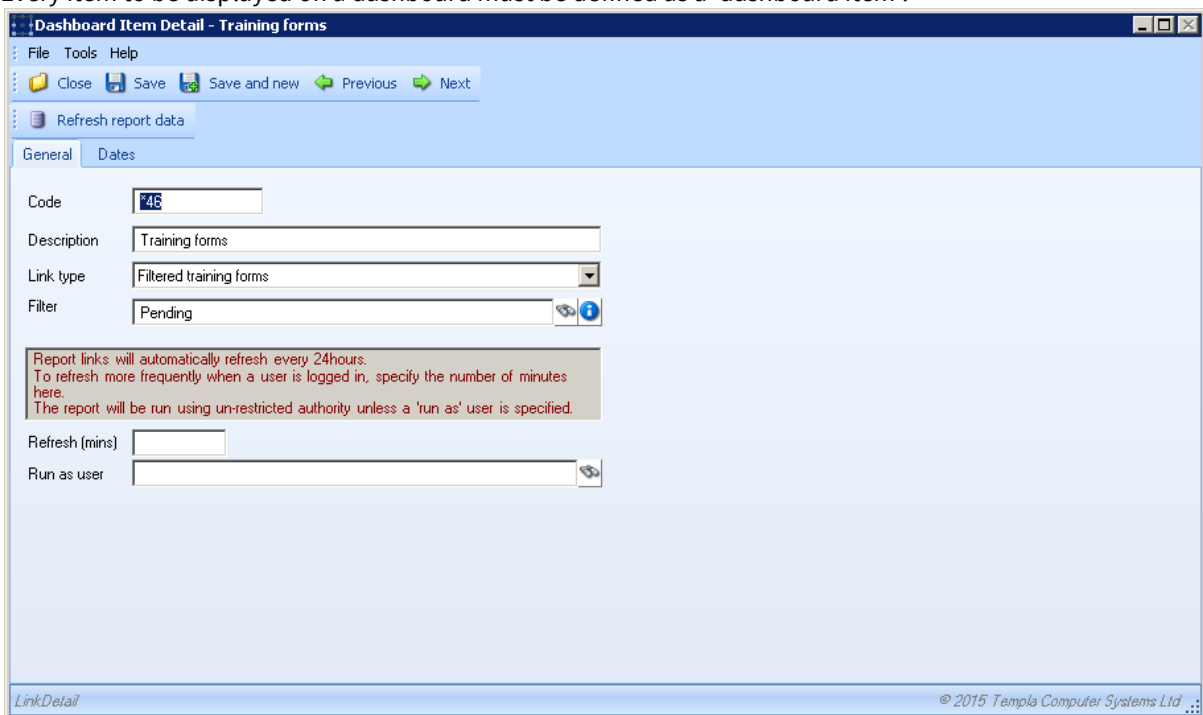
Each item defines the type of item it is, being one of:

- Analysis reports:
    - Site analysis
    - Timesheet analysis
    - Stores analysis
    - QA analysis
- Reports
    - Profit and Loss
    - Aged debt
    - Aged credit
- Filtered lists:
    - Clients
    - Contracts
    - Data forms
    - Employees
    - Equipment audit forms
    - Equipment items
    - Purchase invoices
    - Completed QA items
    - QA forms
    - Sites
    - Service requests
    - Stores orders
    - Stores order requests
    - Suppliers
    - Training forms
    - Workbills

Once defined, the underlying data associated with a dashboard item will be refreshed (by the TemplaCMS Batch processor) each day automatically. For volatile data where a more frequent refresh is required, the user can specify this in minutes. Note that the refreshing of data on a more frequent basis will only take place when users to whom the dashboard item applies are logged into TemplaCMS. Note also that a user can manually refresh the data for a dashboard item by pressing the 'refresh report data' toolbar button at any time.

When refreshing the data, this will be performed with an un-restricted user, unless otherwise specified.

