Excel-Based Financial Reporting Options
For Sage 300 Construction and Real Estate

This document describes how financial reporting can be accomplished in Excel using Sage Office Connector Query and how this process becomes vastly easier after adding the Office Connector Financials extension to Office Connector Query.

This document is semi-technical in nature in that it provides insight into how financial values are stored in General Ledger and provides examples of various Office Connector formulas that would retrieve those values:

Contents

Understanding Your Data

Your financial data is made up of various accumulated values (stored values) that have been stored for each GL account. Reporting the desired amount often requires you to derive a value by using multiple stored values that must be added or subtracted to another value.
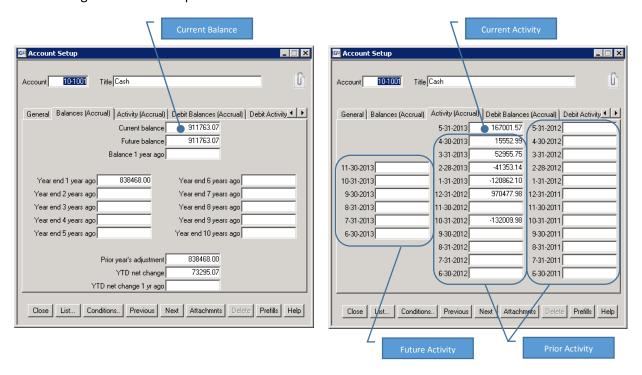
Each GL account stores a value called "Current Balance" that reflects the sum of all transactions that have been posted to the account through the current period ending date (or for income statement accounts, transactions in the current fiscal year through the current period ending date).

In addition, the sums of posted transactions by period are also stored for each GL account. These values are always relative to the current period of the fiscal entity (the fiscal entity may be represented by the account prefix, and different prefixes may have differing period ending dates).

Stored Value	Represents…
Current Period Activity	Sum of transactions posted for the current period
Prior 1 Activity	Sum of transactions posted for the prior period
Prior 2 Activity	Sum of transactions posted for two periods back
Prior 3 Activity	Sum of transactions posted for three periods back

The prior activity values extend back as far as 24 periods for each GL account. For periods further back, values are stored in a separate account history table.

The following screen-shots depict some of the values that are stored for each GL Account:

Roll-Back

Since the Current Balance for last month is <u>not</u> a stored value, you must derive it by using some simple math functions. You would subtract **Current Period Activity** from **Current Balance** to get the balance as of the end of last month. This type of financial math operation is commonly called "roll back".

> **Balance Last Month** = **Current Balance** – **Current Period Activity**

Likewise, if you wanted the balance from three months back, you would perform a similar math operation:

> **Balance Three Months Ago** = **Current Balance** – **Current Period Activity** – **Prior 1 Activity** – **Prior 2 Activity**

Roll-Back with Office Connector Query Alone

Balance as of the end of last month for account 10-1001:

```
=TSLOOKUP("MASTER_GLM_RECORD_1","ACRBAL","10-1001") –
  TSLOOKUP("MASTER_GLM_RECORD_1","ACRACT","10-1001")
```

Balance as of three months back for account 10-1001:

```
=TSLOOKUP("MASTER_GLM_RECORD_1","ACRBAL","10-1001") –
  TSLOOKUP("MASTER_GLM_RECORD_1","ACRACT","10-1001") –
  TSLOOKUP("MASTER_GLM_RECORD_1","AP1","10-1001") –
  TSLOOKUP("MASTER_GLM_RECORD_1","AP2","10-1001")
```

While the above approach works, you can see that the formula logic becomes increasingly complex with the more periods you wish to roll-back.

To add to the complexity, you must also consider that income statement accounts work differently than balance sheet accounts because their balances reset to zero at the fiscal year end. In addition, there is special roll-back logic needed for retained earnings.

Finally, if you need to roll-back more than 24 periods, you must use the GL Account Activity History table and gain an understanding of that data structure.

Roll-Back with Office Connector Financials

Assuming a calendar year end, with 5/31/2013 as the current period ending date for company 10.

Balance as of the end of last month:

```
=TSGLAMOUNT("10", "1001", 2013, 4)
```
     Prefix   Base Account   Fiscal Year   Period

Balance as of three months back:

```
=TSGLAMOUNT("10", "1001", 2013, 2)
```

As you can see, this makes it very easy to report the balance for any desired period without needing to write any complex roll-back formulas. Behind the scenes, Office Connector Financials performs the same roll-back operation as described earlier.

Roll-Forward

General Ledger allows you to post transactions for up to six future months. This supports the scenario where you are not yet ready to close a period (or fiscal year), but you have accounting activity to record for the next period (or periods).

The balance as of the end of a future period is not a stored value and so just like with prior period balances, it must be derived by using a simple math operation.

