

## Contents

Setup .....	2
Templates .....	3
Command Structure .....	4
Command List.....	5
GL Formats .....	6
Design .....	7
Running Reports .....	9
Batch .....	11

## Setup

The process of configuring MAS\_Report2 to operate is as follows:

**Installation:** The product should be installed on a centrally accessible machine to allow all users access. Ideally it should be located in its own shared directory. It must be run from a computer that already has Sage and Microsoft Excel installed. It uses dotnet 4.6.1.

The three necessary files are as follows:

Program – MAS\_Report2.exe

INI File – MAS\_Report2.ini

Help File – MAS\_Report2.pdf

All files should be copied from the distribution media. The INI file can be customized further to suit your needs. The INI file should look like this.

// Sage

**Sage**=dsn=Sotamas90;uid=zzz;pwd=xxxxxx;company=

**Key**=s8juiuBBS5343meMs2uOZKzL1

**Budget**=ORIGINAL

**Batch**=ON

**StartYear** = 2015

The key words are in **BOLD**:

- **Sage** is the ODBC connection to Sage. It is suggested that you create a report user with only ODBC access – no access to modules, since this INI file is in plain text.
- **Key** is the activation key provided by the vendor.
- **Budget** is the budget to load with the company history (or NONE if you are not using budgets in your reporting, usually set to ORIGINAL)
- **Batch** is ON or OFF. If used it allows multiple templates to be run at the same time. If OFF, it will remove those items from the panel.
- **StartYear** is optional and can be included if the user has many years of GL history but is only interested in reporting on recent years. It will make the history and budget loading from sage go faster.

# Templates

Final reports are created using three sources of information. The dollar amounts come from the Sage company database. The reporting period comes from the program interface. The report format and contents are defined in the template workbook. The template contains one or more spreadsheets that contain your reports.

The spreadsheets are formatted using standard Excel formatting and can contain any worksheet functions/formulas. Special tags starting with “\*=” define substitution cells from the Sage Database.

As with standard Excel workbooks, you can link data between spreadsheets or have non-printable sections where you include calculations. Sheets within the workbook can also be completely non-reporting, or have data from other sources. The report program will just copy as-is. The only requirement for a reportable sheet is that it contain a \*=DATE function (which add the as-of date to the spreadsheet)

Reference the Command help and the Sample workbook.

Report spreadsheet will be created in the same directory as your template and named with the as-of date.

For example;

Template = sample\_ABC.xlsx

Report = sample\_ABC\_2020\_5\_31.xlsx

## Command Structure

Reports in this system consist of formatted Excel spreadsheets. The spreadsheets are called Templates. They are formatted as you would like the final report to look, with each numeric placeholder containing a formula. When run, the formula will be replaced with the actual value read from Sage.

The formula or command consists of 4 parts:

- **Prefix** – this tells the reporting program that the cell contains a request for data (always \*=)
- **Company Code** – this is the company from which you want to extract data.
- **Function** – What type of data you would like to extract, See Command List.
- **GL** – General Ledger account or range to extract data.

Example:

```
*=ABC|MTD|105-00-01
```

This function requests the Month-to-Date amount from Company=ABC, GL=105-00-01

The dates or periods are set before running the report.

## Command List

DATE – Shows the current as of date (this command has no other parameters).

DATE(xx) - Offsets the template column by x periods (+/-). This would be used with something like a quarterly report, where the Q1 column heading would have a \*=DATE(-2), Q2 would have a \*=DATE(-1), and Q3 would have \*=DATE. This function affects all cells in the column below this command.

### Beginning / Ending Balances:

- BBCY – Beginning Balance Current Year
- BBCM – Beginning Balance Current Month
- BBPY – Beginning Balance Previous Year
- EBCY – Ending Balance Current Year
- EBPY – Ending Balance Previous Year
- BByyyy – Beginning Balance for a specific year, enter Fiscal Year.

### Transactions:

- MTD – Total transactions from beginning to end of the current month.
- YTD – Total transactions from beginning of the year to the end of the current month.
- PTyyyyymm – Total transactions for the specified period.

### Budget: (Budget name from INI file)

- BUM – Budget for current month.
- BUY – Budget year to date.
- BUPyyyyymm – Budget for a specified period.

### Special:

- ^ - prefix the command with a carat symbol to add the beginning balance to the function.
- In a YTD case, it will add the BB of the current year to the transactions year to date.

## GL Formats

In the simplest case, you can fully list the GL account:

- \*=ABC|MTD|100-00-00

Ranges of accounts can be done listing the main portion of the account or using a wildcard:

- \*=ABC|MTD|100 is equal to \*=MTD|ABC|100-##-## is equal to \*=ABC|MTD|100#

Accounts can be added together:

- \*=ABC|MTD|100-00-00+105-00-01

The Dash symbol “-” is only used to separate account segments.