When creating a dashboard item, if the 'run as user' field is left blank, when refreshing the data, a report will be created for each user assigned to the dashboard via a user dashboard relationship, i.e. the dashboard is assigned to their user. If a specific user is chosen the dashboard item will populate with their data, though restricted analysis will still apply.

Based on the type selected, the options available vary:

Analysis reports – site, time, stores, QA

For each of these, the user can select either a graphical or grid display, along with the series label, and measure(s) that are to be shown. For example:
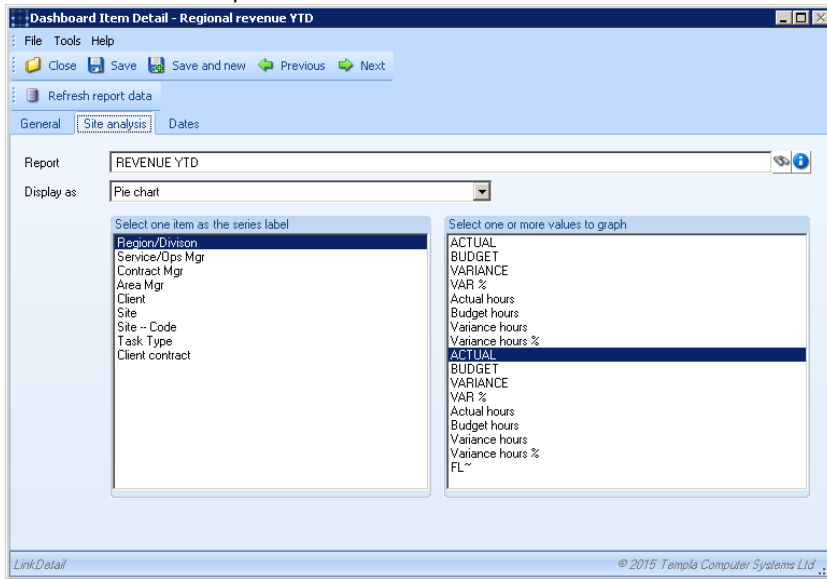
This item defines a pie chart showing actual revenue by region, with the data sourced from the site analysis report configuration 'Revenue YTD'.

Reports – debtors, creditors, P&L

Each of these shows on the dashboard as a grid. Having selected the report type, the user can access the standard report criteria window by pressing the 'Configure report' button. The criteria specified here are then stored on the dashboard item so they can be applied whenever the data is extracted.

Filtered lists

Based on the type of filtered list selected, the user must specify a previously published filter relevant to the type (e.g. Employees approaching visa expiry).

Defining a Dashboard

Dashboards comprise a sequenced list of dashboard items. Any number of dashboards can be created, and each item can be used on multiple dashboards. Indeed, if the same data is required on multiple dashboards, it is best to use the same item, as in this way only one version of the item needs to be refreshed by TemplaCMS.
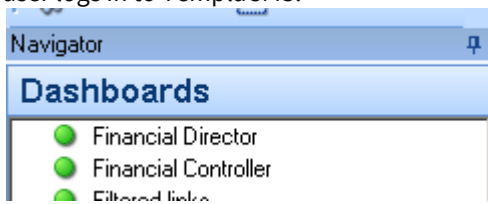
Assigning Dashboards to Users