Balance Next Month = **Current Balance** + **Future Period 1 Activity**

The balance as of three months out would be:

Balance In Three Months = **Current Balance** + **Future Period 1 Activity** + **Future Period 2 Activity** + **Future Period 3 Activity**

Roll-Forward with Office Connector Query Alone

Balance as of the end of next month for account 10-1001:

=TSLOOKUP("MASTER_GLM_RECORD_1","ACRBAL","10-1001") +
  TSLOOKUP("MASTER_GLM_RECORD_1","AF1","10-1001")

Balance as of the end of three months from now for account 10-1001:

=TSLOOKUP("MASTER_GLM_RECORD_1","ACRBAL","10-1001") +
  TSLOOKUP("MASTER_GLM_RECORD_1","AF1","10-1001") +
  TSLOOKUP("MASTER_GLM_RECORD_1","AF2","10-1001") +
  TSLOOKUP("MASTER_GLM_RECORD_1","AF3","10-1001")

While the above approach works, you can see that the formula logic becomes increasingly complex with the more periods you wish to roll-forward.

To add to the complexity, you must also consider that income statement accounts work differently than balance sheet accounts because their balances reset to zero at the fiscal year end. In addition, there is special roll-forward logic needed for retained earnings.

Roll-Forward with Office Connector Financials

Assuming a calendar year end, with 5/31/2013 as the current period ending date for company 10.

Balance as of the end of next month:

=TSGLAMOUNT("10", "1001", 2013, 6)

      Prefix   Base Account   Fiscal Year   Period

Balance as of three months from current:

=TSGLAMOUNT("10", "1001", 2013, 8)

As you can see, this makes it very easy to report the balance for any desired period without needing to write any complex formulas. Behind the scenes, Office Connector Financials performs the same roll-forward operation as described earlier.

Consolidation

Assuming that GL account numbers are using a prefix to identify separate entities (companies, divisions, departments, properties, etc.), the process of consolidation is where amounts are retrieved for the same base account under a set of entities (prefixes) and then combined into one amount on your report.

Consolidation Using Office Connector Query Alone

This is an example of consolidating the current account balance for companies 20, 21, and 22 (all companies starting with "2") for base account 1001.

```
=TSLOOKUP("MASTER_GLM_RECORD_1","ACRBAL","20-1001") +
  TSLOOKUP("MASTER_GLM_RECORD_1","ACRBAL","21-1001") +
  TSLOOKUP("MASTER_GLM_RECORD_1_1","ACRBAL","22-1001")
```

In the above example, we're assuming that each company's current period ending date is the same. In the event that they're not, you must roll-back or roll-forward the balances of some companies but not others so that you would be adding the balance for each company as of the same period.

Consolidation Using Office Connector Financials

This example uses Office Connector Financials to accomplish the same consolidation:

```
=TSGLAMOUNT("2%", "1001", "2013", 5)
```

Note that the prefix is identified using a wildcard character ("%") meaning that the balance of base account 1001 will be included for any prefix starting with "2". Office Connector Financials is also aware of the period ending date of each company and will automatically roll forward or backward the balance of the account under each company in order to report the consolidated balance as of period 5.

The prefix argument could also be represented as a cell reference that identifies a range of cells containing the list of desired prefixes:

	A	B	C
1	20	21	22

```
=TSGLAMOUNT($A$1:$C$1, "1001", "2013", 5)
```

Additional Considerations

Types of Derived Amounts

The earlier examples focused on deriving the current balance as of a specific period. There are a variety of other financial values that can also be reported using Office Connector Financials. Each of these would require similar logic to derive their value if using Office Connector Query by itself. With Office Connector Financials, these values are derived for you (for the desired period and prefixes), without having to write any special formulas:

- Balance
- Period Activity
- YTD Activity
- Period Debit Activity
- YTD Debit Activity

- Cash Balance
- Period Cash Activity
- YTD Cash Activity
- Period Debit Cash Activity
- YTD Debit Cash Activity

- Period Budget
- YTD Budget
- Period Cash Budget
- YTD Cash Budget

The type of value requested is supplied in the fifth argument of the TSGLAmount function:

=TSGLAMOUNT("10", "1001", 2013, 8, "PeriodActivity")

Partner Statements

Office Connector Financials simplifies the task of producing partner-specific financial statements. By supplying the desired Partner ID in the sixth argument, Office Connector Financials looks up the percentage of ownership for the partner within each prefix being consolidated and then factors the values accordingly.

=TSGLAMOUNT("10", "1001", 2013, 8, "Balance", 101)

Multiple Data Folders

If multiple Sage 300 CRE data folders exist and share a common base account list, Office Connector Financials facilitates the production of consolidated financials by allowing you to retrieve values from any desired data folder.

The seventh argument can provide the data folder path of the desired data folder or it may contain a cell reference to a range of cell containing a list of data folders to be consolidated.

=TSGLAMOUNT("10", "1001", 2013, 8, "Balance", , $A5:$A10)

(where A5 through A10 contains a list of data folders to be consolidated)