The plus sign “+” is used to add accounts, and the parenthesis are used to negate an account:

- \*=ABC|MTD|100-00-00+(105-00-01)

### Ranges and Masks

You can sum all of the accounts in a range using the colon symbol “:”

- \*=ABC|YTD|100-00-00:299-99-99

And so:

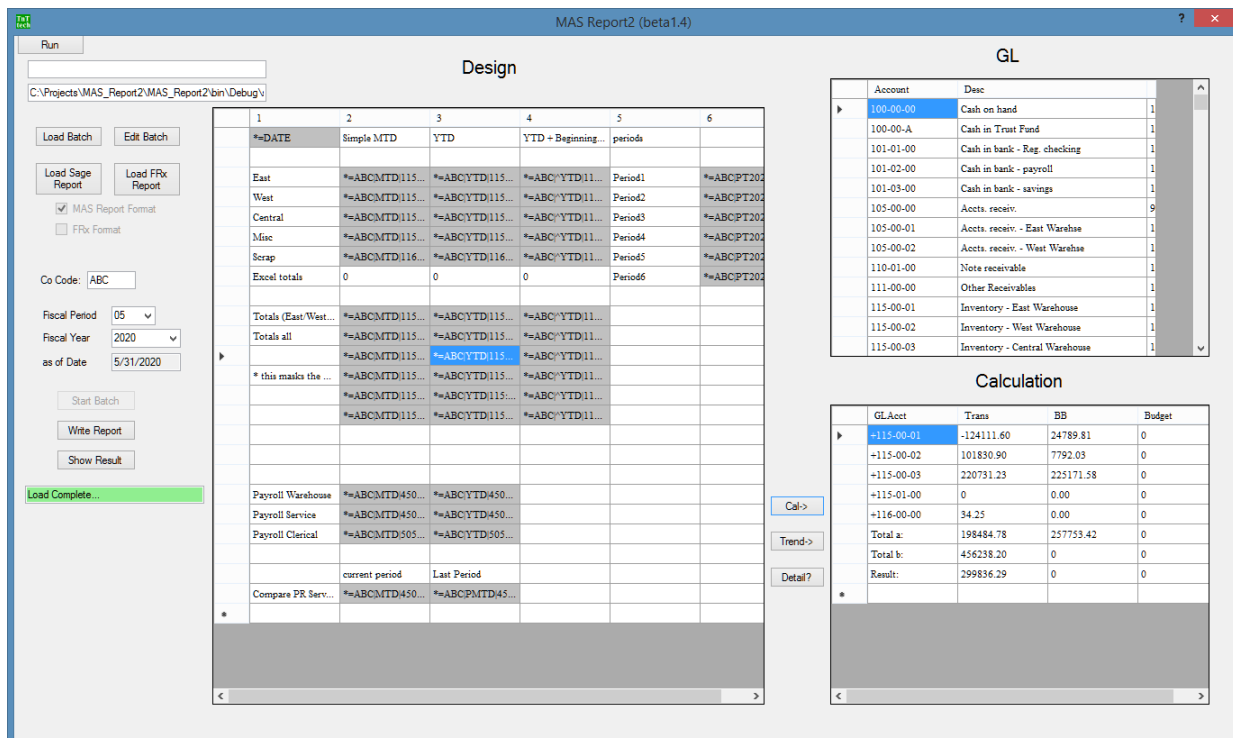
- \*=ABC|YTD|100 is equal to \*=ABC|YTD|100-##-## is equal to \*=ABC|YTD|100-00-00:199-99-99

To get sub account totals, you will use masks. In this case, the center segment is masked with 05:

- \*=ABC|YTD|1##-05-## will get all of the 05 subaccounts >=100 and <200
- OR**
- \*=ABC|YTD|100-05-00:199-05-99 -since the center segment matches, it is used as a mask.

# Design

This function is to assist with the development and debugging of reports. It is accessed by pressing the Design Button on the main Run Panel (next section). It expands the desktop to show the design features. The Design button is then replaced with the Run button to allow switching back and forth.



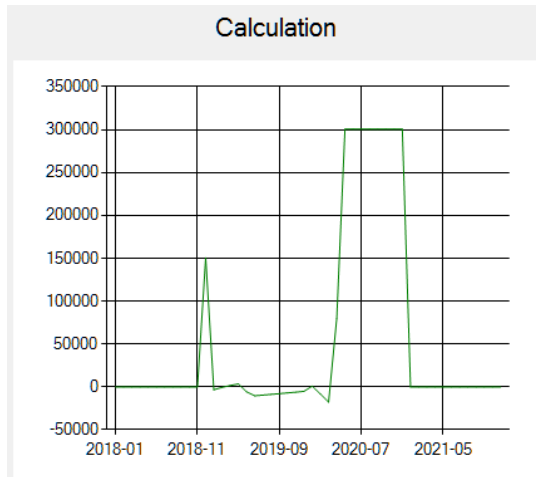
The Design Grid will show sheet 1 of your workbook with all of the MAS\_Report cells highlighted. The grid is adjustable, so you are able to scroll, as well as expand/shrink columns. The Design Panel also has an extra button, “Show Results,” which will toggle the Design Grid between showing formulas and showing results. This “Show Results” button only displays Sage Data; no formatting or Excel functions are shown.

