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Part I
Building Financial Models
Overview

Oracle Hyperion Strategic Finance integrates and consolidates financial forecast models among your corporate planning, business development, treasury, and investor relation groups. This includes interaction between corporate groups, business units, and the corporate office. The result is enhanced, consistent communication within the company. Strategic Finance reduces the time and planning costs while assuring accurate analytics. It is ideal for merger and acquisition analysis, strategic planning, equity analysis, deal underwriting, and portfolio analysis.

Strategic Finance enables you to centralize financial data using these enterprise-wide data management capabilities and tools:

- “Integration with EPM System Products” on page 29
- “Consolidation” on page 29
- “Sensitivity Analysis” on page 30

Integration with EPM System Products

Integrating Oracle Enterprise Performance Management System products unifies enterprise financial information. Importing and exporting data between products saves time and lowers errors in transfer. Oracle Essbase users can also import both metadata and data from Strategic Finance.

Consolidation

Use the consolidator to combine entities representing different business units into one model. This tool enables you to perform these tasks:
See Chapter 12, “Consolidating Financial Models”.

- Consolidate basic file information, methods, scenarios and time periods
- Control consolidation information and subaccount details
- Export data to Oracle Enterprise Performance Management System products

**Entity Change Management**

Use the Entity Change Manager (ECM) to standardize entity metadata and apply changes made to parent entities to child entities, ensuring uniformity.


**Sensitivity Analysis**

Sensitivity Analysis determines how key variable changes affect results.

See Chapter 14, “Performing Advanced, What If? Analysis”.

**About Creating Financial Models**

You will perform these tasks to create and evolve your financial models:

- Select the server and database to use.
- Existing users: Select existing model template.
- Create a template and model (entity) file, and define the model duration time using:
  - The Time Period Wizard
  - The New Entity Wizard
- Define user and group access to other models and items such as dimensions, scenarios, and reports.
- Create or use the provided accounts, and input data. See Chapter 4, “Working With Financial Accounts”.
- Project financial results using provided (e.g. growth rate) or custom forecast method. See Chapter 5, “Forecasting”.
- Define funding and debt repayment options. See Chapter 7, “Using Funding Options”.
- Define tax and valuation options such as shareholder value, dividend discount, and economic profit. See Chapter 8, “Using Tax and Valuation Options”.
- Convert international currencies. See Chapter 13, “Translating Currencies”
- Insert data from Microsoft Excel into your model using worksheets. See Chapter 9, “Using Worksheets”
- Amalgamate multiple models. See Chapter 12, “Consolidating Financial Models”.
- Analyze financial models using different scenarios and targets. See Chapter 14, “Performing Advanced, What If? Analysis”.
- Use graphs and reports to depict financial data in a variety of formats. See Chapter 18, “Using Provided and Freestyle Reports” and Chapter 19, “Working with Graphs”.

**Architecture**

Strategic Finance has three components and can be used as a standalone or a client-server application:

- **Strategic Finance Client**—Use to create and grow your financial models (entities) by checking out and checking in entities.

- **Strategic Finance Server**—Centrally managed version control system that contains the databases that you use to build models, and which you can use to promote financial uniformity between models, secure access, archive, and import and export financial data. For information about using the Admin Doc that supports administrative features, see the *Oracle Hyperion Strategic Finance Administrator’s Guide*.

- **Strategic Finance with Smart View integration**—Using the Smart View connection interface, you can open the Strategic Finance entity independently. Users check out the entities required for their financial models on the Strategic Finance Server, develop them on the Strategic Finance Smart View Client, and then check them into the server.

The Strategic Finance Web Application acts as a middle tier. This middle tier contains the logic for managing the interaction between the user interface and the database. The Strategic Finance Smart View client cannot directly communicate with the Strategic Finance Server. Thus, takes the request from Strategic Finance client, and the Strategic Finance Server performs the validation check to make sure that the data entered are in an acceptable state. After validation, the Strategic Finance Server sends the response back to the Strategic Finance client.

The Strategic Finance Smart View Architecture is displayed:
Requirements

Before using the product, ensure that an Administrator has performed these tasks:

- Assigned additional Strategic Finance-specific access rights to your account in the Strategic Finance Administrator
- Created and configured the Oracle Hyperion Strategic Finance Server
- Configured connections to the appropriate databases

Note: If you installed release 11.1.2.1 of Oracle Hyperion Enterprise® or Oracle Hyperion Financial Management or upgraded from a previous release of these products, confirm that they successfully integrate with Strategic Finance. If integration fails, perform these tasks:

- Navigate to %EPM_ORACLE_INSTANCE%\bin directory (e.g. C:\Oracle\Middleware\user_projects\epmsystem1\bin).
- Run one or both of the following:
  - Oracle Hyperion Enterprise®—epmsys_registry.bat updateproperty STRATEGIC_FINANCE_SERVICE/@integrationActiveHE true
  - Oracle Hyperion Financial Management—epmsys_registry.bat updateproperty STRATEGIC_FINANCE_SERVICE/@integrationActiveH true
Setting Preferences

To specify user preferences, click , and then select any tab. See:

- “Setting General Preferences” on page 33.
- “Changing Language Settings” on page 33.
- “Setting Accounts Tab Preferences” on page 33
- “Setting View Preferences” on page 34.
- “Setting Calculation Preferences” on page 34.
- “Setting Global Assumptions Preferences” on page 35.

Tip: For information on specifying cursor placement and navigation after you press ENTER, see the Oracle Smart View for Office online help or the Microsoft Excel online help.

Setting General Preferences

To specify general preferences:

1. Click , select General, and then specify any of the following:
   - Limit currency name choices to default list — Disable adding currencies.
   - Name — Scenario author.
   - Data directory — Where to store files.
   - Template directory — Where to store templates.
   - Import directory — Where to store map files.
2. Click OK.

Changing Language Settings

To display Strategic Finance in another language, see “Advanced Options” in the Smart View User’s Guide.

Setting Accounts Tab Preferences

To set account tab preferences:

1. Click , select Accounts, and specify any of the following:
   - Show headers — When opening entities, display row and column headers (A,B,C..., 1,2,3).
Setting Report Preferences

To set report tab preferences:

1. Click ☑️, select Reports, and then specify any of the following:
   - **Standard Reports**:
     - **Show headers** — Display standard report headers.
     - **Characters per note line** — Enter a number between 10 and 255 that is the maximum number of characters that can be used for account notes.
   - **Insert Preferences**:
     - **Insert subaccounts with main account** — Include or exclude the placement of subaccounts in reports when you insert main accounts.
     - **Insert dimensional block** — Include or exclude the full dimensional block in reports when you insert main accounts.
   - **Freestyle Reports and Show headers** — Display or conceal freestyle report headers.
   - **Maximum reports on open** — The maximum number of reports that are opened with an entity.

2. Click OK.

Setting View Preferences

You can enable the display of formulas in the status bar that displays information about current commands, accounts, and processing. To view formulas in the status bar, click ☑️, select View, and then select **Show formula in status bar**.

Setting Calculation Preferences

To set calculation preferences:

1. Click ☑️, and then select Calculation.

2. Specify any of the following:
   - **Suppress funds flow out of balance warning** — Generate “Funds Flow Out of Balance” errors when funds flows do not balance in historical periods.
- **Auto calculate newly selected scenario**—Enable automatic scenario calculation.
- **Warn for deprecated functions**—Generate warnings if deprecated functions are encountered during calculations.
- **Suppress zeroes on analyze**—Exclude empty cells from calculation, analysis, and audit trail features.

3 Click **OK**.

## Setting Global Assumptions Preferences

To set global assumptions preferences:

1 Click ![](image) , and then select **Global Assumptions**.

2 Specify any of the following:
   - **Display messages advising that file was updated by export**—Show messages when files are updated with global assumptions.
   - **Automatically accept import updates without prompting during import**—Do not notify users when global assumption changes are accepted.

3 Click **OK**.

## Strategic Finance Smart View Interface

This section describes the Strategic Finance Smart View Interface.

### Shared Connections and Private Connections

You connect to data sources through shared or private connections.

- **Shared Connections**
  Shared connections are stored in a central location and are available to multiple users through the Smart View Panel. You cannot add, edit, or rename shared connections, but you can save them as private connections, which you can edit and rename.

- **Private Connections**
  Private connections are those that you create by saving a shared connection to your local computer or by entering a URL to a provider that is not configured for shared connections. When you create a private connection, it becomes the active connection.

For more information, see Smart View User’s Guide.
Creating a New Private Connections

If you know the URL, then you can create a private connection from a connection that is not listed in Shared Connections.

➤ To add a connection using a URL:
1. From the Smart View ribbon, select Panel.
2. From the Smart View panel, select the arrow next to Home button, and then select Private Connections.
3. Select the drop-down menu next to the Arrow button, select Create new connection, and then select Strategic Planning provider connection provider.
4. In the text box, enter the URL details to which you want to connect. The URL syntax is as follows. Contact your system administrator for the URL to use:
   Strategic Finance: http(s)://servername:port/StrategicPlanning/SmartView.
   For example: http://myserver:8900/StrategicPlanning/SmartView.
   • ServerName is the name of the computer hosting the Strategic Finance server
   • Port is the Strategic Finance server port number
   • SmartView is the directory set for Strategic Finance server
5. Click Next to display the Edit Connection -- Application/Cube dialog box. Expand the server details.
   Note: If you expand the server details, the user authentication dialog box is displayed.
6. Provide the user authentication details, and then click Connect.
7. Select the Strategic Finance Server that you want to add to the connection, and then click Finish.

Deleting the List of Private Connections

To delete the entire list of private connections, select the arrow next to Go button, and then select Clear Manually Entered URL Entries.

For more information, see Oracle Hyperion Smart View User's Guide.

Creating a connection using Shared Connections

You can create a connection using Shared Connections, if you know the URL.

➤ To add a connection using a URL:
1. To set the Shared Connection URL: From Smart View > Options > Advanced Tab > Shared Connections
   URL: http://[server]:[port]/workspace/SmartViewProviders
2. From the Smart View ribbon, select Panel.
3. From the Smart View panel, select the arrow next to the Home button, and then select Shared Connections.
4. Provide the user authentication details and then using the Shared Connection drop-down list select the Oracle Hyperion Strategic Planning, Fusion Edition connection provider.

5. Expand the Strategic Finance server node.

6. Expand the Strategic Finance Database that you want to add to the connection and click OK.

For more information, see Smart View User’s Guide.

Saving Shared Connections as Private Connections

Although you cannot create shared connections without administrative privileges, you can save them as private connections if they are enabled for private connections.

To create a private connection:

1. From the Shared Connections tree list, select an item to save as a private connection.

2. From the Action Panel, select Add to private connections. This option is available only if the selected item is enabled for saving as a private connection.

3. Optional: From Save as Private Connection, edit the name and description of the connection.

4. Click OK.

5. The connection name is displayed in the following:
   - The Shared Connections tree list, indicated as private by a small arrow
   - The Private Connections drop-down menu

Ribbons and Menu

In Microsoft Office Excel 2007 (32-bit) and 2010 (both 32-bit and 64-bit), under Strategic Planning ribbon tab, you can view many Strategic Finance Smart View icons. The following table describes the grouping labels, and icons descriptions.

<table>
<thead>
<tr>
<th>Grouping Label</th>
<th>Icons</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>Worksheet</td>
<td>A spreadsheet is a table used to store various types of data. The data is arranged in rows and columns to ease storage, organization, and analysis. You can Open, Close, Add or Delete worksheets, and Copy the worksheet link.</td>
</tr>
<tr>
<td>Open</td>
<td></td>
<td>Enables you to open the Hyperion Strategic Finance files as *.alc extension.</td>
</tr>
<tr>
<td>New</td>
<td></td>
<td>Enables you to open a new Entity file as *.alt extension.</td>
</tr>
<tr>
<td>User Preferences</td>
<td></td>
<td>Enables you to review or change the user preferences details.</td>
</tr>
<tr>
<td>Links</td>
<td></td>
<td>Enables you to creates a data link between the source entity and the target entity.</td>
</tr>
<tr>
<td>Grouping Label</td>
<td>Icons</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>File</td>
<td>Entity</td>
<td>Entities are stored on servers. You can Check in and Release lock. When you check in entities, the server releases the locks, and the entities become available to others users.</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>Summary Information enables you to specify basic information about files such as author, company, SIC code, currency, and global assumption data, that are used in displayed reports.</td>
</tr>
<tr>
<td></td>
<td>Save As</td>
<td>Save As enables you to save the Hyperion Strategic Finance files as *.alc extension.</td>
</tr>
<tr>
<td></td>
<td>Save</td>
<td>Enables you to save the Hyperion Strategic Finance files as *.alc extension.</td>
</tr>
<tr>
<td>Edit</td>
<td>Dataviews</td>
<td>Dataviews filter and manipulate the amount of data displayed on the Strategic Finance spreadsheet.</td>
</tr>
<tr>
<td></td>
<td>Paste Worksheet Link</td>
<td>You can perform the following options: Paste, Paste Special and Paste Worksheet Link—which creates a link between the existing worksheet and the destination worksheet, where it is pasted.</td>
</tr>
<tr>
<td>Account</td>
<td>Account Forecast</td>
<td>Enables you to view the forecast methods provided to project account values in forecast periods.</td>
</tr>
<tr>
<td></td>
<td>Dimension</td>
<td>The dimensions are a concise, an intuitive way of organizing data. Each dimension is an attribute containing members, representing variations of the data. You can perform the following options: Maintenance, and Assign Dimensions.</td>
</tr>
<tr>
<td></td>
<td>Subaccounts</td>
<td>Enables you to view and change the subaccounts and main account detail within the accounts spreadsheet. Subaccounts inherit attributes of main accounts in both historical and forecast periods.</td>
</tr>
<tr>
<td></td>
<td>User Defined Accounts</td>
<td>User Defined Accounts are typically used for non-currency items such as inflation rates and price/quantity relationships.</td>
</tr>
<tr>
<td></td>
<td>Account Groups</td>
<td>Enables you to manage accounts in bulk. For example, you can create a group containing all Income Statement accounts with data input.</td>
</tr>
<tr>
<td></td>
<td>Account Input Status</td>
<td>Enables you to change the input status of accounts. Turn OFF accounts, which are not in use.</td>
</tr>
<tr>
<td></td>
<td>Rename Related Accounts</td>
<td>Enables you to edit and rename the accounts description.</td>
</tr>
<tr>
<td></td>
<td>Where Used</td>
<td>Enables you to identifying the accounts that depend on other accounts.</td>
</tr>
<tr>
<td></td>
<td>Search</td>
<td>Enables you to search for specific account numbers.</td>
</tr>
<tr>
<td>Analysis</td>
<td>Goal Seek</td>
<td>Enables you to identify a target value for an account. Strategic Finance calculates changes to another account to reach that target. This eliminates manipulating accounts manually.</td>
</tr>
<tr>
<td></td>
<td>Depreciation Scheduler</td>
<td>Enables you to depreciate capital assets over time in formulas.</td>
</tr>
<tr>
<td></td>
<td>Scenario Manager</td>
<td>Enables you to create variations, or scenario, on a model, with accounts specific to that scenario.</td>
</tr>
<tr>
<td></td>
<td>Sensitivity Analysis</td>
<td>Enables you to change values on some accounts to evaluate the effects on key metrics.</td>
</tr>
<tr>
<td>Grouping Label</td>
<td>Icons</td>
<td>Description</td>
</tr>
<tr>
<td>----------------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td>Enables you to combine periods of years, weeks, months, quarters, and halves for historical and forecast data.</td>
</tr>
<tr>
<td>Data</td>
<td>Audit Trail</td>
<td>Enables you to drills down from the account line or the output line on the Strategic Finance spreadsheet to see how the value is calculated.</td>
</tr>
<tr>
<td>Funding</td>
<td></td>
<td>Funding Options enables you to pay off debt accounts with cash from surplus accounts.</td>
</tr>
<tr>
<td>Calculate</td>
<td></td>
<td>Calculate option enables you to save data into the database and recalculate the input values for all scenarios. You can perform the following options: Calculate, and Calculate All.</td>
</tr>
<tr>
<td>Submit Data</td>
<td></td>
<td>Enables you to save the data back to the Strategic Finance provider.</td>
</tr>
<tr>
<td>Tax Valuation</td>
<td></td>
<td>Enables you to configure and enter data for tax refund calculations, and use of three Strategic Finance valuation methods.</td>
</tr>
<tr>
<td>Debt Scheduler</td>
<td></td>
<td>Enables you to capture and manage cash flow involved in debt investments, such as debt amortization, payments, interest, and interest rates.</td>
</tr>
<tr>
<td>Currency Translator</td>
<td></td>
<td>Currency Translator expresses the data in international currencies, while creating multinational financial models.</td>
</tr>
<tr>
<td>Reports</td>
<td>Free Style Reports</td>
<td>Enables you to customize the reports. You can create custom reports to meet other needs.</td>
</tr>
<tr>
<td></td>
<td>Report List</td>
<td>Enables you to view the list of available reports.</td>
</tr>
<tr>
<td></td>
<td>Insert</td>
<td>Enables you to insert the following options: Account, Text Row, Text Column, and Sheet into your spreadsheet.</td>
</tr>
</tbody>
</table>

**Specifying File Summary Data Displayed in Reports**

**Summary Information** enables you to specify basic information about files such as author, company, SIC code, currency, and global assumption data, that are used displayed reports.

To view or set summary information:

1. **From the File grouping label, click the Summary Information icon.**
2. **Select the Summary Information tab.**
3. **Most inputs are self explanatory, but notice the following:**
   - **Comments**
     Enter additional information about the analysis.
   - **SIC Code**
     The company SIC (industry classification) code that is displayed in reports.
   - **Group ID**
     The group performing the analysis, such as “Marketing.”
● Default Currency:
  ○ Units—
    Default currency units: Ones, thousands, millions, billions or trillions. All data, unless otherwise specified, is entered and displayed in the default units. Displayed on reports.
  ○ Name
    Default currency name; for example: dollars, pounds, or yen. Displayed on reports.