Each user can be assigned any number of dashboards via the 'User details → Dashboards' tab:
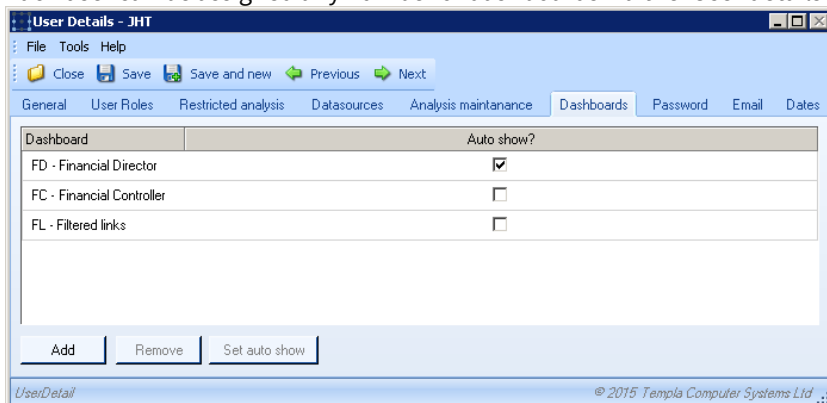
Each dashboard can optionally be set to 'auto show' (see later).

Viewing Dashboards

If a user is assigned any dashboards, they will be automatically created in a new 'Dashboards' area of the navigator when the user logs in to TemplaCMS:


Clicking on any one of these will launch the dashboard. However, a user may have been assigned one or more dashboards to 'auto show', in which case these will be automatically opened when the user logs in.

Below is an example dashboard view:
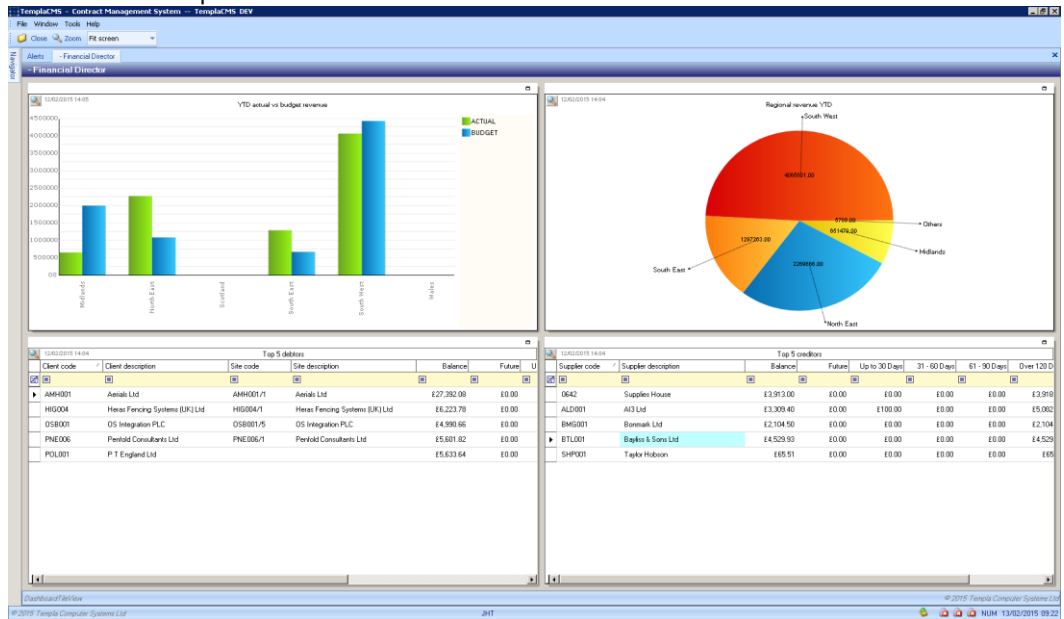
Each of the defined items on the dashboard is displayed in its own tile, which can be re-sequenced by dragging its title bar. The tiles will automatically size based on the number of items, but any tile can be enlarged by clicking the icon on the right of the title bar:
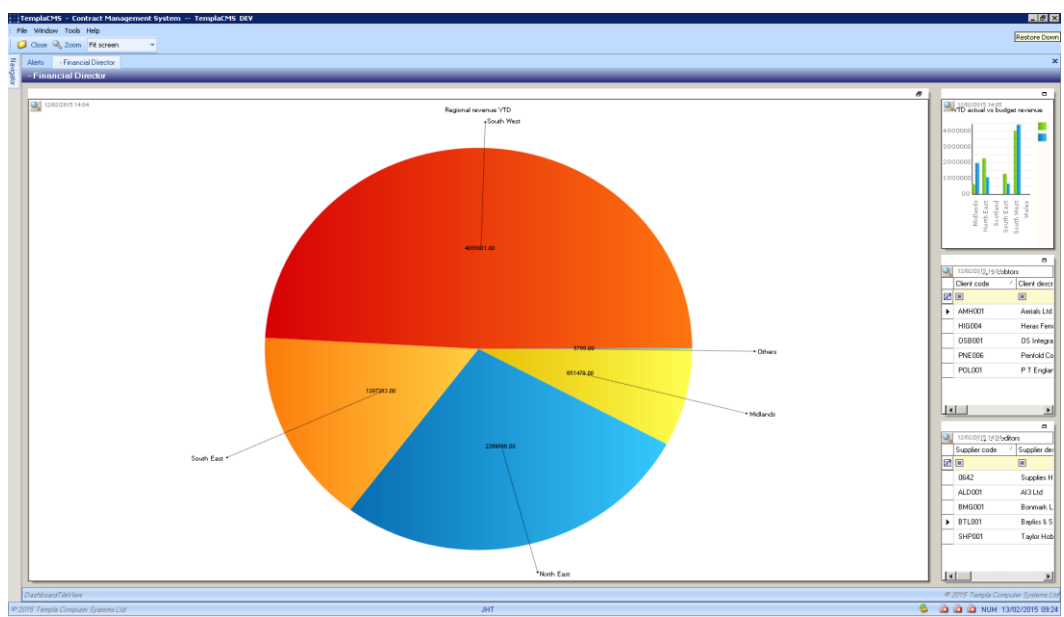
Each tile identifies the age of the data being displayed (top left). Based on the settings of each dashboard item, TemplaCMS will automatically refresh this data, thus updating the dashboard.