For reference, the upper right grid shows the GL listing of the current company.

The bottom right Calculation Grid has three functions:

- 1- Selecting a cell on the Design Grid and pressing the Cal-> button will show a calculation of your MAS\_Report formula, displaying the full list of GL accounts that will be used in that calculation. This shows the period transactions, beginning balance, and the budget for the period. The “Result” line shows what it calculates as the result of your formula.

- 2- Selecting a cell in the Design Grid and pressing the “Trend” button will show a trend of the cell formula over the entire historical period of data in Sage. See the following image:



- 3- Selecting a cell in the Calculation Grid and pressing the “Detail” button will cause the program to read all of the detail transactions of the GL accounts in that cell for the selected period and display the results. This could take time depending on the number of transactions. See the following example:

Calculation					
	PostingDt	Source	JournalR	PostingComment	DebitAmount
▶	531202...	AR	000001	AR INVOICE ENTRY - 053103	0.00
	531202...	AR	000061	AR INVOICE ENTRY - 053103	0.00
	531202...	IM	000072	INVENTMonthly Inv Pur Tr...	69690.71
	531202...	IM	000074	INVENTORY TRANSACTIO...	558.75
	531202...	IM	000075	INVPURInventory Purchase	14037.31
	531202...	IM	000076	INVSALSale of Excess Invent...	0.00
	531202...	SJ	000091	SLSCSTMonthly Sales Costs	0.00
	531202...	SO	000003	Shepard Motorwork REF0100...	0.00
	531202...	SO	000003	Greater Alarm Com REF0100...	0.00
	531202...	SO	000003	Greater Alarm Com REF0100...	0.00
	531202...	SO	000003	Orange Door Win REF0100047	0.00
	531202...	SO	000003	Orange Door Win REF0100047	0.00
	530202	SO	000004	American Business REF0100048	0.00

In this Design Grid, you can create/test new formulas anywhere on the grid. These will not be written to, or saved to, the original template.

As with the Run panel (next section), you can generate a report by pressing the “Write Report” button.



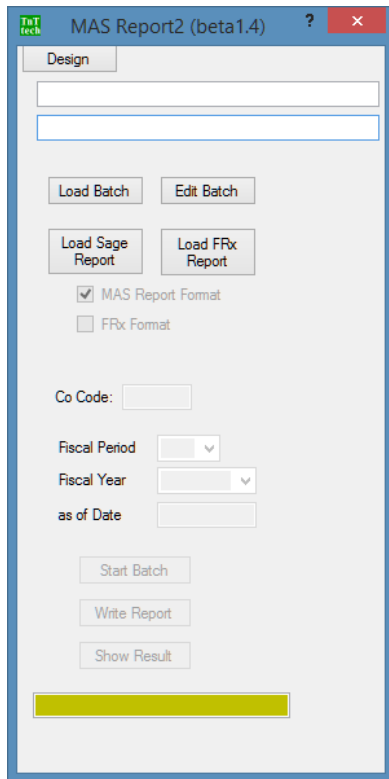
# Running Reports

There is an ABC company sample template included (in a separate file) to work with. You should include all formatting on your template (bolding, formulas, etc) and it will pull through to your final report. Here is a sample:

	B	C	D	E	F	
1	<b>Simple MTD</b>	<b>YTD</b>	<b>YTD + Beginning balance</b>	<b>periods</b>		
2						
3	*=ABC MTD 115-00-01	*=ABC YTD 115-00-01	*=ABC ^YTD 115-00-01	Period1	*=ABC PT202001 115-##-##:116-##-##	
4	*=ABC MTD 115-00-02	*=ABC YTD 115-00-02	*=ABC ^YTD 115-00-02	Period2	*=ABC PT202002 115-##-##:116-##-##	
5	*=ABC MTD 115-00-03	*=ABC YTD 115-00-03	*=ABC ^YTD 115-00-03	Period3	*=ABC PT202003 115-##-##:116-##-##	
6	*=ABC MTD 115-00-00	*=ABC YTD 115-00-00	*=ABC ^YTD 115-00-00	Period4	*=ABC PT202004 115-##-##:116-##-##	
7	*=ABC MTD 116-00-00	*=ABC YTD 116-00-00	*=ABC ^YTD 116-00-00	Period5	*=ABC PT202005 115-##-##:116-##-##	
8		\$0.00	\$0.00	\$0.00	Period6	*=ABC PT202006 115-##-##:116-##-##
9						
10	*=ABC MTD 115-00-01:115-00-03	*=ABC YTD 115-00-01:115-00-03	*=ABC ^YTD 115-00-01:115-00-03			
11	*=ABC MTD 115-0#-00:116-0#-03	*=ABC YTD 115-0#-00:116-0#-03	*=ABC ^YTD 115-0#-00:116-0#-03			
12	*=ABC MTD 115-00-00:116-01-03	*=ABC YTD 115-00-00:116-01-03	*=ABC ^YTD 115-00-00:116-01-03			
13	*=ABC MTD 115-00-00:116-00-03	*=ABC YTD 115-00-00:116-00-03	*=ABC ^YTD 115-00-00:116-00-03			
14	*=ABC MTD 115:116	*=ABC YTD 115:116	*=ABC ^YTD 115:116			
15	*=ABC MTD 115-##-##:116-##-##	*=ABC YTD 115-##-##:116-##-##	*=ABC ^YTD 115-##-##:116-##-##			
16						
17						
18						
19	*=ABC MTD 450-03-##	*=ABC YTD 450-03-##				
20	*=ABC MTD 450-04-##	*=ABC YTD 450-04-##				
21	*=ABC MTD 505-00-03	*=ABC YTD 505-00-03				
22						
23	<i>current period</i>	<i>Last Period</i>				
24	*=ABC MTD 450-04-##	*=ABC PMTD 450-04-##				
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						

The headings are bolded and the columns are formatted as currency. Row 8 has Excel sum functions to show usage of standard worksheet functions.

When running the program, the standard Run panel looks like this:



Press the “Load Sage Report” button and select the template spreadsheet. It will take a moment to load. The status is displayed in the colored bar at the bottom. As it loads, it will import GL accounts and history for the company codes in the template. When complete, the company code appears in the center of the panel. No other actions are possible while it loads.

Next, select your reporting period. The dropdown boxes contain the years and periods that the company code has in history. The “as-of” date will automatically be filled in.

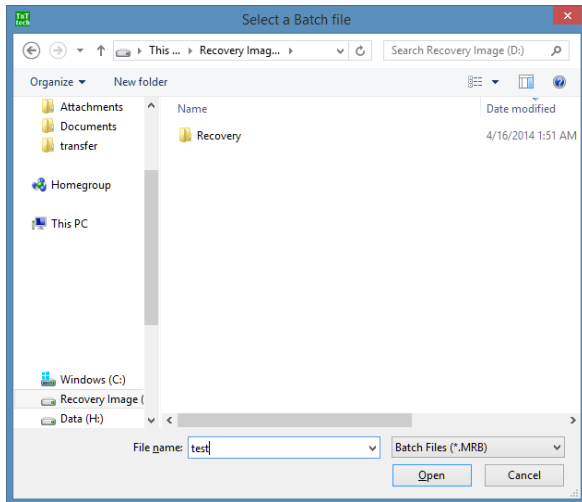
Press the “Write Report” button to export the report. The new report spreadsheet will be in the same directory as the template, but will have the “as-of” date included as the last part of the name.

Continue to load and run as many templates as needed. Note that while the application is running, it will maintain the company data (or companies data). This makes it so that sequential reports will not require any time to reload the company GL data, and will run faster.

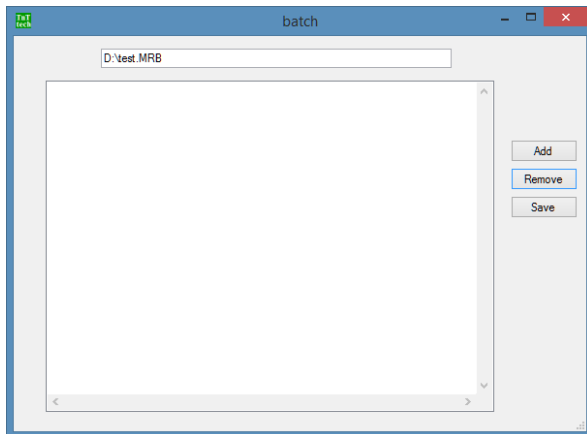
## Batch

Several reports can be run at the same time in a batch. For example, monthly reports. A batch is simply a list of template files to be run.

Start by pressing the “Edit Batch” button. This will show a standard lookup. Browse to the target directory and type the new batch name in the filename box.



Then press the “Add” button to add as many templates as needed.



Save when complete. This will create an MRB – Mas Report Batch, which is a text file with the template names in it.

Back at the main panel, Select “Load Batch,” and pick the batch file to load.

It will load the first template and company data as it would when selecting the “Load Sage Report” function. When it is complete, select the fiscal year and period and press the “Start Batch” button. It will cycle through all of the templates and write the reports.