● Global Assumptions—Provide the path to the global assumptions file updating the current file. When you click OK, the system links the current file with the global assumptions file, asking if it should update. Delete the file name, and the system removes the link.

4 Click OK.

Viewing Server Information

Summary Information—Server Information displays information the server and database connection.

➢ To view or set the Server information:
1 From the File grouping label, click Summary Information icon.
2 Select the Server Information tab.
3 Most inputs are disabled and self-explanatory, but notice the following:
   Server Details:
   ● Name
     The name of the Strategic Finance server.
   ● Serial #
     The server serial code is displayed.

Database Details:
Name
The name of the database is displayed; on which the Strategic Finance server is running.

Entity Details:
● Name
  The entity name is displayed.
● ID
  The entity ID is displayed.

4 Click OK.
Using Offline Option

Using offline mode, you are able to access and maintain the local version of the entity. Even, if the network fails, you are able to access the data effectively.

**Note:** In Strategic Finance Smart View 11.1.2.2. 000 Release, you are not able to perform offline options for consolidations structures.

To take entities offline:

1. In Excel, connect to the Strategic Finance data source that contains the entities you want to take offline.
2. Either from the **Shared Connections** or **Private Connections** pane, select **Take Offline** at bottom right.
3. The **Take Offline** Wizard is displayed.
4. Expand and select the entities from the available list that you want to be taken offline and then select **Next**.
5. Click **Finish** to create a local version of the entity.
Creating and Managing Model Files

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About Model Files and Templates

Create Strategic Finance models, also called entities, using templates that are financial model frameworks that contain predefined reporting and modeling standards. Templates enable you to analyze and consolidate business units and to model industry formats and you can password protect templates to prevent modifications. Entities are .alc files and templates are .alt files.

Oracle recommends using the default HSF Standard.alt template to create models. The first step in creating models is to use the Time Period Setup Wizard to define your time structures that form the duration of the model. This includes selecting the lowest input level (weeks or months), and determining how to calculate aggregate periods (e.g. quarters, halves and years).

Converting Templates

If you upgraded to this release, you must convert your templates.
To convert templates:

1. Open a template in the Time Periods Setup Wizard.
   - Specify .alt to list all templates.
2. Select File, then Save As to save updated templates.
3. Select Save Account Structure Only, and click OK.
4. Close the template and proceed to the Initial Time Period Wizard.

Creating and Opening Files

To create or open files, perform a task:

- To create a file, click New, then click Entity, and then define the period of time for the model.
- To open an existing file:
  - Click Open.
  - Navigate to the appropriate directory, select the file, and then click Open.

Defining the Model Duration

Before the wizard divides time structures into weeks or months, select the number of years and historical years in the model. After you complete the wizard, the time structure is generated and applied to the model.

To specify the model duration:

1. In Total number of years in model, enter the number of years in the model, including previous and forecasted years.
2. In Number of historical years in model, enter the number of previous years to include in the model. Specify at least one year.
3. Click Next.
   - See “Specifying the Smallest Period of Time” on page 44.

Specifying the Smallest Period of Time

After the number of years is defined, the Initial Time Period Setup Wizard divides years into months or weeks. Selecting “Months” or “Weeks” defines the smallest native period in the model, which helps to construct the calendar for that model.

Caution! Once specified, you cannot change the type of calendar that are used by an entity.
To define the smallest period of time:

1 Select an option:
   - Weeks—Enter data by week. Monthly aggregates are calculated.
   - Months—Enter data by month. No weekly data exists.

2 Click Next and see the appropriate topic:
   - For Weeks, see “Handling Extra Days ” on page 45.
   - For Months, see “Creating Monthly Time Periods” on page 45.

Creating Monthly Time Periods

To create monthly time periods:

1 Select an option:
   - Calendar length—Use the standard number of days in months.
     For example, January has 31 days. February has 28 in most years, but 29 in leap years.
     A year has 365 or 366 days. Quarters and halves are calculated based on the aggregate months,
     so quarters and halves will not have equal numbers of days.
   - Equal length—Have months consist of 30 days.
     Calculated quarters and halves will have equal numbers of days. Years have 360 days.

2 In First fiscal year in the entity ends in, define the fiscal year:
   - Month — Enter the last month of the fiscal year.
   - Year — Enter the first fiscal year.

3 Click Next.
   See “Extended Time Period Options” on page 48.

Handling Extra Days

If you select Weeks, you must define how weeks aggregate, as they do not divide evenly into months, quarters and years.

To handle extra days:

1 Select an option:
   - Adding a 53rd week as needed—Adds extra weeks as needed
   - Ignoring them—Discards extra days. Years contain 52 weeks/364 days.

2 Click Next.
   See“Specify the Number of Months in a Year” on page 46.
Specify the Number of Months in a Year

With 52-week years, you must define how months add to a year.

To select the number of months in a year:

1. **Select an option:**
   - **12 Months** — Use 13 weeks per quarter. Months have an unequal number of weeks.
   - **13 Months** — Use a 13–month year in which months contain the same number of weeks, and you specify the quarters that contain extra months.

2. **Perform a task:**
   - Click Next and see “Specifying the End of a 12 or 13 Month Fiscal Year” on page 46 if you selected:
     - Ignoring them
     - 12 Months
   - Click Next and see “Specifying the End of a 12 or 13 Month Fiscal Year” on page 46 if you selected:
     - Ignoring them
     - 13 Months
   - Click Next and see “Specifying the End of a 12 or 13 Month Fiscal Year” on page 46 if you selected:
     - Adding a 53rd week as needed
     - 12 Months or 13 Months

Specifying the End of a 12 or 13 Month Fiscal Year

To set the end of a 12 month year:

1. **Under First fiscal year in the entity ends in, select:**
   - **Month** — Enter the last month of the fiscal year.
   - **Year** — Enter the first fiscal year.

2. **Click Next.**

   See “Assigning Weeks to Months” on page 47.

To set the end of a 13 month year:

1. **Under First fiscal year in the entity ends in, define the time period ending the year:**
   - **Week** — Enter the number of the first week.
   - **Year** — Enter the first fiscal year.

2. **Click Next.**
Specifying the End of a 53 Week Fiscal Year

In a 53-week year, you must define the last day of the fiscal year, and the month and year in which the day occurs. This is used to calculate the leap year. Every year has 364 days, but the leap-week year has 371 days.

To set fiscal year end:

1. In Day of the Week, select the day of the week of the last day of the first fiscal year.

2. Indicate if the first fiscal year ends on the last day of the week (in a specific month) or on a day closest to the end of that month:
   - Last occurring in the month of — The first year ends on the last day of a month and year you choose. For example, if the year ends on Tuesday December 26, 2008, select Tuesday, Last occurring in the month of December for 2008.
   - Closest to the end of — The first year ends of the day of the month closest to its end. For example, selecting Tuesday, Closest to the end of: December 2007, ends the year January 2, 2008.

   Required: Indicate a time:
   - In Month, select the month in which the first fiscal year ends or the month closest to the end.
   - In Year, select the first fiscal year.

3. Perform one:
   - Click Next, see “Assigning Weeks to Months” on page 47 if you selected 12 Months.
   - Click Next, see “Assigning Months to Quarters” on page 48 if you selected 13 Months.

Assigning Weeks to Months

In 12-Month years, months contain 4 or 5 weeks. This means the year contains at least 52 weeks. Each quarter contains 13 weeks that are divided into two “4 week” months and one “5 week” month. To use this configuration, define the month that contains the 5th week.

To define the 5th week:

1. From Which month in each quarter will contain five weeks, indicate when the 5th week occurs. For example, if the week happens in the third month of the quarter, select The Third Month. To add the week using the same rule that assigns weeks to years, select Assign the extra week to a month using the same rule that’s used to assign weeks to years.

2. Click Next.

   See “Extended Time Period Options” on page 48.
Assigning Months to Quarters

A 13-month year has months that contain the same number of weeks, but it does not have an equal number of months in a quarter. In 13-month years, you must define which quarter contains the extra month.

1. To assign months to quarters:
   1. Under Which quarter will contain four months indicate the quarter to contain the four months.
   2. Click Next.

See “Extended Time Period Options” on page 48.

Extended Time Period Options

1. To complete the Time Period Setup Wizard:
   1. Click Extended Setup, and select:
      - Deal Periods — Create deal periods in which the Balanced Sheet is re-levered by the absence of time lapses.
      - Actual Periods — Define the historic time period
   2. Click Finish.

Adding Trailing Periods

1. To add trailing time periods:
   1. In Smart View, select Strategic Planning.
   2. In Smart View Connections, select HSF Server, and then select the database.
   3. Expand Entity Structures, select an entity, and then open or check the entity out.
   4. Click Time, select Settings, and then select Time Specific.
   5. In the Properties area of the dialog box that is displayed, select Trailing Properties.
   6. In the left-hand portion of the dialog, select desired period of time, such as the month and year.
   7. In the Properties area to the right, enter the number of periods in Add.
   8. From Add, select Add.
   9. Click Apply, and then Finish.

Calculating the Days in a Year

You can determine the number of days in a year as follows:
Using @yearlen = Year length
Using @annualize = Account *

Working With Model and Template Files

Saving Files
You can only save files locally by selecting File, then Save As.

Working With Templates
When creating financial models, you select a template as the basis. Templates contain predefined financial, reporting, and modeling standards. You can customize templates to meet analysis and reporting needs. After you customize templates, use passwords to restrict modifications and ensure standardization.

Saving Files as Templates
You can save any Strategic Finance file as a template to use the modeling standards it contains in your own models.

➢ To save files as templates:

1. Click , select the file, and then click Open.
2. In Save as Type, select Template Files (*.alt).
3. In File Name, enter a name.
4. Click Save.
5. Select the financial model information from the file the template should contain:
   - Financial Accounts Only. Use only the accounts.
   - Financial Accounts and Time Periods. Use the account and time structures.
   - Financial Accounts, Time, and Data. Use the whole model.
6. Optional: If you did not enter a name for the template in Save As, enter a name in Template Name.
7. Click OK.

Note: If using Currency Translator, the exchange accounts are added to the forecast are deleted when you select the Financial Accounts Only or Financial Accounts and Time Period options. To save them with the file, select Financial Accounts, Time Periods and Data.
Customizing Templates

In templates, you can customize financial accounts, forecast methods, time periods and input values. You may want to customize account descriptions, specify input, print and group settings, and add subaccounts for additional detail. Template also specify forecast methods, which you change to reflect user preferences and standard company or industry practice. Change time periods to represent your company’s standards. There may even be cases where you want to save financial data values in a template.

To customize templates:

1. Click , select the template file, and then click Open.
2. Customize financial accounts, time periods, and/or input values.
3. Select File then Save As.
4. In Save As, enter a filename followed by .alt.
5. Click OK.
6. In Save Template , select components.
   Financial accounts are included. You can include time periods or time periods and data. Select Financial Accounts Only to include accounts only.
7. Click OK.
Working With Entities in Smart View

In This Chapter

Managing Entities ................................................................. 51

The Strategic Finance Server is a central repository for storing and sharing data. A server contains databases which contain entities. Entities are financial models you can check out and save to local hard drives as files. They may be created as local files (*.alc), checked-in to the Strategic Finance Server as entities (*.als).

Templates (*.alt) are also stored on the server. Templates are empty financial models for creating entities.

Managing Entities

Subtopics

- Creating New Entities
- Checking In Entities
- Deleting Entities from Servers
- Moving Entities within the Servers

Entities are Strategic Finance files stored on network servers, providing centralized data access for multiple users.

Creating New Entities

In Strategic Finance Smart View you can create new entities. The new entities can be based on templates or entities in the database.

To create new entities:

1. Select the Entity Structure from the Smart View panel, and then right-click on the Entity Structure folder, and then select New Entity.

   Create New Entity on Server dialog is displayed.

2. In Copy Model From, you can select either one of these options:
Entity in Database—The new entity can be created as a copy of an entity that already exists in the database.

Local Entity—Local Strategic Finance (.alc) files can be checked in to servers to be stored as entities.

3 In Source Entity, you can browse and select an entity.

4 In New Entity Name, enter a unique name identifying the entity in the server.

Note: In case of an error, an exclamation point icon is displayed. In the tool tip, you can view the error message by resting the cursor over the icon. For example: If the entity name is already exist, then the message displays “The name is already in use”.

5 Optional: Select Keep Source Entity’s Data.
   - Selected—stores the file and all data.
   - Deselected—stores only account and time period structure.

6 Optional: Select Place At Root to store entities at the root level. Used for:
   - Standalone entities
   - Entity structure parents

Note: Deselect Place At Root to store entities as children, and select parents in New Entity will be a Child of the Selected Entity.

7 Click OK.

“Entity successfully created and place at the root” is displayed. Click OK.

Checking In Entities

When you check in entities, the server releases the locks and the entities available to others users. Disabled if no entities are checked out.

➢ To close entities:

1 Select an entity from the Smart View panel and then right click on the entity, and then select Open-Check Out.

2 From the File grouping label, click Entity, and then select Check-In.

   Or

   On closing the sheet, the Close Entity dialog is displayed, and then select one of the following option:
   - Check-in—Enables you to check-in the file to the server.
   - Release lock—Enables you to release the lock. If the entity is locked or unable to open by other users.
   - Close—Enables you to close the excel sheet, without any changes in the database.
Optional: Enter comments in the Comment column, and then click OK.

“Check-in succeeded” is displayed. Click OK.

Deleting Entities from Servers

To delete entities from servers, you must own the entity, or have Delete Entity access defined in the Strategic Finance Administrator.

To delete entities from servers:
1. Select an entity from the Smart View panel.
2. Right-click on the entity, and then select Edit Entity Structures.
3. In Entity Structures, select an entity, and then right-click on the entity, and then select Delete Entity from Database.

   An information dialog is displayed, and then click Yes.

Moving Entities within the Servers

You can move entities within entity structures.

To move entities within entity structures:
1. Select Server, then Entity Structures.
2. Select an entity to be the parent of the new entity.
3. Right-click on the entity, and then select Edit Entity Structure.
4. On the Entity Tree dialog, right-click on the entity, and then select Move Entity From Root, and then select either one of these option:
   - To Sibling
   - To Child
5. On the Move Entity dialog, select an entity that needs to be moved within the entity structures, and then click OK.

   An entity tree is displayed, and then click Close.
About Financial Accounts

The Accounts spreadsheet displays accounts in financial models. You enter data, company and account descriptions, scenario names, time period headings, account notes, and subaccounts on the Accounts spreadsheet. Financial data consists of historical results and forecast assumptions.

With subaccounts, you can create additional accounts aggregating into total accounts, and user-defined accounts. Account groups are used to group accounts together to make them easy to find and display when doing data entry.

Note: Cells containing global assumptions data, Accounts cell borders are in red.

Structure

Subtopics

- Input Accounts and Calculated Accounts
- Account Numbering

Input Accounts and Calculated Accounts

Strategic Finance accounts are Input or Calculated accounts. Input accounts are for manually entering data. Calculated accounts compute values with formulas using output from other
accounts. You cannot convert accounts from one type to another except for User-defined Accounts.

- “Input Accounts” on page 56
- “Calculated Accounts” on page 56

**Input Accounts**

You manually enter financial data into Input accounts for historical and forecast periods. In forecast periods, use forecast methods or Freeform formulas to calculate values. Forecast methods dictate input data format in forecast periods. For example, if Sales uses the Growth Rate forecast method, you enter input data as a growth rate into the forecast periods.

**Calculated Accounts**

You cannot alter formulas in calculated accounts—they are fixed to retain accounting integrity. For example, the formula for the calculated account Net Income is modeled into Strategic Finance; you can not change it. Net Income is calculated using data entered into other Income Statement accounts.

**Account Numbering**

Strategic Finance account numbers have three decimal-separated segments, separated by decimal points or periods:

- main account number (vxxxx.xx.xxxx)
- related account number (vxxxx.xx.xxxx)
- subaccount number (vxxxx.xx.xxxx)

See Table 2 on page 56:

<table>
<thead>
<tr>
<th>Account Type</th>
<th>Account Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>main account</td>
<td>1000.00.00</td>
<td>Intangibles</td>
</tr>
<tr>
<td>related account</td>
<td>1000.01.00</td>
<td>Additions to Intangibles</td>
</tr>
<tr>
<td>related account</td>
<td>1000.03.00</td>
<td>Amortization of Intangibles</td>
</tr>
</tbody>
</table>

Strategic Finance account structure groups all main accounts and related accounts together on the Accounts Spreadsheet. For example, the table below shows v2410.00, the main account for Intangibles, plus the .01 and .03 related accounts that are part of v2410:
Main Account Numbers

These are the main accounts in typical Strategic Finance models:

<table>
<thead>
<tr>
<th>Main Account Number</th>
<th>Financial Account Grouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>300.00.000 - 395.00.000</td>
<td>Memo Accounts</td>
</tr>
<tr>
<td></td>
<td>User Defined Accounts</td>
</tr>
<tr>
<td>1000.00.000 - 1999.09.999</td>
<td>Income Statement Accounts</td>
</tr>
<tr>
<td>2000.00.000 - 2999.09.999</td>
<td>Balance Sheet and Related Accounts</td>
</tr>
<tr>
<td>3000.00.000 - 3999.09.999</td>
<td>Funds Flow Statement and Tax Accounts</td>
</tr>
<tr>
<td>4000.00.000 - 4999.09.999</td>
<td>Cash Flow Accounts</td>
</tr>
<tr>
<td>5000.00.000 - 5999.09.999</td>
<td>Valuation Accounts</td>
</tr>
<tr>
<td>6000.00.000 - 7060.00.000</td>
<td>Financial Ratios, Custom Ratios and Debt Covenant Accounts.</td>
</tr>
<tr>
<td></td>
<td>User Defined Accounts</td>
</tr>
</tbody>
</table>

Note: Income Statement expense accounts such as Amortization and Interest Income/Expense, having related Balance Sheet accounts such as Intangibles, Debt and Funding accounts, are not situated in the Income Statement grouping, but in the Balance Sheet grouping, with their related Balance Sheet accounts.