Clicking on a data item within any tile will provide drill down into the saved report results, filtered down to the data item clicked (e.g. revenue for the North East region). Access to the full report without filtering can be achieved by clicking the icon on the top left of the tile.

The above example shows tiles based on site analysis, aged debt and aged credit – i.e. they are all reports. Where 'filtered list' items are added to the dashboard, these are not reports, but shortcuts into the specific filtered area. Tiles for these show as buttons that identify the number of row that meet the filtering criteria, for example:
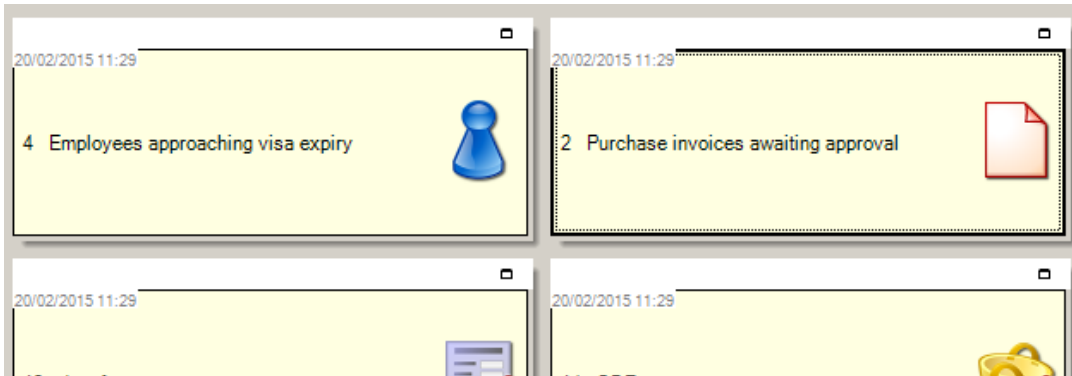
Clicking a button takes the user directly to the list (for example, employees), applying the filtering criteria.