Related Account Numbers

Most Balance Sheet accounts have related accounts. They share a main account number, but are individually identified by the middle segment (vxxxx.xx.xxxx). Some Tax, Valuation, and Covenant accounts have related accounts.

<table>
<thead>
<tr>
<th>Suffix</th>
<th>Type of Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>vxxxx.00.xxx</td>
<td>Main account (usually Balance Sheet)</td>
</tr>
<tr>
<td>vxxxx.01.xxx</td>
<td>Related Funds Flow account, covenant actual account, tax and valuation</td>
</tr>
<tr>
<td>vxxxx.02.xxx</td>
<td>Acquisition accounts and covenant result accounts</td>
</tr>
<tr>
<td>Suffix</td>
<td>Type of Account</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>vxxxx.03.xxx</td>
<td>Retirement, amortization and non-cash interest accounts</td>
</tr>
<tr>
<td>vxxxx.04.xxx</td>
<td>Tax, valuation and currency translation accounts</td>
</tr>
<tr>
<td>vxxxx.05.xxx</td>
<td>Interest accounts and dividends from subsidiaries</td>
</tr>
<tr>
<td>vxxxx.06.xxx</td>
<td>Minimum accounts. Funding Options only.</td>
</tr>
<tr>
<td>vxxxx.07.xxx</td>
<td>Maximum accounts. Funding Options only.</td>
</tr>
<tr>
<td>vxxxx.08.xxx</td>
<td>Increase in Maximum accounts. Funding Options only.</td>
</tr>
<tr>
<td>vxxxx.09.xxx</td>
<td>Balance Correction accounts. Funding Options only.</td>
</tr>
<tr>
<td>vxxxx.11.xxx</td>
<td>Issuance of non-acquisition debt. If you enter a value for the principal and</td>
</tr>
<tr>
<td></td>
<td>the debt is non-acquisition related, the value in this account is added to</td>
</tr>
<tr>
<td></td>
<td>debt in the main account. Funding Options only.</td>
</tr>
<tr>
<td>vxxxx.13.xxx</td>
<td>Total issuances. The sum of all acquisition-related and non-acquisition-related</td>
</tr>
<tr>
<td></td>
<td>debt issuances. Funding Options only.</td>
</tr>
<tr>
<td>vxxxx.14.xxx</td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.15.xxx</td>
<td>Payments actually made. These may deviate from scheduled payments in the</td>
</tr>
<tr>
<td></td>
<td>form of recapture, funding options, or if they run below minimum debt.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.17.xxx</td>
<td>Maximum excess cash flow that may potentially be used for recaptured payments.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.18.xxx</td>
<td>Actual amount of recaptured cash paid to debt. Constrained by vxxxx.17.xxx.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.19.xxx</td>
<td>Total payments you can control in a given period.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.35.xxx</td>
<td>Non-cash adjustment for write-down to assets</td>
</tr>
<tr>
<td>vxxxx.50.xxx</td>
<td>Cash interest accrued.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>Suffix</td>
<td>Type of Account</td>
</tr>
<tr>
<td>------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>vxxxx.51.xxx</td>
<td>Cash interest expense.</td>
</tr>
<tr>
<td></td>
<td>In a given period, the account value should be principal times rate, which change time.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.52.xxx</td>
<td>Cash interest paid.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.55.xxx</td>
<td>Cash interest entered.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.56.xxx</td>
<td>Interest rate after repricing.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.60.xxx</td>
<td>PIK interest accrued.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.61.xxx</td>
<td>PIK interest expense.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.62.xxx</td>
<td>PIK interest paid.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.65.xxx</td>
<td>PIK interest rate.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.70.xxx</td>
<td>Unamortized issue cost.</td>
</tr>
<tr>
<td></td>
<td>Treated as a non-current asset.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.71.xxx</td>
<td>Change in unamortized issue cost.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.75.xxx</td>
<td>Amortization of issue cost.</td>
</tr>
<tr>
<td></td>
<td>A non-cash item. You can control where this appears on an income statement.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.80.xxx</td>
<td>Unamortized premium or discount.</td>
</tr>
<tr>
<td></td>
<td>When bonds are issued at more of less than face value, the issue must record a premium or discount.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.81.xxx</td>
<td>Change in unamortized premium or discount.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.85.xxx</td>
<td>How the premium or discount is amortized.</td>
</tr>
<tr>
<td></td>
<td>Debt Schedules only.</td>
</tr>
<tr>
<td>Suffix</td>
<td>Type of Account</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------</td>
</tr>
<tr>
<td>vxxxx.97.xxx</td>
<td>Current portion of long-term debt. The current portion is the amount of debt to be paid within the next 12 months. Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.98.xxx</td>
<td>Long-term portion of long-term debt. The long-term portion is the total minus the current portion. A reporting-only item. Debt Schedules only.</td>
</tr>
<tr>
<td>vxxxx.99.xxx</td>
<td>Used to trigger the calculation of an account with a debt schedule. Debt Schedules only.</td>
</tr>
</tbody>
</table>

**Balance Sheet Related Accounts**

Accounts relating to the balance sheet:
- “Funds Flow Accounts” on page 60
- “Non-Cash Adjustment Accounts” on page 60
- “Interest and Funding Accounts” on page 60

**Funds Flow Accounts**

All Balance Sheet accounts.

<table>
<thead>
<tr>
<th>vxxxx.01.xxx</th>
</tr>
</thead>
</table>
- Increase in Accounts Receivable
- Additions to Land

**Non-Cash Adjustment Accounts**

Selected Balance Sheet accounts only.

<table>
<thead>
<tr>
<th>vxxxx.03.xxx</th>
</tr>
</thead>
</table>
- Fixed Asset Retirements
- Amortization
- Non-Cash Interest

**Interest and Funding Accounts**

Interest bearing accounts only.

<table>
<thead>
<tr>
<th>vxxxx.05.xxx and vxxxx.06.xxx</th>
</tr>
</thead>
</table>
- Interest on Marketable Securities
- Minimum Balance on Long Term Debt
Funds Flow

All balance sheet accounts have at least one related account — Funds Flow (.01).

Funds Flow accounts measures change in the related Balance Sheet account from one period to the next. Funds Flow accounts drive the Cash Flow Reports and the Funds Flow Statement.

Related Funds Flow accounts are automatically calculated in historical periods by subtracting the Balance Sheet amount in the prior period from the current period.

<table>
<thead>
<tr>
<th>Account</th>
<th>Activity</th>
<th>Value Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>v2020.00.000</td>
<td>Accounts Receivable (current)</td>
<td>$675</td>
</tr>
<tr>
<td>v2020.00.000</td>
<td>Accounts Receivable (prior)</td>
<td>minus (-) 525</td>
</tr>
<tr>
<td>v2020.01.000</td>
<td>Change in Accounts Receivable</td>
<td>- $150</td>
</tr>
</tbody>
</table>

In forecast periods, you may forecast the ending Balance Sheet amount (.0 account) or the Funds Flow amount (.1 account). Whichever you select, the other is calculated based on the forecasted account’s output.

Adjustment Accounts

Some Balance Sheet accounts contain .03 adjustment accounts for increasing or decreasing the primary balance sheet account value by non-cash amounts (e.g., Amortization of Intangibles decreases the Intangibles account balance).

Non-cash adjustment accounts in Strategic Finance include amortization and retirement accounts. For example, Intangibles (2410.00.000) is a Balance Sheet account containing a related Funds Flow account, Additions to Intangibles (2410.01.000), and an adjustment account, Amortization of Intangibles (2410.03.000). When forecasting the Additions to Intangibles, the Intangibles balance increases in the forecast periods, and the balance for Intangibles decreases in the forecast periods by the amount in the adjustment account, Amortization of Intangibles.

<table>
<thead>
<tr>
<th>Intangibles</th>
<th>v2410.00</th>
<th>main account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additions to Intangibles</td>
<td>v2410.01</td>
<td>related Funds Flow account</td>
</tr>
<tr>
<td>Amortization of Intangibles</td>
<td>v2410.03</td>
<td>related Non-Cash adjustment</td>
</tr>
</tbody>
</table>

In some templates, asset and liability accounts have related “Acquired” cash flow accounts (v2XXX.02), representing balance sheet account changes caused by special investing transactions (e.g. acquisition or mergers.)

Interest / Funding

Interest-bearing and funding accounts have related accounts for interest associated with Balance Sheet account and funding minimums.
### Entering Account Data

#### Subtopics

- Changing Account Names
- Data Formats
- Entering ‘#’ or ‘##’ Overrides
- Overriding Missing Cell Values With Zero
- Submitting Data
- Finding and Replacing Data
- Protecting Account Input Status
- Changing the Historical Averages of Accounts

You enter account data (historical values, project forecast assumptions, and estimate valuation assumptions) in the Accounts spreadsheet or reports. You customize financial accounts to match financial statements you are analyzing, add account detail, change the order in which accounts display, and select accounts for display in reports. To enter negative values, start the value with a minus sign (-).

#### Changing Account Names

In Strategic Finance, financial accounts have standard names. You can modify them to reflect descriptions in your analysis by entering names over those in the Accounts spreadsheet. Name changes appear in all reports.

#### Data Formats

Strategic Finance reliably stores and manipulates numbers containing up to 16 significant digits, before and/or after the decimal point. You can change the number of decimal places displayed.

#### Entering ‘#’ or ‘##’ Overrides

On the Strategic Finance spreadsheet, you can enter ‘#’ or ‘##’ into a cell to override current values.
Overriding Missing Cell Values With Zero

To override missing cell values with zeros during overrides:

1. In Oracle Smart View for Office ensure that you are on the Smart View tab.
2. Click and then select Data options.
3. From #NoData/Missing Label, select #NumericZero.
4. Select Submit Zero, and then click OK.

Submitting Data

From the Data grouping label, click Submit Data to save the data back to the Strategic Finance provider.

Note: You can click Calculate to save the data.

Note: Data are not permanently saved until the entities are checked-in to the database.

Finding and Replacing Data

To use Find and Replace:

1. From any Strategic Finance view, select the Accounts view.
2. Select Edit, and then Find & Replace.
3. In Search For text, enter a term, which can be words, numbers, or a combination of words and numbers.
4. Select one:
   - Find—Locates the term.
   - Replace With—Locates and replaces the term with another.
5. Under Search, select:
   - All—Search the entire model.
   - Range—Search part of the model.
6. Optional: Select Match case to make the action case-sensitive.
7. Click OK.
8. Perform an action:
Protecting Account Input Status

You can change the input status of accounts. Turn OFF accounts, which are not in use.

Note: To maintain accounting integrity, Strategic Finance does not enable you to turn 6 input accounts off. These accounts are on: Gain on Sale of Assets (1170), Unrealized Tax Benefit of Losses (1620), Excess Marketable Securities (2015), L-T Debt: Excess (2690), Unrealized Benefit of Tax Loss (3242), and Proceeds from Asset Sales (4000).

To turn OFF (which are not in use) or turn ON the account input status:

1. From the Strategic Finance spreadsheet, select Account Input Status.
2. Select the Accounts tab.
3. Change the input status of accounts:
   - Input enabled
     To enable input, select accounts in the list.
   - Turn OFF accounts
     You can change the input status of an account by not selecting the accounts from the list. However, by doing this, you are can turn OFF (which are not in use).
4. Optional: To find accounts, enter text or numbers to search.
5. Optional: To view the selected accounts list, select an option under Show selected accounts only.
6. Optional: To change historical averages, see “Changing the Historical Averages of Accounts” on page 64.
7. Click OK.

Changing the Historical Averages of Accounts

To change historical averages of accounts:

1. From the Strategic Finance spreadsheet, select Account Input Status.
2. Select the Historical Average tab.
3. In the Accounts column, locate the account row.
4. In the Historical Average column, select an option for the account row:
   - Default
The default historical average is taken from the **Years for Historical Average** setting in **Time Periods**. Applied to all accounts in the model, unless overwritten here.

- **All**
  Includes all time periods in the model in the historical average.

- **Any number**
  There is a number for each time period in the model. Select one, and the historical average includes periods from the beginning up to that number.

5  **Click OK.**

### Working with Subaccounts

**Subtopics**
- Adding and Maintaining Subaccounts
- Deleting Subaccounts
- Modifying Subaccount Descriptions
- Creating Subtotals
- Autonumbering Subaccounts
- Renumbering Single Subaccounts
- Renumbering Multiple Subaccounts
- Renaming Related Accounts
- Items Transferring to Renumbered Subaccounts

You create subaccounts for additional input detail in main accounts. For example, you can subaccount SG & A Expense (1080) to display two different expense categories: SG & A Expenses (1080.00.010) and Research & Development (1080.00.020). Subaccounts inherit attributes of main accounts in both historical and forecast periods.

### Adding and Maintaining Subaccounts

When you divide Income Statement accounts, you produce one subaccount. When subaccounting Balance Sheet accounts (2000 level), related accounts are automatically subaccounted.

Subaccounts add detail to the standard financial accounts. Each subaccount appears in the Accounts spreadsheet and in respective financial statements. When you subaccount a financial account that has related accounts, all of the related accounts are subaccounted automatically.

1. From the Account grouping label, click **Subaccounts**.

2. In **Main Account**, select a main account.

   Lists all main accounts available for subaccounting. You can find accounts by entering the first few characters of the name in **Main Account** to sort.
3 In Subaccount, enter a subaccount number.

Enter the number or click the arrows to select one. You can create up to 999 subaccounts to main accounts.

4 In Subaccount, enter a subaccount name or description.

5 Enter the subaccount descriptions and numbers, and then click Add.

6 Optional: Select Required Element to define the subaccount as a required element.

Required element subaccounts cannot be deleted or renumbered.
- Required element subaccounts roll up all subaccounts into a subtotal.
- You cannot add Subaccounts above the highest required element.

Note: The Strategic Finance Administrator may give users special access permissions to change required elements.

Note: You cannot add subaccounts to calculated accounts. You can create additional detail for calculated accounts. For example, to add accounts displaying details for the calculated account, insert a User Defined account containing formulas calculating the account into the Income Statement.

Deleting Subaccounts

You can delete subaccounts.

To delete subaccounts:

1 From the Account grouping label, and then select Subaccounts.

2 In Main Account, select an account.

3 In Subaccounts, select the name the subaccount.

4 Click Delete.

Modifying Subaccount Descriptions

You can edit subaccount descriptions.

To modify subaccount descriptions:

1 From the Account grouping label, and then select Subaccounts.

2 In Main Account, select a main account.

3 In All Subaccounts, select a subaccount.

4 Double click the subaccount name and change.

5 Press Enter.
Creating Subtotals

The Subaccount dialog displays the subaccount to be subtotalled. Defining a subaccount as a Subtotal turns the account into a calculated account.

To create a subtotal:
1. From the Account grouping label, and then select Subaccounts.
2. In Subaccount Options, select a subaccount, and then click the Subtotal tab.
3. Select subtotal options:
   - Subtotal Starting after Previous or Main Account—Adds the subaccounts listed above it in All Subaccounts until reaching another subtotal or main account.
   - Subtotal Starting at Subaccount—Designates a subaccount number to being the subtotal. Enter the subaccount number in the input box.
4. Click Apply.

Autonumbering Subaccounts

Use Autonumber to create multiple subaccounts in a batch. Select a starting point, the number of subaccounts to create, and an increment to define a pattern to use in creating and numbering the subaccounts. You can apply the pattern to many accounts through a multi-select list box.

When you create accounts, the following applies:
- The first subaccount inherits rules from the main account.
- You may have subaccounts outside autonumber patterns. The pattern is not saved, so you can add other subaccounts later.
- Autonumber applies for subaccounts of a main account. For example, if you create accounts using autonumber, and have subaccounts, subaccounts are created if the pattern is valid.

To autonumber subaccounts:
1. From the Account grouping label, and then select Subaccounts.
2. In Subaccount Options, select a subaccount, and then click Autonumber tab.
3. Under Apply Pattern to, select the main account to subaccount.
   In Search for, enter the accounts details to search.
4. Under Subaccount Pattern, define the numbering system:
   - In Number of Subaccounts, enter a number of subaccounts to create.
   - In Beginning Number, enter the starting number.
   - In Increment, enter the increment between successive numbers.
5. Optional: select Show selected accounts.
   This option enables you to display the accounts selected from the available subaccounts list.
6 Click Run.

**Autonumber** validates for two potential problems:

- It ensures that subaccount patterns do not exceed 999.
- It checks to see whether subaccounts exist using those numbers. For example, if subaccount 026 exists, and you create a pattern beginning with subaccount 006, incrementing by 5 for up to 10 subaccounts, subaccount 026 can be overwritten. Because this validation may bring up numerous accounts, they are written to a log file.

7 Click **OK**.

Doing so closes **Autonumber** and returns you to **Subaccount Options**. The patterns displayed are not saved.

### Renumbering Single Subaccounts

Use **Renumber Subaccount** to change a subaccount number and all of its references in the model, freeing previous numbers for reuse.

- To renumber one subaccount:
  1. From the Account grouping label, and then select **Subaccounts**.
  2. In **Subaccount Options**, select a subaccount and select the **Renumber** tab.
  3. Select **Single**.
  4. **Current Main Account** (read only) lists the current main account name.
  5. Under **Current Subaccount Number** select a subaccount to renumber.
  6. Under **New Subaccount Number**, enter a subaccount number. Use numeric characters only.

Optional: To renumber multiple accounts, see “Renumbering Multiple Subaccounts” on page 68.

8 Click **Apply** to make the changes.

Strategic Finance validates that the subaccount number is unused.

9 Click **OK**.

### Renumbering Multiple Subaccounts

Use the Renumber Subaccount—Multiple tab to renumber many accounts simultaneously.

- To renumber multiple subaccounts:
  1. From the Account grouping label, and then select **Subaccounts**.
  2. In **Subaccount Options**, select a subaccount, and then select **Renumber** tab.
  3. Select **Multiple**.

**Current Main Account** (read only) lists the current main account name.
4 In **Starting Subaccount Number**, enter the first subaccount number in the range.

5 In **Ending Subaccount Number**, enter the last subaccount number in the range.
   This number must be higher than the starting subaccount number.

6 In **New Starting Subaccount Number**, enter a subaccount number.
   This is the starting number. For example, if you renumber subaccounts 1 through 5 and
   start at 7, Strategic Finance renumbers the subaccounts 7 through 11.

7 Click **Apply**.
   Strategic Finance validates that the subaccount number that is not in use. If one of the
   renumbered subaccount numbers is in use, the process fails. The original subaccount
   numbers remain.

8 Click **OK**.

**Renaming Related Accounts**

➢ To rename related accounts:

1 From the **Account** grouping label, click **Subaccounts**.

2 Perform an action:
   - In **Subaccount Options**, select a subaccount and select the **Rename** tab.
   - From the **Accounts** view, select an **Account**, and then **Rename Related Accounts**.

3 In **Find what**, enter an account name to rename.
   - Click **Find Next** to find the account.
   - **Match whole word only**—Looks for the exact word or phrase.
   - **Match case**—Makes the task case-sensitive.

4 In **Replace with**, enter an account name.

5 Perform an action:
   - Click **Replace** to replace the only account name currently shown.
   - Click **Replace All** to replace account name instances with the new name.
Many original subaccount attributes transfer to the new number, including: account descriptions, forecast methods input values, UDA attributes, custom settings (for example: group inclusion, input flag), funding options settings, scenarios, graphing, dimensions, and report placement.

**Account Description**

The original subaccount's description applies to the renumbered account.

**Forecast Method**

The original subaccount's forecast method and/or Freeform Formula transfers to the renumbered account. Other Freeform settings transfer to the renumbered subaccount, such as: the description of method, input as, units, use in history, and enable overrides.

**Input Values**

The original subaccount's Input values transfer to the renumbered subaccount.

**UDA Attributes**

If you are renumbering user-defined accounts, all attributes set in User Defined Accounts transfer to renumbered subaccounts. See “UDA Attributes” on page 70.

**Custom Settings**

Custom settings include group selections and account on/off status.
Funding Options
Funding option settings inherited by renumbered subaccounts include: instrument type (debt accounts only), zero based, no maximum, specify minimum, minimum change value, surplus, deficit, and funding order.

See “Using the Standard Funding Method” on page 113
or
See “Using the Target Capital Structure Funding Method” on page 114
Preferred Stock allocation also transfers to renumbered subaccounts.

Scenario
If the original subaccount is part of a scenario, the renumbered subaccount belongs to the same scenarios.

Graphing
If the original subaccount is a data point in a graph, the renumbered subaccount replaces it in that graph.

Dimensional Membership
Renumbered subaccounts inherit dimensions from the original accounts.

Reports
References to the original subaccount in reports update to reference the renumbered subaccount. The new subaccount number retains formatting such as bold, italics, font, number format, border, pattern, alignment, color, and so on.

Formula References
If the original subaccount number was used in formulas, all references to the original are updated for the renumbered subaccount.
Account Dependencies

Subtopics

- Using Analyze
- Using “Where Used”

Using Analyze

Analyze drills down from the account line or the output line on the Accounts spreadsheet to see how the value is calculated. The heading displays the entity name and current scenario as follows: Analyze <entity or file name>(<scenario name>)

To use Analyze:

1. From the Data grouping label, click Audit Trail.
2. Highlight an account or value.
3. Double-click the cell.

**Note:** By default, if you do not click New or Current button, and then double-click on the value within the cell. The information are displayed within the current dialog.

   If you click New or Current button, and then double-click on the value within the cell. The information are displayed in a new analyze dialog.

4. **Optional:** Click a toolbar button to analyze different account elements:
   - Forecast—Access Forecast Method—See “Specifying Basic Forecast Method Options” on page 90.
   - **Optional:** Click Back to revert the changes performed on the Analyze dialog box.
   - **Optional:** Click New/Current to view the data in a separate dialog box.
   - **Optional:** Click Close All to exit the Analyze dialog box.
   - **Optional:** To find accounts, click Find Accounts.

**Note:** When you drill down to Account Input, you can change historical and forecast values. Be sure to recalculate for input changes and save to retain the data.

**Note:** Valid values in conditional statements are highlighted.

5. Close the initial Analyze dialog box.
Using “Where Used”

Where Used is a forward audit trail, identifying the accounts that depend on other accounts. You select accounts and calculate all scenarios, and Where Used tracks the accounts using the selected accounts.

To use Where Used to identify account dependencies:
1. From the Accounts spreadsheet, select Accounts, and then Where Used.
2. Optional: To list only financial accounts in Available Accounts, select Show Accounts Only.
   If this option is not selected, informational accounts such as Company Name and Default Currency are listed.
3. In Available Accounts, select an account and click >>.
4. Optional: to limit the calculation to only the scenario currently selected in the model, select Calculate Current Scenario Only.
5. Click Run.
6. In Where Used, view dependent accounts.
7. Optional: To store the results as a .txt file, click Save.

Using User-Defined Accounts

Subtopics
- Using Memo Accounts
- Using Custom Ratio Accounts
- Using Debt Covenant Accounts

The three types of user-defined accounts add flexibility to your analysis:
- Memo Accounts—Create additional detail in the financial accounts. See “Using Memo Accounts” on page 73
- The Custom Ratio—Create additional ratios for your analysis. See “Using Custom Ratio Accounts” on page 75.
- Debt Covenant—Define measures within Custom Ratios testing against performance standards (debt covenants). See “Using Debt Covenant Accounts” on page 76.

Using Memo Accounts

Memo Accounts calculate and store data for formulas other accounts. There are 20,000 possible memo accounts in Strategic Finance—(300.00.000, 305.00.000... 395.00.000). You assign relationships between Memo Accounts and other accounts as needed—they initially have no account relationships.
For example, you could use two Memo Accounts to model annual sales based on a price vs. quantity relationship. You enter the price of the item in one Memo Account, and the quantity sold in the second. To see the result of this relationship, you create a Freeform Formula in the Sales Account (v1000) multiplying the two Memo Accounts.

Each of the 20 Memo Accounts can be subaccounted 999 times, for a total of 19,980 possible Memo Accounts containing additional account details necessary to complete your analysis.

Memo Accounts and their subaccounts both enable:

- Changing account descriptions
- Entering data
- Changing forecast methods
- Attaching account notes

You can turn the display of Memo Accounts on and off from Account Input Status. Memo accounts are not used in calculations on financial statements unless you reference them in a forecast method or historical formula.

To use Memo Accounts:

1. Select Accounts, and then User Defined Accounts.
2. In Select Account, select Memo.
3. Under Select Account options, select an account.
   
   To add Memo Accounts or change their names, do so from the Subaccounts dialog box.
4. Select the Output Type:
   - Currency
   - Items
   - Percent
   - Ratio
   
   Note: If you select Calculated in formula in all periods, all Output Types are available. If you select Input in history, the Output Types are limited to Currency and Items.

5. Optional: If the Output Type is Currency or Items, the account output values can be shown in a denomination other than the Default Currency Units.

   Override the default setting by selecting an Output Units option:
   - Ones
   - Tens
   - Thousands
   - Millions
   - billions
   - Trillions
6 Under Value, specify how to enter data values. For example, select Calculated in formula in all periods to input formulas.

7 Specify the Aggregate Period Value option:
   - Last interim period value (such as Balance Sheet)
   - Sum of interim periods (such as Income Statement)
   - Weighted average based on the financial account that you select from the account drop-down list. (such as Discount Rate)
   - None applies the formula in aggregate periods. (such as Ratios)

   Note: These rules also apply to the calculation of dimensional parents.

8 Select the Output Type:
   - Currency
   - Items
   - Percent
   - Ratio

   Note: If you select Calculated in formula in all periods, all Output Types are available. If you select Input in history, the Output Types are limited to Currency and Items.

9 Optional: If the Output Type is Currency or Items, the account output values can be shown in a denomination other than the Default Currency Units.

   Override the default setting by selecting an Output Units option:
   - Ones
   - Tens
   - Thousands
   - Millions
   - Billions
   - Trillions

10 Click OK.

Using Custom Ratio Accounts

Strategic Finance automatically calculates 34 ratios. You can also use 10 Custom Ratio accounts (6400.00.000 through 6445.00.000) for customized calculations. Use Custom Ratio accounts to enter formulas that are used to calculate your own ratios. Custom Ratio accounts can be subaccounted 999 times to create additional Custom Ratios.

The Financial Ratios report displays all ratios calculated in an analysis. Custom Ratio accounts are displayed at the bottom, enabling you to distinguish between ratios defined by Strategic Finance and your individual ratios.
Formulas that you can use to create Custom Ratios are similar to the Freeform Formula forecast method. You can use constant numbers or values from other accounts in Custom Ratio formulas. You can also use different functions in the formula.

To use Custom Ratio accounts:

1. From the Account grouping label, and then User Defined Accounts.
2. In User Defined Account, select Ratio.
3. From the drop-down list, select a ratio account.

   To add ratio accounts or change descriptions, access the Accounts view spreadsheet or Subaccount Options dialog box.

4. Select the Output Type:
   - Currency
   - Items
   - Percent
   - Ratio

5. Optional: If the Output Type is Currency or Items, the output value of the account can be shown in a denomination other than the Default Currency Units.
   
   Override the default setting by selecting an Output Units option.

6. In Value, select Calculated in formula in all periods to input formulas, using Accounts and Functions tabs.

7. Specify the Aggregate Period Value as option:
   - Last interim period value (such as Balance Sheet)
   - Sum of interim periods (such as Income Statement)
   - Weighted average based on the financial account you select from the account drop-down list. (such as Discount Rate)
   - None applies the formula in aggregate periods.

8. Click OK.

Using Debt Covenant Accounts

In Strategic Finance, you can establish measures testing an entity’s ability to meet performance standards. Use user-defined Debt Covenant accounts to enter your debt covenant requirements for testing entities.

Each of the five Debt Covenant accounts (v6500, v6505, v6510, v6515 and v6520) can have up to 999 subaccounts to accommodate all the covenants in your analysis.

To accommodate the required inputs and outputs for covenant tests, each Debt Covenant account has two related accounts, for a total of three related accounts:

- Test (.00): Accommodates the covenant test parameter.
- **Actual** (.01): Accommodates the actual performance equation.
- **Result** (.02): Accommodates the difference between the test parameter and the actual performance equation.

When you subaccount Debt Covenant accounts, all related accounts also receive subaccounts, enabling you to automatically create additional Debt Covenant Test Parameter accounts, actual performance equation accounts, and result accounts.

Debt Covenant accounts are accessible from the User Defined Accounts dialog box, so that the output type and units can be selected (for example, currency in millions). Debt Covenant accounts are displayed on the bottom of the Funding Analysis Report. You can insert the Debt Covenant accounts on reports by using the Edit, Insert command.

- “Covenant Test Parameter Account” on page 77
- “Actual Performance Equation” on page 77
- “Covenant Result Account” on page 77
- “Entering Covenant Test Parameters” on page 78
- “Entering Covenant Actual Performance Equations or Result Formulas” on page 78

**Covenant Test Parameter Account**

This input account is accessible from the Accounts Spreadsheet view or the Account Input dialog box. Enter a test parameter amount for each period in the file (such as Working Capital of $200 million in 1995, $250 million in 1996, and so on). You can enter different test parameters from period to period. In the User Defined Account dialog box, you can select the output type and units.

**Actual Performance Equation**

This account is accessible from the User Defined Accounts dialog box. Enter formulas measuring the actual performance of the analysis. (for example, Working Capital = Current Assets - Current Liabilities, using the formula v2100 - v2600). Select the output type and units.

**Covenant Result Account**

This account, accessible from the User Defined Accounts dialog box, calculates the difference between the test parameter and actual performance results. It measures the result of how the entity performs relative to the covenant test. To model a “minimum” test (for example, Minimum Working Capital), enter a formula that requests the “Actual-Test” accounts:

\[(v65xx.01 - v65xx.00)\].

Results are displayed as a negative numbers if covenants are not met (the actual is less than the test parameter).

To model “maximum” tests (for example, Minimum Debt/Equity), enter formulas representing, the “Test-Actual” accounts:
Results are displayed as negative numbers if covenants are not met, (the actual is greater than the test parameter).

**Entering Covenant Test Parameters**

1. **On Accounts**, select the Covenant Test accounts (v6500.00 - v6520.00).

2. Change the account name to match your analysis.
   - In this example, change the name to “Working Capital Test” and change the two related account names to “Working Capital Actual” and “Working Capital Result”.

3. **Using Account Forecast**, change the forecast method to reflect the test parameter data format.
   - In the example, enter or forecast working capital in Specified Currency.

4. **Enter the test parameter data in all periods**.
   - In the example with four years, enter 100, 150, 200, and 250, respectively.

5. **Select Accounts**, and then **User Defined Accounts**.

6. **In User Defined Accounts**, select **Covenant**, and then select **Working Capital Test**.

7. **Select the Output Type (currency)**, and then **Output Units**.

**Entering Covenant Actual Performance Equations or Result Formulas**

1. **Select Accounts**, and then **User Defined Accounts**.

2. **In User Defined Accounts**, select **Covenant**, and then select **Working Capital Actual**.

3. **Under Value is**, leave the setting at **Calculated by formula in all periods**.

4. **Enter a formula for the covenant under Formula**, using the same formula format as in **Custom Ratios**.
   - You can also enter ratio accounts in formulas. For this example, enter this formula: v2100 - v2600.

5. **Select Output Type (currency) and Output Units**.
Creating and Displaying Account Groups

Subtopics

- Creating Account Groups
- Creating Groups of Accounts
- Adding Accounts to Account Groups
- Displaying Account Groups

Use Account Groups to manage accounts in bulk. For example, you can create a group containing all Income Statement accounts with data input. You also use Account Groups to select which accounts currently display on the Accounts view.

Creating Account Groups

➢ To create account groups:

1. From Strategic Finance worksheet, select Accounts, then Account Groups.
2. In Account Groups, select General.
3. Click the New (Insert) .
4. Under The New Group is a... on Type of New Group, select an option and click OK:
   - List of Accounts—Creates groups of accounts.
   - List of Groups—Creates groups of account groups.
   - Account Separator—Creates a line to separate groups in a list.
5. When the group appears in Available Groups, enter a unique name.
6. Optional: To change the group display order in Available Groups and View on the Accounts view, select a group and click the up and down arrows.
7. In Header, enter the heading for the group to be displayed on the Accounts view.
8. Optional: Click Hide Group from Filter in Accounts View to hide the group on the Accounts view.
9. In Default Dataview, select the dataview for display by default when accessing the group.
10. Add accounts.
    See “Adding Accounts to Account Groups” on page 80.
11. Click OK.

Creating Groups of Accounts

➢ To create groups of account groups:

1. From any Strategic Finance worksheet, select Accounts, then Account Groups.
2. From Account Groups, select General.
3 Click New (Insert).
4 Select List of Groups and click OK.
5 When the group appears in Available Groups, enter a unique name.
6 Optional: To change the group display order in Available Groups and View on the Accounts view, select a group and click the up and down arrows.
7 In Header, enter the heading for the group to be displayed on the Accounts view.
8 Optional: Click Hide Group from Filter in Accounts if you do not want this group to appear in the View.
9 In Default Dataview, select the default dataview to display when accessing the group.
10 Select Groups Containing Groups.
11 In Group, select the name of the new group.
12 In Selected Groups select a name in Account Group to Add, and click New (Insert).
13 Click OK.

Adding Accounts to Account Groups

Adding Accounts to Account Groups

➢ To add accounts to account groups:
1 Create an account group.
   See “Creating Account Groups” on page 79.
2 From Account Groups, select Account List.
3 In Group, select a group.
4 Optional: You use permission groups to allow an administrator to set access permissions for all accounts in the group, select Permission Group.
   Assign the account group to the user group.
5 In Available Accounts, select and add accounts to the group in Selected Accounts.

Note: This box lists accounts belonging to groups. Accounts appear on the Accounts view in the order they appear in this list.

Add accounts as follows:

- In Available Accounts, double-click on accounts.
- In Find Account, enter text or numbers to search.

6 Optional: Reorder selected accounts as they display in the Accounts view by selecting accounts in Selected Accounts, and clicking the up and down arrows.
Optional: Specify how subaccounts display by selecting an option from Subaccounts.

- **None**—Displays only main accounts.
- **All Input Accounts**—Displays only input subaccounts, not main accounts or subtotaled subaccounts.
- **All Input and Main Accounts**—Displays input subaccounts and main accounts, not subtotaled subaccounts.
- **All**—Displays input subaccounts, main accounts, and subtotaled subaccounts.

Optional: Specify dimension display from Dimensions:

Dimensions determine the display of dimensions when adding main accounts. Available only when All subaccounts are selected in Subaccounts:

- **None**—Displays no dimensions.
- **All Input Accounts**—Displays input dimensions, not main dimensional accounts or subtotaled dimensional subaccounts.
- **All Input and Main Accounts**—Displays input dimensions and main dimensional accounts, not dimensional subtotaled subaccount.
- **All**—Displays input dimensions, main dimensional accounts, and subtotaled dimensional subaccount.

Optional: Select Include subaccounts for user-defined accounts to add the subaccounts of user-defined accounts.

Optional: Select Include accounts that have been turned off to add inactive accounts.

Click OK.

**Displaying Account Groups**

After you create account groups, they are available in the Accounts view.

> To display account groups, from the POV bar, select Account Groups, and then click Refresh.

**Dataviews**

Dataviews filter and manipulate the amount of data displayed on the Accounts view, and you select them from Dataview.

There are three dataviews:

- **Standard**—displays standard accounts.
- **Input Only**—displays input accounts.
- **Output Only**—displays output accounts.

You can create custom dataviews displaying data according to your needs.
Creating and Maintaining Dataviews

You modify and create dataviews in Create Dataview.

To create and maintain dataviews:

1. From the Edit grouping label, click Dataviews.
2. Optional: You can select, remove, and rename dataviews.
3. To create dataviews, click New.
4. Select Display Group Header as Titles to display Account Group headings.
5. Select Hide Input Row if a Calc Account to conceal input rows of calculated accounts.
6. Select Hide Forecast Row if a Calc Account to conceal forecast methods of calculated accounts.
7. Select Hide Calculated Time Period Column to conceal the calculated time period details.
8. Select account attributes:
   - Available Account
     Select attributes in the Available Account column, and then click -> to include it in the dataview.
     - Output Row—Display outputs
     - Input Row—Display inputs
     - Forecast Row—Display forecast methods or freeform formula descriptions
     - Selected Account Attributes—Display or remove account attributes
9. Click Blank Row to insert rows between accounts.
10. Click the + button to expand time periods to the dataview.
11. Select time periods to be displayed:
    - All Time Periods
    - Only History
    - Only Forecast
    - Set Time Range
      Displays periods in a specified range:
      - In Beginning Boundary, enter a formula to set the first period in the range.
      - In Ending Boundary, enter a formula to set the last period in the range.
      - Click Build to build formulas. See “Building Time Formulas”.
12. Click OK.
Renaming Dataviews

To rename dataviews

1. From the Edit grouping label, click Dataviews.
2. In Dataview, click Rename, enter a name in the New Name field, and then click OK.
Create your own, or use the forecast methods provided to project account values in forecast periods.

**Accessing Forecast Methods**

To access Forecast Method:

1. Select a Account, place your cursor on an account.
2. From the Account grouping label, click Account Forecast.
Entering Data for Predefined Forecast Methods

Subtopics

- As Actual Value
- Growth Rate
- Growth Rate (Year over Year)
- Percent of Another Account
- Percent of Prior-Period Account
- Percent of Change in Another Account
- Percent of Average Account
- Days
- Turns
- Absolute Multiple of Another Account
- Default Multiple of Another Account

As Actual Value

Enter data as the actual value as defined by the default currency units.

Growth Rate

You can enter an annual or a periodic growth rate. For example, for Sales growth of 10% per year, enter a 10 for the forecast period input.

Growth Rate (Year over Year)

Enter data as a growth rate over the same period one year prior. For example, if January 2003 Sales are to be 5% higher than January 2002 Sales, enter 5 in January 2003.

Percent of Another Account

Enter data for one account as a percent of another account (Associated Account) in the same period. For example, for Cost of Goods Sold as 46% of Sales, enter 46 for the forecast period input.

If you select this option, you must specify the Associated Account specified in the Forecast Method dialog.

Caution!

When calculating an account, you may get a message that says you cannot use the Associated Account specified because it is calculated after the main account. For example, to enter Cash as a percentage of Total Assets, you must use the forecast method called Percent of Prior Period Account.
Percent of Prior-Period Account
Enter data for one account as a percent of another account in the prior period. For example, Depreciation Expense can be entered as a percent of the prior-period ending balance of Fixed Assets. If you select this option, you must specify the Associated Account, which you choose in the Associated Account section of the Forecast Method dialog.

Percent of Change in Another Account
Enter data for one account as a percent of the increase in another account. For example, the Increase in Accounts Receivable can be entered as a percent of the change in Sales. If you select this option, you must specify the Associated Account, which you choose in the Associated Account section of the Forecast Method dialog.

Percent of Average Account
Enter data for an account as a percent of the average value of another account during the current and prior periods. This option can be used to forecast interest based on the average debt balance. The calculation engine in Strategic Finance supports certain iterative calculations, such as interest averaging and tax carryback/carryforward calculations. For example, Interest on Notes Payable can be entered as a percent of the average value of Notes Payable during the current and prior periods.

If you select this option, you must specify the Associated Account, which you choose in the Associated Account section of the Forecast Method dialog.

Days
Enter data for an account as the number of days (typically of sales or cost of goods sold) which this item represents. It is most commonly used for working capital balances, such as receivables and payables forecasting.

Note: When forecasting using the Days method, do not select Increase in method on the Account Forecast dialog.

If you select this option, you must specify the Associated Account, which you select in the Associated Account section of the Account Forecast dialog. The Annualize Associated Account option is automatically turned on and the Input is... section is set to Annual. Strategic Finance uses the correct time period handling in this calculation (e.g., monthly A/R is calculated based on annualized sales, etc.).

So, if you elect to forecast Accounts Receivable in Days of Sales, your Accounts Receivable balance is calculated as follows in each forecast period:

\[(\text{Input for Days} / \text{No. of Days in Period}) \times \text{Sales} = \text{Accts. Receivable Balance}\]
**Turns**

Enter data for an account as the number of turns (how often the balance turns over) this item represents. This method is most commonly applied to inventory forecasting.

**Note:** When forecasting using the Turns method, do not select the Increase in method in the Forecast section in the Forecast Method dialog.

If you select this option, you must specify the Associated Account, which you select in the Associated Account section of the Forecast Method dialog. The Input is... section is automatically set to Periodic. If you select this option, you must specify the Associated Account, which you select in the Associated Account section of the Forecast Method dialog.

If you elect to forecast Inventories using the Turns method and you select Cost of Goods Sold as the Associated Account calculation, your Inventories balance is calculated as follows in each forecast period:

\[
\text{Annualized Value of Cost of Goods Sold} / \text{Input for Turns}
\]

**Absolute Multiple of Another Account**

Enter data for one account as an absolute multiple of another account (Associated Account) in the same period. This method is primarily used for price/quantity forecasting. For example, you might forecast unit volume (100 million units) in a Memo Account (v300) and calculate revenue as a unit price of $50 (absolute multiple) times unit volume in the Memo Account (v300).

If you select this option, you must specify the Associated Account, which you select in the Associated Account section of the Forecast Method dialog.

**Default Multiple of Another Account**

Enter data for one account as a default currency unit multiple of another account (Associated Account) in the same period. This method is also primarily used for price/quantity forecasting. For example, you might forecast unit volume (10 units) in a Memo Account (v300) and calculate revenue as a unit price of $20 million (default multiple) times unit volume in the Memo Account (v300).

If you select this option, you must specify the Associated Account, which you select in the Associated Account section of the Forecast Method dialog.

**Selecting Predefined Forecast Methods**

See “Accessing Forecast Methods” on page 85.

- To select predefined forecast methods:
  1. Select **Structured**.
2 In Forecast, select a method.
   The method determines the format of your input data.
   See “Entering Data for Predefined Forecast Methods” on page 86.

3 Optional: Select Input:
   The input for the account being forecast is Annual or Periodic. This input is useful when forecasting items such as interest rates.

4 Optional: Select an Associated account.
   - Use Associated Account to select the value to use for the Associated Account output.
   - Browse to the account.
   - In the Take Associated Account’s output value from, select the value to use for the Associated Account’s output.

5 Select Match Dimensions to match the dimension of the associated account with the dimension of the account being forecast.
   For example, to forecast Cost of Goods Sold/Product XX/Region YY as a percent of Sales/Product XX/Region YY, choose Sales as the associated account and select Match Dimensions.

6 Optional: If you are forecasting a balance account, you can forecast the ending balance or the change in the ending balance from the prior period (Change in).

7 Optional: Select Options to display additional forecast method options on Forecast Method Options.
   “Specifying Basic Forecast Method Options” on page 90

8 Optional: Select an Associate Account Value option.

9 Optional: Select a Forecast input period values option.

Note: If you select Equal to the historical average, you need not enter a value.

10 Optional: Select Using Grid Pricing.
   - Use this option to indicate that the input for this field varies, enabling you to increment or decrement a contract interest rate based on selected criteria. See “Forecasting Data Types” on page 92.
   - Edit Grid
     Click to specify accounts and criteria for grid pricing. See “Forecasting Data Types” on page 92.

11 Optional: Select Spread Over Another Account:
   - Adds the input value to another account’s output value to compute the final input value.
   - Spread Account
     With Spread over another account, select the spread account.
12 Click OK.

Note: Ensure that you are on the Structured tab when you click OK, so the predefined forecast method is used.

See:
Chapter 20, “Using Freeform Formulas”
“Using Grid Pricing” on page 91

Specifying Basic Forecast Method Options

➢ To select a Forecast Method option:

1 Access Forecast Method.

   See “Accessing Forecast Methods” on page 85.

2 Select Structured.

3 Click Options to display additional forecast method options on Forecast Method Options.
   You can select to the current forecast method.

4 Click OK.

Entering Forecast Methods as Freeform Formulas

➢ To enter a Freeform Formula:

1 Access Forecast Method.

   See “Accessing Forecast Methods” on page 85.

2 Select Freeform.

3 In Formula, enter Freeform formulas calculating output values for selected accounts. Using the accounts and functions tabs, you can create Freeform Formulas using standard math operators.

   See “Using Freeform Formulas” on page 279.

4 In Method Description, enter formula descriptions for display.

5 Optional: For formulas using @input, from Input select the format of the input data.

   Input data used in the Freeform formulas is entered in the Accounts view or in the Account Input dialog:
   ● Currency
     Enter input data using the option set in Units.
   ● Items
     Enter input data using option set in Units.
• **Percent**  
Enter input data as a percentage. Useful for tax rate formulas.

• **Ratio**  
Enter input data as a ratio.

• **Days**  
Enter input data as a number of days. When this input type is chosen, the input must be as a multiplied by another account to produce the output value.

• **Turns**  
Enter the input data as the number of turns. The input must be multiplied by another account to produce the output value.

6 For formulas using @input, select the input data unit specifications (thousands, or millions, for example) from Units.

7 Select Use in History to use Freeform formulas in historical periods.

   For example, you may select Use in History to calculate Sales as Price x Quantity in both history and forecast.

   If this option is not selected, the Freeform formula is used only in forecast periods and historical data must be input separately.

8 Select Allow Overrides to enable currency overrides in input fields.

   In input periods, the selected input method can be overridden to enable input of that period’s value as Default Currency/Items. To override the input method, enter a pound sign (#) before or after the number.

9 Optional: Click Options to display additional forecast method options on Forecast Method Options.  
“Specifying Basic Forecast Method Options” on page 90

**Using Grid Pricing**

Grid Pricing enables you to model varying interest rates over time by incrementing or decrementing rates based on company performance against a metric.

To use grid pricing:

1 Select an account and select Account Forecast.

2 From Forecast Method, select Structured.

3 Select Use Grid Pricing.

4 Click Edit Grid.

5 In Base Grid Pricing on, select a criteria account.

   This account becomes the metric for measure.

6 In Comparison to use, select how to compare to the criteria account.

7 In Adjust by, select an adjustment type.
In *Reprice*, select the frequency of calculation. The system adjusts rates at the beginning periods.

In the *Grid Pricing* table, click *Add* to create rows. Then enter values:

- **Criterion in Millions of Dollars**
  
  In this column, enter the value of the criteria in the same scale as the account.

- **Adjustment in Percent**
  
  This column is the effect on the rate, as a decimal. For example, if the rate increases a quarter of a point, enter .25.

- To delete, select a row and click *Delete*.

- To reorder, select a row and click the arrows.

Click *OK*.

## Forecasting Data Types

### Subtopics

- Entering Gross Fixed Assets
- Entering Gross Fixed Assets in Historical Periods
- Forecasting Gross Fixed Assets
- Accumulated Depreciation
- Interest Accounts
- Tax Rates
- Taxable Income
- Deferred Taxes
- Historical Averages

### Entering Gross Fixed Assets

Three financial accounts together calculate gross fixed assets: Gross Fixed Assets (v2170.00), the Gross Book Value of Retired Assets (v2170.03) and Fixed Capital Investment (v2170.01). Fixed Capital Investment represents all capital expenditures for new and replacement equipment, discretionary and non-discretionary.

### Entering Gross Fixed Assets in Historical Periods

In historical periods, you input historical values of Gross Fixed Assets (v2170.00) and Capital Expenditures (v2170.01). Gross Retirements (v2170.03) is calculated. In historical periods, the calculation for these accounts follows:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Gross Fixed Assets (beginning)</th>
<th>Input</th>
<th>$100</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Capital Expenditures</td>
<td>Input</td>
<td>50</td>
</tr>
</tbody>
</table>
Forecasting Gross Fixed Assets

Subtopics

- Gross Fixed Assets account
- Gross Retirements account

Gross Fixed Assets account

Forecasting the ending balance of Gross Fixed Assets results in Gross Retirements being calculated as:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Gross Fixed Assets (beginning)</th>
<th>Input</th>
<th>$100</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>Gross Fixed Assets (ending)</td>
<td>Input</td>
<td>130</td>
</tr>
<tr>
<td></td>
<td>Gross Retirements</td>
<td>Calc</td>
<td>20</td>
</tr>
</tbody>
</table>

Gross Retirements account

Forecasting Gross Retirements results in Gross Fixed Assets being calculated as:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Gross Fixed Assets (beginning)</th>
<th>Input</th>
<th>$100</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Capital Expenditures</td>
<td>Input</td>
<td>50</td>
</tr>
<tr>
<td>-</td>
<td>Gross Retirements</td>
<td>Input</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Gross Fixed Assets (ending)</td>
<td>Calc</td>
<td>130</td>
</tr>
</tbody>
</table>

This method assumes only fully depreciated assets are retired, enabling you to independently forecast actual amounts of retirements and the amount of Fixed Capital Investment in all future periods.
Accumulated Depreciation

Subtopics

- Entering Accumulated Depreciation
- Entering Accumulated Depreciation in Historical Periods
- Accumulated Depreciation in Forecasts

Entering Accumulated Depreciation

Three financial accounts together calculate accumulated depreciation: Accumulated Depreciation (v2190.00), Accumulated Deprecation on Retirements (v2190.03) and Depreciation Expense (v2190.01). Depreciation Expense represents all depreciation expenses on all fixed assets.

Entering Accumulated Depreciation in Historical Periods

In historical periods, you input historical values of Accumulated Depreciation (v2190.00) and Depreciation Expense (v2190.01). Accumulated Depreciation on Retirements (v2190.03) is calculated. In historical periods, the calculation for these accounts is as follows:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Accumulated Depreciation (beginning)</th>
<th>Input</th>
<th>$70</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Depreciation Expense</td>
<td>Input</td>
<td>30</td>
</tr>
<tr>
<td>-</td>
<td>Acc Depreciation on Retirements</td>
<td>Input</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Accumulated Depreciation (ending)</td>
<td>Calc</td>
<td>$90</td>
</tr>
</tbody>
</table>

Accumulated Depreciation in Forecasts

In forecast periods, you forecast accumulated depreciation using these options:

- “Forecasting Accumulated Depreciation” on page 94
- “Forecasting Accumulated Depreciation on Retirements” on page 95

Forecasting Accumulated Depreciation

Forecasting the ending balance of the Accumulated Depreciation account results in Accumulated Depreciation on Retirements being calculated as:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Accumulated Depreciation (beginning)</th>
<th>Input</th>
<th>$70</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Depreciation Expense</td>
<td>Input</td>
<td>30</td>
</tr>
<tr>
<td>-</td>
<td>Accumulated Depreciation (ending)</td>
<td>Input</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Acc Depreciation on Retirements</td>
<td>Calc</td>
<td>$10</td>
</tr>
</tbody>
</table>
Forecasting Accumulated Depreciation on Retirements

Forecasting Accumulated Depreciation on Retirements results in the Accumulated Depreciation account balance being calculated as:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Accumulated Depreciation (beginning)</th>
<th>Input</th>
<th>$70</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Depreciation Expense</td>
<td>Input</td>
<td>30</td>
</tr>
<tr>
<td>-</td>
<td>Acc Depreciation on Retirements</td>
<td>Input</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Accumulated Depreciation (ending)</td>
<td>Calc</td>
<td>$90</td>
</tr>
</tbody>
</table>

This method assumes all Retirements are fully depreciated, enabling you to independently forecast actual amounts of depreciation associated with retirements and the amount of depreciation expense in all future periods.

Interest Accounts

Interest income and expense can be entered in detail manner or summary. For example, interest expense can be entered as a total summary amount or the detail can be displayed and forecasted for each debt instrument on the Balance Sheet.

Interest can be entered as a total amount in history, with detail forecasted based on a percentage of the current period, prior period, or average debt or investment balances. This is due to the fact that historical interest information is usually summarized, while interest in forecast periods can be detailed using rates applied to debt and investment balances.

- “Interest Summary Accounts” on page 95
- “Specific Interest Accounts” on page 95
- “Non-Cash Interest” on page 96

Interest Summary Accounts

Interest Income (v1210.00) can be used to summarize total interest income in history and/or forecast. This account can also be used for other interest income.

Interest Expense (v1360.00) can be used to summarize total interest expense history and/or forecast. This account can also be used for other interest expense.

Specific Interest Accounts

Specific interest accounts are each related to a specified debt or investment account, so in forecast periods, you can forecast interest income and expense based on debt and investment balances. Any of the 10 predefined forecast methods or the Freeform Formula method can forecast interest. You can apply one of these methods:

- Percent of Another Account
- Percent of Prior Period Account
Percent of Average Account

where the Associated Account for each interest account is the related debt or investment account and percentages entered are interest rates. When debt or investment accounts are subaccounted, related interest accounts are subaccounted, enabling forecasting interest rates for different debt and investment accounts.

Specific interest accounts and related debt/investment accounts are:

<table>
<thead>
<tr>
<th>Account</th>
<th>Name</th>
<th>Assoc. Acct.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010.05</td>
<td>Interest on Marketable Securities</td>
<td>2010.00</td>
</tr>
<tr>
<td>2015.05</td>
<td>Interest on Excess Mkt. Securities</td>
<td>2015.00</td>
</tr>
<tr>
<td>2460.05</td>
<td>Interest on L-T Funding Asset</td>
<td>2460.00</td>
</tr>
<tr>
<td>2510.05</td>
<td>Interest on Curr. Portion of LTD</td>
<td>2510.00</td>
</tr>
<tr>
<td>2520.05</td>
<td>Interest on Notes Payable</td>
<td>2520.00</td>
</tr>
<tr>
<td>2660.51</td>
<td>Interest on L-T Debt: Scheduled</td>
<td>2660.00</td>
</tr>
<tr>
<td>2690.05</td>
<td>Interest on Long-Term Debt: Excess</td>
<td>2690.00</td>
</tr>
</tbody>
</table>

Non-Cash Interest

Non-Cash Interest Expense (v2660.03) calculates non-cash portions of interest expense on scheduled debt accounts. Non-cash interest typically takes the form of zero coupon (deep discount) debt or PIKs (Payments in Kind). In history, enter Non-Cash Interest as a dollar amount. In forecast, enter this item as a rate (using the Percent of Prior Period Account forecast method) or as a default currency amount, depending on the forecast method you choose.

Amounts entered into this account reflect as part of total interest expense and accrue to the related scheduled debt account, Long-Term Debt: Scheduled (v2660.00) in the forecast periods.

Note: If the forecast methods Percent of Another Account or Percent of Average Account forecast Non-Cash Interest Expense, a circular reference occurs when calculating because the current period-ending balance of L-T Debt: Scheduled is calculated based on Non-Cash Interest Expense.

Tax Rates

- “Trial Provision for Income Taxes (v1610.00)” on page 97
- “Deferred Provision for Income Taxes (v1660.00)” on page 97
- “Temporary Differences (v3120.00)” on page 97
- “Interest Tax Shield (v3220.00)” on page 97
- “Tax on Non-Operating Profit (v3230.00)” on page 97
Trial Provision for Income Taxes (v1610.00)
This account measures the amount of taxes paid to taxing authorities. In historical periods, enter a currency amount. In forecast periods, enter the percentage of taxable income paid in taxes. Strategic Finance multiplies this rate by Taxable Income (v3140.00) to arrive at the taxes to be paid.

Deferred Provision for Income Taxes (v1660.00)
This account measures the amount of taxes paid on temporary differences when they reverse. In periods where book income exceeds taxable income, the deferred provision is positive. In periods where taxable income exceeds book income, the deferred provision is negative. In historical periods, enter a currency amount. In forecast periods, enter the tax rate in effect when the temporary differences are scheduled to reverse. Generally, this is the same rate as in v1610 unless a new rate is enacted but is not yet effective.

Temporary Differences (v3120.00)
This account measures the differences between book and taxable income that reverses in future periods. In historical periods, enter a rate. Strategic Finance divides Deferred Provision for Income Taxes (v1660.00) in a given historical period by this rate to determine the amount of temporary differences that gave rise to the deferred provision. Generally, is the statutory tax rate in effect in that period. It is important to know temporary differences in historical periods since it is a key component of Taxable Income (v3140.00). In forecast periods, this is calculated.

Interest Tax Shield (v3220.00)
This account measures the tax benefit of having debt. In historical periods, enter a currency amount. In forecast periods, enter the marginal tax rate, which is the tax rate to be paid on the last dollar of income. This be the rate used in v1610.00. Strategic Finance multiplies this rate by Total Interest Expense (v1420.00) to determine the interest tax shield.

Tax on Non-Operating Profit (v3230.00)
This account measures the tax liability on non-operating income. In historical periods, enter a currency amount. In forecast periods, enter the tax rate on non-operating profit. If all income is subject to the same tax rate, this is the same rate as in v1610. Strategic Finance multiplies this rate by Non-Operating Profit (v3225.00) to determine the tax on non-operating profit.

Residual Value Tax Rate (v4.00.560 and v5.00.800)
This account measures the tax rate on Perpetuity Operating Profit (v5100.00) used in both the Discounted Cash Flow and Economic Profit approaches to valuation. For discounted cash flow,
enter the rate by selecting Design, Tax/Valuation Options, SVA. For economic profit, enter the rate by selecting Design, Tax/Valuation Options, EP.

**Taxable Income**

The starting point in analyzing taxable income is Earnings Before Taxes (EBT) (v1600.00). This account aggregates all the items of income and expense and measures book (GAAP) income. There are two general categories of differences between GAAP and tax law. GAAP uses the terms permanent differences and temporary differences to distinguish between them.

A permanent difference is one which is included in taxable income but never EBT or included in EBT but never taxable income. An example of a permanent difference is municipal bond interest income. Municipal bond interest is included in EBT but is never taxable.

A temporary difference occurs when the difference between the financial and tax treatment of an item eventually reverses. Over the life of the item, there is no difference. In a given year, there can be differences. The classic example is depreciation of fixed assets. If assets are depreciated using the straight line method for financial purposes and an accelerated method for tax purposes, a difference between GAAP and taxable income is created. Over the life of the asset, the total depreciation under each method must be equal.

Strategic Finance uses EBT (v1600.00) and subtracts Permanent Differences (v3130.00) and Temporary Differences (v3120.00) to arrive at Taxable Income (v3140.00).

- “Temporary Differences” on page 98
- “Permanent Differences” on page 99

**Temporary Differences**

Strategic Finance uses two accounts to represent temporary differences:

- (v3110.00) Other Temporary Differences
- (v3120.00) Temporary Differences

Other Temporary Differences (v3110.00) is an input in all periods.

In historical periods, Temporary Differences (v3120.00) is entered as a tax rate. The rate should be such that Deferred Provision for Income Taxes (v1160.00) divided by it equals the temporary differences in that period.

In forecast periods it is calculated as:

\[ \text{v3100.00} - \text{v2190.01} + \text{v3110.00} \]

where:

- v3100.00 Tax Depreciation
- v2190.01 Depreciation Expense (Funds)
- v3110.00 Other Temporary Differences.
If multiple temporary differences exist, you can subaccount Other Temporary Differences (v3110.00), so subaccounts represent a unique temporary difference. You can model each subaccount using a forecast method that best predicts what happens during the forecast periods.

**Permanent Differences**

Permanent differences are entered in Permanent Differences (v3130.00). This account uses the default Freeform formula as follows:

- (v2410.03) Amortization of Intangibles

Permanent Differences (v3130.00) are subtracted from EBT (v1600.00) to arrive at Taxable Income (v3140.00).

If additional permanent differences exist, and you want to model each separately, create subaccounts and model each permanent difference individually. The first subaccount inherits the default Freeform formula. As with Freeform Formulas, you can modify or delete it. Permanent Differences (v3130.00) is the total of all the subaccounts.

**Deferred Taxes**

Use these accounts to model taxes on the Balance Sheet:

- (v2080.00) Current Deferred Tax Asset
- (v2080.01) Incr. in Curr. Def Tax Asset
- (v2380.00) Deferred Tax Asset
- (v2380.01) Incr. in Def. Tax Asset
- (v2580.00) Current Deferred Tax Liab.
- (v2580.01) Incr. in Curr. Def. Tax Liab.
- (v2770.00) Deferred Income Taxes
- (v2770.01) Incr. in Deferred Inc. Taxes

Changes in the deferred tax accounts generally are due to changes in temporary differences. The proper relationship between these accounts and Temporary Differences (v3120.00) assures proper presentation of the deferred tax position.

Strategic Finance uses Current Deferred Tax Asset (v2080.00), Deferred Tax Asset (v2380.00), Current Deferred Tax Liab (v2580.00), and Deferred Income Taxes (v2770.00) as input accounts. \textbf{Incr. in Curr. Def Tax Asset (v2080.01), Incr. in Def. Tax Asset (v2380.01), Incr. in Curr. Def. Tax Liab. (v2580.01) and Incr. in Deferred Inc. Taxes (v2770.01)} take the current period value in the associated account and subtract the previous period value. If the input accounts are zero, the calculated accounts are zero.

In forecast periods, Strategic Finance calculates the deferred tax provision as a function of temporary differences in that period. Strategic Finance does not default a relationship between the deferred tax accounts on the balance sheet and deferred tax provision on the income.
statement. To keep the cash flow reports internally consistent, this relationship must be enforced. The best way to enforce it is to make sure this equality holds in all periods:

\[ v_{1660.00} = v_{2770.01} + v_{2580.01} - v_{2080.01} - v_{2380.01} \]

Deferred Tax Reconciliation (v4180.00) is calculated using the above equation. On the Direct and Indirect Cash Flow Statements, this account can be accessed by analyzing Non-Operating Income (v4200.00). On the FAS 95 Cash Flow Statement, this account can be accessed by analyzing Non-Operating Sources (FAS 95) (v4520.00).

**Historical Averages**

You can forecast an account based on its historical average. Strategic Finance calculates the historical average of that account and apply it to all forecast periods.

For example, for three historical periods in a file, the respective sales were 100, 110, and 121. If the forecast periods, you want to forecast sales as a historical growth rate. Strategic Finance calculates historical growth rates to apply to forecast periods. Without data input, Strategic Finance grows sales at 10% in all periods.

This is a dynamic forecast method. If you changed one of the historical years, recalculating the file would change the sales forecast by applying the new historical average. If you changed the amount of historical years, recalculating the file would change data dependent on the historical average.

The number of years for the historical average is determined through the Time dialog, where you set the amount of years for the historical average. In the case of growth rates, you must select three years of history to get two growth rates. The other place to determine the amount of time to use for the historical average is the Account Status & Groupings Dialog. The Historical Average tab enables you to determine, for each account, how many periods to use in calculating the historical average.

The historical average calculation is a weighted calculation. Say, for example, you forecast Cost of Goods Sold as a historical average percentage of Sales. You have two years of historical data as follows:

<table>
<thead>
<tr>
<th></th>
<th>Sales</th>
<th></th>
<th>COGS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100</td>
<td>70</td>
<td>110</td>
</tr>
</tbody>
</table>

The historical average calculation sum all the sales values and COGS values and calculate the percentage. In this case, \( 180 \) \((70 + 110)\) divided by \(300\) \((100 + 200)\) would yield a historical average percentage of 60. The alternative is to calculate the percentage in each period and take the historical average of the percentages. Doing that here would return a historical average percentage of 62.5. Weighting is a superior method of calculation.
About Time Periods

You create time periods with detail required by financial models. You can combine periods of years, weeks, months, quarters, and halves for historical and forecast data. You can create period-to-date periods, trailing periods, and, for transactions reporting, deal periods and subperiods.

Use the Time Periods dialog to modify time period structure and settings. You can select last historical periods, add or delete periods, change time details, change period labels, select periods to display, and insert periods-to-date or subperiods.

Defining, Deleting, and Displaying Time Periods

Subtopics

- Adding Years
- Changing Time Period Details
- Recalculating Values for Changed Periods
- Deleting Time Periods
- Editing Last Actual Time Periods

When you create Strategic Finance models, you define the number and type of time periods (weeks, months, quarters, halves, years). Afterwards, you can modify and add time periods, to enhance financial models.

To define global time periods:

1. From the Analysis grouping label, click Time, and then Settings.
2. Select Global tab.
In Last Historical Period, you select a year to be the last historical year of the model.

In Base Period, you select a year to be the base period of the model.

In Years for Historical Average, you enter a number to define the number of historical years in the model.

The Period list displays this information:

- **Period**—Name of the period when displayed on the Accounts view and in reports.
- **ID**—Code name internally used to reference the period.
- **Display**—If status is provided in reports.
- **Input**—If users can enter data for trailing periods.

In Time Periods, perform these tasks:

- Add Years — see “Adding Years” on page 102
- Edit Years— see “Changing Time Period Details ” on page 102
- Delete Years— see “Deleting Time Periods” on page 103

### Adding Years

You can add years to the beginning or end of the entity, and you can select the detail of the years.

1. To add years to time periods:
   1. From the Analysis grouping label, select Time, and then Settings.
   2. On Time Periods, select Global, and then select the Add Years tab.
   3. In Number of Years, enter a year from 1950 to 2100.
   4. Select a Where option, and indicate whether you are adding years at the Beginning or End of your model.
   5. Under Details, define the level of time to use to model the year. For example, to model using six months, select Halves. To model using financial quarters, select Quarters.
   6. In Add Years, click Apply.
   7. Click Finish.

### Changing Time Period Details

When you generate time periods for a financial model, all periods share detail level, which you define in the Time Period Setup Wizard. You detail level for years in Detail in Year.

1. To change time period level detail:
   1. From the Analysis grouping label, select Time, and then Settings.
   2. On Time Periods, select Global, and then click the Edit Years tab.
   3. Under Change Years, select periods.
4 Under Detail, select a period that determines aggregate periods. For example, you can select Months without selecting Quarters or Halves—resulting in 12 months and the annual period. You can add the aggregate periods later, which, except for annual periods, are not automatically created.

5 In Edit Years, click Apply.

6 Click Finish.

**Recalculating Values for Changed Periods**

When you change time periods, Strategic Finance prompts to recalculate when changes require backsolving.

- To calculate input values for changed periods:
  1. From the Data grouping label, click Calculate, and then select an option:
     - Calc All Scenarios
       - Calculate input values for all scenarios.
     - Calculate (Inputs for Current Scenario Only)
       - Calculate input values for the current scenario only.
  2. Click OK.

**Deleting Time Periods**

You can delete years from the beginning or end of financial model timelines.

- To delete time periods:
  1. From the Analysis grouping label, click Time, and then Settings.
  2. In Time Periods, select Global, and then click the Delete Years tab.
  3. In Number of Years, enter a number.
  4. In Where, select Beginning or End.
  5. In Delete Years, click Apply.
  6. Click Finish to exit.

**Editing Last Actual Time Periods**

- To change the last actual period:
  1. From the Analysis grouping label, select Time, and then Time Period, and then select Actuals.
  2. In Last Actual Period, select a time period.
  3. Optional: Select Use current scenario’s data to use the scenario currently selected when adjusting the actual time period.
Creating and Distributing Period-to-Date and Trailing Periods

Subtopics

- About Period-to-Date and Trailing Periods
- Creating Period-to-Date Subperiods
- Creating Subperiods
- Creating Trailing Periods

About Period-to-Date and Trailing Periods

Use period-to-date to create year-to-date, half-to-date, quarter-to-date, or month-to-date periods. To preserve the integrity of an analysis, “to-date” periods are not included in the Cash Flow Statements.

- A Year-to-Date Total sums all preceding semi-annual, quarterly, monthly, or weekly periods into a previous annual period.
- A Quarter-to-Date Total sums all preceding weekly or monthly periods into a previous quarterly period.

All financial accounts in period-to-date periods are calculated by default. You can view period-to-date periods in the Accounts spreadsheet or in Reports.

➢ To define time specific periods:

1. From the Analysis grouping label, select Time, and then Settings.
2. Select the Time Specific tab.
3. In Last Historical Period, select a year as the last historical year of the model.
4. In Base Period, select a year as the base period of the model.
5. In Years for Historical Average, enter a number to define the number of historical years in the model.
6. The Period list displays this information:
   - **Period**—Name of the period when displayed on the Accounts view and in reports.
   - **ID**—Code name internally used to reference the period.
   - **Display**—Whether status is provided in reports.
   - **Input**—Whether users can enter data for trailing periods.
7. In Time Periods, perform these tasks:
   - Period To Date—See “Creating Period-to-Date Subperiods” on page 105
   - Sub Period—See “Creating Subperiods” on page 105
Creating Period-to-Date Subperiods

To create Period-to-Date subperiods:
1. From the Analysis grouping label, select Time, and then Settings.
2. In Time Periods, select Time Specific tab.
3. Under Period, select a time period.
4. Select Period-to-Date.
5. In Period-to-Date Totals, select the option that defines the range of time to include in the period. For example, to start and include the first week of a month up to the current month, select Month to Date and specify the present week in Detail.
6. Optional: Select Active options to add more periods-to-dates to selected periods.
7. Optional: Select Display options to identify period to dates to present in reports.
8. In Time Periods, click Apply.
9. Click Finish.

Creating Subperiods

Define subperiods for periods when transactions such as acquisitions or leveraged buyouts occur. For example, for a leveraged buyout that took place on April 15, the subperiod length is 105 days.

To create subperiods:
1. From the Analysis grouping label, select Time, and then Settings.
2. In Time Periods, select the Time Specific tab.
3. Under the Period column, select a time period.
4. Click Subperiods.

Review information:
- Time Period
  The selected time period.
- Days
  Days in the time period.
- Add
  Add subperiods to the grid
- Delete
Deletes subperiods from the grid.

- **Subperiod Grid**
  
  After you add subperiods, edit subperiod names and lengths in the grid.

- **<Unallocated Days>**
  
  Number of days from total period not allocated to subperiods. Must be zero before you click Apply.

5 Click Add.

6 Under Period, enter a name.

7 Under Days, enter a length of time.

**Note:** Subperiods must be at least one day long.

8 Create more subperiods and allocate days until <Unallocated Days> is zero.

9 Click Apply.

**Caution!** If the <Unallocated Days> is not zero, subperiods are not created.

10 In Time Periods, click Apply.

11 Click Finish.

---

**Creating Trailing Periods**

▶ To create Periods-to-Date:

1 From the Analysis grouping label, select Time, and then Settings.

2 In Time Periods, select the Time Specific tab.

3 Under Period, select a period.

4 Select Trailing Periods.

5 Select Add.

6 In Enter length of trailing period in Years, enter a number of trailing periods and click Apply.

7 Click Finish.
Managing Deal Periods

Subtopics
- Creating Deal Periods
- Moving Deal Periods
- Deleting Deal Periods

Creating Deal Periods

For analyses with transactions, you can create zero-length deal periods for re-levering the Balance Sheet with no time elapsing, so the Income Statement is empty, for use as restatement periods.

To create Deal Periods:
1. From the Analysis grouping label, select Time, and then Deal Period, and then select Add.
2. In Add deal at end of, select the time period when the deal should occur.
3. Click OK.
   A deal period is added to the end of the time period selected.

Note: When you add a deal period, Strategic Finance automatically renames the time period to “(Time Period):Closing” before adding the deal period. All data from the initial time period remains in the closing period.

Moving Deal Periods

Strategic Finance enables you to easily change move deal periods. You can also delete the deal period created and choose to keep or delete its data.

To move deal periods:
1. From the Analysis grouping label, select Time, and then Deal Period, and then select Move.
   If the model has a deal period, Move Deal Period displays.
2. In Move deal to the end of, select a time period.
3. Click OK.
   The deal period changes.

Deleting Deal Periods

When you delete deal periods, you can delete or retain the results.

To delete deal periods:
1. From the Analysis grouping label, select Time, and then Deal Period, and then select Remove.
If the model has a deal period, **Delete Deal Period** displays.

2 **Under Delete Deal Period**, select an option:
   - **Delete Deal**
     Deletes the deal period and all associated values.
   - **Delete Deal, but Keep Results of Adjustment**
     Deletes the deal period but retains the combined results of the Closing and Deal Periods as the ending balance of the time period.

3 **Click OK.**

### Changing the Fiscal Year End

Change the fiscal year end to specify the end of the fiscal year in models.

- Changing the fiscal year end results in partial years at the beginning and end of the entity. Partial-year data is discarded during conversion. To retain the data, add a year at the end and/or beginning of the entity.
- To retain historical and forecast data in the years, define the years before and after the historical boundary in monthly detail.
- To ensure accuracy for years containing aggregate values like year-to-date or trailing periods, make sure there is enough time detail in each year. Use Entity Change Manager to modify time detail.

To change the fiscal year end:

1 **Open an entity.**
2 **From the Analysis grouping label, select Time, and then Time Period, and then select Fiscal Year End.**
3 **In New Fiscal Year End Month, select a month.**
4 **Click OK.**
Using Funding Options

In This Chapter

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Using Funding Methods ................................................................. 112
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About Funding Options

Subtopics

- Account Types
- Surplus and Deficit Settings
- Order of Repayment and Funding
- When do Funding Options Balance?

Funding Options enable you to pay off debt accounts with cash from surplus accounts. You specify which surplus accounts go to which debt accounts, and the order they should be repaid. You can specify fund sources the company should borrow from in paying deficits. You can identify affordable dividends, handling of common and preferred stocks, and issuance or repurchase of shares.

Account Types

Account type refers to the revolver or term settings of Notes Payable and Long-Term Debt: Scheduled, and equity accounts such as preferred, common, contra-equity, and dividends. It is listed in the Type column for each account on every tab of the Funding Options dialog.

You cannot change account types of asset accounts (Marketable Securities, Excess Marketable Securities, and Long-Term Funding Asset) or Long-Term Debt: Excess. The remaining debt accounts can be specified as revolving or term accounts. To change account type, click the Type cell next to the account. These accounts may be defined as revolving or term accounts:

- Notes Payable (Short-Term Debt) (v2520.00) or its subaccounts
- Long-Term Debt: Scheduled (v2660.00) or its subaccounts.
**Surplus and Deficit Settings**

Use the Surplus or Deficit columns to specify whether accounts are used for cash surpluses or deficits. Select the Surplus column to use cash surpluses to repay a revolving debt facility, prepay a term debt facility, or to accumulate in asset accounts. Select the Deficit column to use a debt instrument or funding asset account to fund a cash deficit.

**Note:** You cannot change the two cash balancing accounts (Excess Marketable Securities and Long-Term Debt: Excess) surplus/deficit settings—both function as sources or uses in the case of a cash surplus or deficit in your model.

**Order of Repayment and Funding**

In the Funding Options dialog, use “Apply Cash Surplus to” and “Fund Cash Deficit with” to specify the order of account use, in the event of cash surpluses or deficits. To reorder, click and drag accounts to different positions in the list.

<table>
<thead>
<tr>
<th>Order</th>
<th>Apply Cash Surplus to...</th>
<th>Order</th>
<th>Fund Cash Deficits with...</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>L-T Debt: Excess</td>
<td>First</td>
<td>Excess Mktable Securities</td>
</tr>
<tr>
<td>Next</td>
<td>Other Selected Surplus Accounts</td>
<td>Next</td>
<td>Other Selected Deficit Accounts</td>
</tr>
<tr>
<td>Last</td>
<td>Excess Marketable Securities</td>
<td>Last</td>
<td>L-T Debt: Excess</td>
</tr>
</tbody>
</table>

With a cash surplus, by default, Long-Term Debt: Excess is reduced first if a balance exists. Funds remaining, after reducing other surplus accounts selected, accumulate in Excess Marketable Securities. With a cash deficit, by default, Excess Marketable Securities is used as funding first. If there is still a cash deficit after other selected funding accounts are used up to their forecasted limits. Long-Term Debt: Excess funds the remaining cash deficit in its entirety.

**Note:** Excess Marketable Securities is last in the Apply Cash Surplus to... order and by default is first in the Fund Cash Deficit with... order. Long-Term Debt: Excess is by default first in the Apply Cash Surplus to... order and last in the Fund Cash Deficits with ... order.

**When do Funding Options Balance?**

Funding Options never attempt to balance funding during historical or actual periods, so you may see non-zero values in Net Funds Flow Source (Use) (v3040) in historical or actual periods.

Funding Options balance all input periods that are neither historical nor actual periods. These are typically called input forecast periods, but actual periods may occur in what are typically forecast periods.

When there is a forecast leaf period (a non-aggregate period) that is not an input period because its values are interpolated using inputs from a period-to-date or trailing period, Funding Options balance that period unless it is the last period before the input period-to-date or trailing period that is driving it’s values.
Funding Options Accounts

Subtopics

- Long-Term Debt: Scheduled (v2660.00) and Notes Payable (v2520.00)
- Marketable Securities (v2010.00), Long-Term Funding Asset (v2460.00), Preferred Stock (v2820.00), Common Shares Issued (Year End) (v3460.00), and Treasury Shares (v3470.00)
- Excess Marketable Securities (v2015.00), and Long-Term Debt: Excess (v2690.00)

Long-Term Debt: Scheduled (v2660.00) and Notes Payable (v2520.00)

These debt accounts can be specified as revolving or term debt instruments. They can be repaid early in case of a cash surplus. If you repay a term debt facility with cash surpluses, the model reduces the debt instrument by its forecasted principal payments. If a debt account is a revolver, it can be used as a funding source with a specified maximum or “cap,” and a minimum balance to be maintained. These accounts can have subaccounts, which appear in Funding Options.

Marketable Securities (v2010.00), Long-Term Funding Asset (v2460.00), Preferred Stock (v2820.00), Common Shares Issued (Year End) (v3460.00), and Treasury Shares (v3470.00)

These are asset accounts that can be used for funding cash deficits and accumulating cash surpluses. They can have subaccounts, which appear in Funding Options.

Excess Marketable Securities (v2015.00), and Long-Term Debt: Excess (v2690.00)

These are cash-balancing accounts with permanent Funding Option settings—unlimited maximums, fixed surpluses, and deficit orders (the accounts are first and last in each area), and subaccounting is disabled.

- Excess Marketable Securities (v2015.00) accumulates cash surpluses, and can be used as a funding source.
- Long-Term Debt: Excess (v2690.00) acts as an unlimited long-term revolving facility funding cash deficits not covered by other debt facilities.
Using Funding Methods

Subtopics

- Accessing Funding Options
- Setting Common Attributes for Funding Accounts
- Using the Standard Funding Method
- Using the Target Capital Structure Funding Method

You can use the standard funding method or the target capital structure funding method—both require you to configure common attributes for funding accounts.

Accessing Funding Options

➢ To access funding options, perform the following: From the Data grouping label, click Funding.

- See “Setting Common Attributes for Funding Accounts” on page 112
- See “Using the Standard Funding Method” on page 113
- See “Using the Target Capital Structure Funding Method” on page 114

Setting Common Attributes for Funding Accounts

Use common attributes to identify funding account information before creating a Standard or Target Capital Structure Funding Method. You can identify certain advanced funding account attributes if the account is zero-based, or has an unlimited maximum, a minimum funding requirement (specify minimum), or a minimum change amount.

➢ To set the Funding Option common attributes:

1. **Access Funding Options.**
   See “Accessing Funding Options” on page 112.
2. **Select Common tab.**
3. **Under Funding Method to use, select Standard or Target Capital Structure.**
4. **Optional: Select Actual Override Defeats Funding to determine how ‘##’ overrides function during data entry:**
   - Deselected—‘##’ overrides the account maximum.
   - Selected—‘##’ overrides the account balance.
5. **Optional: Under Type, click the cell to change the account type for related debt accounts:**
   - Term
   - Revolving Debt.
6. **Optional: Select Zero Based for an account to be set to zero before the funding sequence begins.**
7 Optional: Select No Maximum for an account to accept or fund with no cap or maximum.

8 Optional: Select Specify Minimum if an account to requires a time series of assumptions when the balance of the funding account should not go below. For example, certain compensating balances might be required by a lender in cash or securities.

9 Optional: In Minimum change, enter a minimum amount that the account must change to be part of the funding.

If the minimum change is not met, the account is not utilized funding surplus or deficit. The value that you enter should reflect the default currency of the file. For example, if the file is in Thousands of Dollars, a 10 reflects a minimum change of $10,000.

10 Depending on the Funding Method to Use option, perform an action:
   ● For Standard, see “Using the Standard Funding Method” on page 113.
   ● For Target Capital Structure, see “Using the Target Capital Structure Funding Method” on page 114.

11 Click OK.

Using the Standard Funding Method

The Standard funding method applies cash surpluses and funds cash deficits for funding accounts regardless of funding category (debt, preferred equity, or common equity) providing a unified funding priority plan across all funding account categories. You identify additional funding account characteristics and the funding of deficits or receiving cash surpluses.

Use the Funding Analysis Report, a summary of the study’s capital structure, to review the results of your funding strategy.

To enter standard funding information:

1 Access Funding Options.

   See “Accessing Funding Options” on page 112.

   Ensure that Common information exists and Standard is selected in the Funding Method to Use field. See “Setting Common Attributes for Funding Accounts” on page 112.

2 Select Standard tab.

3 Under Surplus, select accounts providing cash. Under Deficit, select accounts receiving cash.

   Note: Some account settings may not be changed. For example, Excess Marketable Securities funds cash deficits to balance the forecast periods.

   Apply Surplus in Category to... and Fund Deficit in Category with... display the order in which these accounts are processed. See Order of Repayment and Funding section.

4 Optional: Drag account names to reorder them.

5 Click OK.
Using the Target Capital Structure Funding Method

The Target Capital Structure Funding Method applies cash surpluses by funding accounts category: debt, equity, and preferred. You can create target level and prioritize the order of funding categories (for example, target debt-to-total capital). Strategic Finance calculates each category target level and applies surpluses to deficits in each category based on priority.

To enter Target Capital Structures:

1. **Access Funding Options.**
   
   See “Accessing Funding Options” on page 112.
   
   Ensure that **Common** information exists and Target Capital Structure is selected in the **Funding Method to Use** field. See “Setting Common Attributes for Funding Accounts” on page 112.

2. **Select Target Capital Structure tab.**

3. **Select a funding account Category.**

   **Note:** The **Preferred** option is not available unless you select the **Allocate Preferred Separately** option under **Treatment of Preferred Stock**.

4. **In Treatment of Preferred Stock, select a method:**

   - **Allocate Preferred as Debt**—All preferred accounts are debt. Preferred is unavailable.
   
   - **Allocate Preferred as Equity**—All preferred accounts are equity. Preferred is unavailable.
   
   - **Allocate Preferred Separately, Overflow to Debt**—Preferred accounts are independent of Debt and Equity accounts.
   
   - **Allocate Preferred Separately, Overflow to Equity**—Preferred accounts are independent of Debt and Equity accounts.

   Notice that the funding accounts for the category you selected are listed with the account number and type.

5. **Under Surplus, select accounts providing cash. Under Deficit, select accounts receiving cash.**

   Some accounts may not be included in the funding lists. For example, Term Debt cannot be used in the funding lists as a source of funding.

6. **Optional: Drag the account names to reorder them.**

   Apply Surplus in Category to... and Fund Deficit in Category with... display the order in which these accounts are processed. See Order of Repayment and Funding section.

7. **Click OK.**
Types of Debt Accounts

Subtopics

- Revolving Debt Accounts
- Term Debt Accounts
- Long-Term Debt: Excess Accounts

There are three types of available debt facilities:

- Revolving
- Term
- Long Term Debt: Excess.

Notes Payable and Long-Term Debt: Scheduled can be modeled as a term or revolver account. Long-Term Debt: Excess is a revolver or cash balancing account. All three debt accounts can be modeled with respective interest expense.

Revolving Debt Accounts

Revolver accounts have ceilings—the outstanding balance in a given period may be below or equal to that ceiling. In Funding Options, you can designate revolver accounts as cash deficit and/or cash surplus accounts. You can repay each account up to the balance, or use it to fund a deficit up to its ceiling.

- If you do not apply a cash surplus to a revolver account and do not use the account to fund deficits, the balance in each period equals the lesser of the prior period’s balance or the specified ceiling.
- If you repay a revolver account early, Funding Options first makes payments required under scheduled revolver ceiling reductions. After meeting the ceiling reduction for all accounts, Funding Options uses surplus cash to reduce the balance of those revolver accounts in Apply Cash Surplus to....
- If you use a revolver account to fund cash deficits, Funding Options draws cash from this account as a source of funds. The amount of funding available is a function of the prior balance for that account and the ceiling specified for that revolver account.
- If you apply a cash surplus to a revolving account and use that account to fund cash deficits, Funding Options may lower the balance of the account in one period because of excess funds. In the next period you can borrow that money to fund shortfalls, depending on the cash requirements.

Term Debt Accounts

Term debt represents a fixed outstanding loan obligation. By default, term debt is not affected by cash surplus/deficit balances. You can pay some or all loans early, ahead of amortization
schedules, when excess cash is available after meeting the required amortization. Term debt cannot be used as a source of funds.

When an account is a term loan, the input data represents the balance of that loan in each period or the amortization schedule, depending on how you forecast the account.

If you repay a term account early, Funding Options repays the account with the early amortization “coming off of the back end” of the account—it pays the scheduled amortization until paid in full, and only after that are additional amounts paid. Even if early payments are made, Funding Options continues to make all scheduled amortization payments until the balance of the facility is zero.

**Long-Term Debt: Excess Accounts**

Long-Term Debt: Excess is the last source of funds in the case of a cash deficit. When all sources of funding are exhausted (e.g., revolvers and funding assets), Funding Options borrow from Long-Term Debt: Excess. It is a revolving account with an infinite ceiling that is, by default, repaid first in the event of a cash surplus. You can not specify a minimum balance or change the Surplus/Deficit order.

**Types of Asset Accounts**

Subtopics

- Marketable Securities
- Excess Marketable Securities
- Long-Term Funding Asset

Of the three asset accounts in Funding Options, Marketable Securities (v2010.00) and Excess Marketable Securities (v2015.00) are short term investments, while Long-Term Funding Asset (v2460.00) is a long-term funding instrument. Both investment accounts can be modeled with respective interest income amounts.

**Marketable Securities**

You can designate Marketable Securities as a funding source (deficit account). The account is used, with unused internally generated funds, to repay debt early. Marketable Securities can accumulate excess funds, (cash surplus account). Set Marketable Securities to a Surplus and/or Deficit account by clicking in the Surplus and/or Deficit columns. Select the funding source and order of use in the Apply Cash Surplus to... and Fund Cash Deficit with... sections.

**Excess Marketable Securities**

Excess Marketable Securities is the “last” use of funds in case of cash surplus. When all funding instruments are reduced and there are funds remaining, Excess Marketable Securities
accumulates excess funds. This account also acts as the first funding source under the default setting in case of cash deficit.

Similar to Long-Term Debt: Excess, most attributes related to this account are unchangeable. Excess Marketable Securities cannot be subaccounted. It has an unlimited maximum. A minimum balance cannot be specified and the Apply Cash Surplus to... and Fund Deficit with... orders cannot be changed.

**Long-Term Funding Asset**

The Long-Term Funding Asset account can be used to model intercompany funding or a long-term asset that might be liquidated for funding purposes. Long-Term Funding Asset can be a Surplus and/or Deficit account by clicking in the respective Surplus and/or Deficit columns. Select the funding source and order of use in the Apply Cash Surplus to... and Fund Cash Deficit with... sections.

**Funding Options Strategies**

In funding plans, you must establish expectations for cash sources and use of excess funds from the firm’s operating strategies. Funding plans might include external sources such as debt, preferred equity, common equity, or reinvestment of internal funds. It may include uses like dividends and share repurchases to treasury stock, retirement of debt or preferred equity, or investments in marketable securities.

Factors in funding activities include:

- Dividend Payout Rate
- Operating Profit margin and Net Income/Sales
- Investment in fixed and working capital required to support sales growth
- Incomes taxes
- Target Debt Capacity

Two funding methods are useful in these situations:

- Using the standard method, you may specify sources and use priority orders for funding accounts.
- Using the target capital structure method, you specify sources and uses within funding categories such as debt, preferred equity and common equity. This establishes a funding policy that manages your model’s capital structure.

Each method is useful for different funding states:

- “The Standard Method with a Surplus” on page 118
- “The Standard Method with a Deficit” on page 118
- “The Target Capital Structure Method Priorities” on page 119
The Standard Method with a Surplus

Using the standard method with forecasts resulting in cash surplus before funding, Strategic Finance distributes the surplus using the order and priority in the Apply Cash Surplus to... list of the Standard tab. Funding accounts not in the funding lists may be forecasted like all other balance sheet accounts.

Enter accounts in the Apply Cash Surplus to... list to achieve:

- Increasing Marketable Securities
  To retain excess cash, include marketable securities in the list. You can retain funds for future investments.

- Repayment of Debt
  To pay down term debt early, include term debt in the list. This repays debt beyond the forecasted decline if surplus cash is available.

- Reduction in Revolving Balances
  To reduce outstanding balance on revolving debt, include the revolving account in the list.

- Retirement of Preferred Stock
  To apply cash to early retirement of preferred stock, include it in the list.

- Acquisition of Treasury Stock (Common Shares and New Common Shares)
  To repurchase the firm's treasury shares, include it in the list.

The Standard Method with a Deficit

When the standard method and your forecasts result in cash deficits before funding, the deficit is funded according to the order on the Fund Cash Deficits with... list of the Standard tab.

Enter accounts in the Apply Cash Surplus to... list to achieve:

- Decreasing Marketable Securities
  To use excess cash, include marketable securities in the list. Minimum requirements are honored if you select “specify minimum” and enter a non-zero value in the forecast for minimum marketable securities.

- Increase in Revolving Balances
  To include as a source of cash the possibility of increasing the outstanding balance on revolving debt, include the revolving account in the list.

- Issuance of Preferred Stock
  To fund deficits with Preferred equity, include the account in the list.

- Issuance of Common Stock
If the common shares issued account is in the list, Strategic Finance issues the number of shares at the Transaction Price for Common Shares to raise cash. The maximum number of shares authorized for sale is established in the Common Shares Issued (Year-End) account in all forecast periods.

- **Sale of Treasury Stock**

  Another source of corporate cash flow is the sale of treasury stock. Like issuance of common stock, the cash available from sale is determined by the number of shares available for sale and the Transaction Price for Common Shares. If you are accounting for additional paid in capital separately, enter a Par Value per Common Share of Treasury Stock.

### The Target Capital Structure Method Priorities

The target capital structure method manages the priority of the category surpluses and deficits in each of up to three funding categories. When using the target capital structure, you specify a target debt capacity and, if needed, a target preferred capacity for your planning entity.

Funding options enable you to specify the order of funding accounts to achieve target category levels. For example, borrowing or repayments on a revolver to meet the targeted debt capacity. Based on these forecasts and based on available funds in the forecast, Strategic Finance applies surpluses and funds deficits in the funding category based on your funding category priorities.

**Example:**

Sample Company has had a successful year. Cash flow from Operations was $220 million. The total capital has increased from $1.4 billion to $1.5 billion. To maintain approximately 35% debt-to-total capital ratio, you increase debt by $35 million. If there are no forecasted increases in the debt accounts, this amount represents a deficit in the debt-funding category. It is funded according to the entries in the Fund Cash Deficits with... list.

### Target Capital Method with a Surplus

If you use the Target Capital Structure method and your forecast results in a category surplus before funding, Strategic Finance distributes the category surplus based on your funding order. Some examples:

- **Affordable Dividend** Affordable dividend may be used to dividend excess equity, lowering retained equity in line with the forecasted time series of debt (and preferred, if specified) capacity. This is like an increase in regular dividends or declaration and payment of special dividends to shareholders.

  **Note:** In the Target Capital Structure - Equity category, Affordable Dividend is the default balancing account in “Apply Surplus” and “Fund Deficit”.

- **Repurchase of Capital Stock**

  Another option when you experience an equity category surplus is to repurchase your stock from your shareholders. Shares are repurchased at the Transaction Price for Common...
Shares. The number of shares authorized for repurchase is established in the Treasury Shares (Year-End) account.

**Target Capital Method with a Deficit**

If you use the Target Capital Structure method and your forecast result in a category deficit before funding, Strategic Finance funds the category deficit based on your funding order. Some examples:

- **Issuing New Shares - Issuance of Common Stock**

  To fund deficits in the equity category, you include the common shares issued account in the funding list. Strategic Finance issues the required number of shares at the Transaction Price for Common Shares to raise equity. The maximum number of shares authorized for sale is established in the Common Shares Issued (Year-End) account in all forecast periods.

- **Sale of Treasury Stock**

  Another source of equity funds is the sale of treasury stock. Like issuance of common stock, the number of shares available for sale determines the equity raised from the reissuance at the Transaction Price for Common Shares. If you are accounting for additional paid in capital separately, enter a Par Value per Common Share.
Using Tax and Valuation Options

About Tax and Valuation Options

Tax and valuation options enable you to configure and enter data for tax refund calculations, and use of three Strategic Finance valuation methods. Tax and valuation options cover taxes, shareholder value, dividend discount, economic profit, and other valuations. You can also calculate tax effects and define the number of years for Net Operating Loss carryback and carryforward.

Calculating the Tax Effect of Operating Losses

Use Tax and Valuation Options to calculate tax effects, which appear in Calc Tax Refund (v1640.00). Without this option, you can manually enter a Net Operating Loss (NOL)-related tax refund in Additional Tax Refund (v1635.00)—see “Net Operating Loss Calculations” on page 122. Enter NOL-related inputs in the remainder of the dialog.

To automatically calculate tax effect of losses:

1. Access Tax and Valuation Options.
   See “About Tax and Valuation Options” on page 121.

2. Select Taxes tab.

   With this option, the model automatically calculates tax refunds by carrying back and/or forward NOLs by the number of years specified in these input boxes. The inputs apply only with this option.

4. In Years for Loss Carryback, enter a number of years to carry back NOLs.
   In the United States, the Internal Revenue Code currently dictates losses can be carried back 2 years.

5. In Years for Loss Carryforward, enter a number of years to carry forward NOLs.
In the United States, the Internal Revenue Code currently dictates that losses can be carried forward 20 years.

6 In Initial Loss Balance, enter an initial loss balance for the NOL-related tax refund calculation.

7 In Initial Gain Balance, enter an initial gain balance for the NOL-related tax refund calculation.

8 In Initial Balance of Taxes Paid, enter an initial balance of taxes paid on the initial gain balance.

Note: Strategic Finance assumes the Initial Loss Balance, Initial Gain Balance and Initial Balance of Taxes Paid entries occur in the period before the first Strategic Finance time period.

9 Click OK.

Net Operating Loss Calculations

Subtopics
- NOL Carryback and Carryforward
- NOL Carryback Accounts
- NOL Carryforward Accounts

When total expenses exceed total income, a Net Operating Loss (NOL) occurs. In Strategic Finance, you have an NOL when Taxable Income (v3140.00) is negative. NOLs impact the results of other years.

**NOL Carryback and Carryforward**

NOLs can carry backward to generate tax refunds paid in previous years, or carried forward to offset future incomes. You can perform these calculations automatically or manually.

Strategic Finance defaults the carryback period to 2 years, which reflects current U.S. tax law. You can change the length for your analysis. NOLs apply first to the earliest year in the carryback period.

If the current year NOL exceeds the taxable income in the earliest year, NOL applies to the second earliest year, and so on. To manage income and associated taxes from the year before your analysis, enter limits for the amount of income and taxes for a carryback to reach.

Strategic Finance assumes the income and taxes occurred in the year before the first historical year. Losses during the carryback period could generate refunds of taxes paid before the analysis starts if the carryback period goes back that far.

If you carry back all the possible NOLs and still have not used up the current year NOL (or if the carryback period is 0), Strategic Finance carries forward the NOLs to the extent of the carryforward period. Strategic Finance defaults the carryforward period to 20 years, which reflecting current U.S. tax law. You can change the length if for your model.

If an NOL exists in the year prior to the analysis start, you can enter and carry it forward. Strategic Finance assumes the loss occurred in the year before the first historical year.
Refunds are calculated once annually using annual results. If an NOL carries back to a year detailed in quarters (negative annual taxable income), the refund appears in the last quarter. If an NOL carries forward into a year detailed in quarters (annual taxable income is positive), the refund only displays in the last quarter.

**NOL Carryback Accounts**

Six accounts illustrate the NOL carryback:
- “Tax Refund Due to Loss Carryback (v3160.00)” on page 123
- “Maximum Carryback (v3160.01)” on page 123
- “Tax Losses Offset (v3160.02)” on page 123
- “Tax Gains Pool (v3160.03)” on page 123
- “Tax Gains Pool Used (v3160.04)” on page 123
- “Tax Pool (v3160.05)” on page 123

**Tax Refund Due to Loss Carryback (v3160.00)**
The refund generated for carrying back current year losses back to previous years.

**Maximum Carryback (v3160.01)**
At the period beginning, this is the largest loss that could be sustained in the current period and still be fully carried back. It is determined by adding the tax gains pool for each year during the carryback period and subtracting gains previously used.

**Tax Losses Offset (v3160.02)**
In a period with a loss, this is the amount of loss actually carried back. It is the lesser of the amount of the loss and the maximum carryback.

**Tax Gains Pool (v3160.03)**
This is taxable income net of amounts carried forward into the current period. These gains are the basis for carrybacks since future losses are carried back against them.

**Tax Gains Pool Used (v3160.04)**
During the carryback period, this represents the amount of gains used by other losses.

**Tax Pool (v3160.05)**
The current provision for income taxes net of refunds due to loss carryforwards. Similar to Tax Gains Pool (v3160.03) since this account holds the taxes made refundable by carrybacks.
NOL Carryforward Accounts

Five accounts illustrate the NOL carryforward:

- “Tax Refund Due to Loss Carryforward (v3150.00)” on page 124
- “Maximum Carryforward (v3150.01)” on page 124
- “Tax Gains Offset (v3150.02)” on page 124
- “Tax Loss Pool (v3150.03)” on page 124
- “Tax Loss Pool Used (v3150.04)” on page 124
- “Total Taxes on Operations (v3280.00)” on page 124

Tax Refund Due to Loss Carryforward (v3150.00)

Calculates refunds when losses from prior years carry forward into a gain year.

Maximum Carryforward (v3150.01)

At the beginning of the period, this is the largest prior loss that could offset gains in the current period. Calculated by taking all the losses that occurred during the carryforward period and subtracting those previously used to offset gains.

Tax Gains Offset (v3150.02)

In a period with a gain, the amount carried forward to offset it. It is the lesser of taxable income for the current period and the maximum carryforward.

Tax Loss Pool (v3150.03)

Taxable loss for the current period net of amounts used for carrybacks. These are the losses carried forward.

Tax Loss Pool Used (v3150.04)

During the carryforward period, the amount of losses used by carryforwards.

Total Taxes on Operations (v3280.00)

Strategic Finance performs the same calculations for NOL in determining Total Taxes on Operations (v3280.00) as it does in determining the current provision. The differences are that it uses Taxable Operating Profit (v3210.00) as the measure of income instead of Taxable Income (v31400.00) and that it uses 3250.xx and 3260.xx instead of 3150.xx and 3160.xx.
Modeling Valuation Accounts

Subtopics

- Entering Data for Shareholder Value Method Accounts
- Entering Data for Dividend Discount Method Accounts
- Entering Data for Economic Profit Method Accounts
- Entering Data for Other Valuation Accounts

Use the Tax and Valuation Options dialog to access Shareholder Value (a Free Cash Flow method), Dividend Discount (a Free Cash Flow method) and Economic Profit options.

Entering Data for Shareholder Value Method Accounts

The Shareholder Value Method measures future free cash flows (from operations) less investments in fixed and working capital. It is not one period measure, but rather a measure of multiple year future free cash flows, discounted at the weighted average cost of capital. This approach is used by public companies to compare management’s expectations to current market price of their stock and by private companies or divisions of large public companies, to obtain a proxy of the market value of their businesses.

For a more detailed explanation of these items, see “Valuation Theory” on page 132.

To enter data for Shareholder Value Method Accounts (SVA):

1. Access Tax and Valuation Options.
   See “About Tax and Valuation Options” on page 121.
2. Select SVA tab.
3. From the associated grid, select the Cost of Capital from the drop-down list and then enter the account values.
   The Cost of Capital is the weighted average costs of debt and equity. The rate should be entered as a percentage, not a decimal (5.57% is input at 5.57, not .0557). Oracle recommends that you use one rate for all periods.
4. From the associated grid, select the Long-Term Cost of Capital from the drop-down list and then enter the account values.
   The Long-Term Cost of Capital is used to calculate the residual value. The rate should be entered as a percentage, not a decimal.
5. In Method to Use, select a method.
   There are six different residual value methods:
   - Perpetuity Method
   - Growth in Perpetuity
   - Value Growth Duration
   - Price/Earnings Ratio
- Market-to-Book Ratio
- Liquidation Value

6 In Residual Value Tax Rate (%), enter a rate.

The residual value income tax rate is applied during the years following the forecast period.

7 In Perpetuity Growth Rate (%), enter a rate.

Enter the perpetuity growth rate when using the Growth in Perpetuity method to calculate residual value.

8 In Value Growth Duration (years), enter the number of years.

Enter the value growth duration when using the Value Growth Duration method to calculate residual value.

9 From the associated grid, select the Normalized Profit Adjustment from the drop-down list and then enter the account values.

You can use this item to change or “normalize,” for valuation purposes of the period-by-period values for Taxable Operating Profit that you consider to be abnormally high or low due to prevailing industry or economic conditions that you do not expect to continue.

If you enter adjustments for periods, the amount is added to Taxable Operating Profit for each period entered and used in calculating Residual Value. While it affects the valuation, it does not change Operating Profit as it appears on the Income Statement.

Note: This adjustment is only appropriate if you are using one of these residual value methods that use a perpetuity cash flow in its calculation: Perpetuity Method, Growth in Perpetuity and Value Growth Duration.

10 From the associated grid, select the Market-to-Book Ratio from the drop-down list and then enter the account values.

Enter the Market-to-Book Ratio when using the Market-to-Book Ratio method to calculate Residual Value.

11 From the associated grid, select the Price / Earnings Ratio from the drop-down list and then enter the account values.

Enter the Price/Earnings Ratio when using the Price/Earnings method to calculate Residual Value.

12 From the associated grid, select the Debt Discount / (Premium) (%) from the drop-down list and then enter the account values.

The Debt Discount/(Premium) is used in the calculation of the Market-To-Book Residual Value and Price/Earnings Residual Value. The Debt Discount/(Premium) is used to adjust the book value of Debt and/or Preferred Stock to market values.

13 From the associated grid, select the Normalized Earnings Adjustment from the drop-down list and then enter the account values.

You can use this to change or “normalize,” for valuation purposes of the period-by-period values for Income Available for Common Shareholders that you consider to be abnormally
high or low due to prevailing industry or economic conditions in that year which are not expected to continue.

If you enter adjustments for periods, the amount is added to Income Available for Common Shareholders used in calculating the Price/Earnings Residual Value for valuation. It does not change Income Available for Common Shareholders as it appears on the Income Statement.

14 From the associated grid, select the Liquidation Value from the drop-down list and then enter the account values.

This item represents your estimate, in future value currency, of what the “price tag” of the business is in each year of the forecast period, based on your expectations of prevailing conditions in that period. You must incorporate the costs of liquidation, including such items as transaction cost and recapture tax in this value.

15 Click OK.

**Entering Data for Dividend Discount Method Accounts**

The Dividend Discount Method (DDM) measures the value of a company’s assets by estimating the expected future cash flows to investors, (i.e., dividends) and discounting those future flows by the investors’ required rate of return to determine the present value of the future cash stream.

See “Valuation Theory” on page 132.

1 Access Tax and Valuation Options.

   See “About Tax and Valuation Options” on page 121.

2 Select the DDM tab.

3 From the associated grid, select the Cost of Capital from the drop-down list and then enter the account values.

   The Cost of Capital is the weighted average costs of debt and equity. The rate should be entered as a percentage, not a decimal (5.57% is input at 5.57, not .0557). It is recommended that you use one rate for all periods.

4 From the associated grid, select the Long-Term Cost of Capital from the drop-down list and then enter the account values.

   The Long-Term Cost of Capital is used to calculate the residual value. The rate should be entered as a percentage, not a decimal.

5 In Method to Use, select an option from the drop-down list.

   When performing a valuation using the Free Cash Flow method, you can select from six different residual value methods:
   - Perpetuity Method
   - Growth in Perpetuity
- Value Growth Duration
- Price/Earnings Ratio
- Market-to-Book Ratio

6 In Long-Term Return on Book Equity (%), enter a value.
   Enter the Long-Term Return on Book Equity which is used to compute the Perpetuity Affordable Dividend.

7 In Target Leverage Ratio (%), enter a value.
   Enter the Target Leverage Ratio (%) when using the Perpetuity, Growth in Perpetuity or Value Growth Duration methods to calculate residual value.

8 In Perpetuity Growth Rate (%), enter a value.
   Enter the Perpetuity Growth Rate (%) when using the Growth in Perpetuity Method to calculate residual value.

9 In Value Growth Duration (years), enter a value.
   Enter the Value Growth Duration (years) when using the Value Growth Duration Method to calculate residual value.

10 From the associated grid, select the Market-to-Book Ratio from the drop-down list and then enter the account values.
   Enter the Market-to-Book Ratio which is used in the calculation of Market-to-Book Equity Residual Value.

11 From the associated grid, select the Price / Earnings Ratio from the drop-down list and then enter the account values.
   Enter the Price/Earnings Equity Ratio which is used in the calculation of Price/Earnings Equity Residual Value.

12 From the associated grid, select the Normalized Earnings Adjustment from the drop-down list and then enter the account values.
   You can use this item to change or “normalize,” for valuation purposes of the period-by-period values for Income Available for Common Shareholders that you consider to be abnormally high or low due to prevailing industry or economic conditions in that year which are not expected to continue.
   If you enter adjustments for periods, the amount is added to Income Available for Common Shareholders used in calculating the Price/Earnings Equity Residual Value for valuation. It will not change Income Available for Common Shareholders as it appears on the Income Statement.

13 From the associated grid, select the Liquidation Value from the drop-down list and then enter the account values.
   This item represents your estimate, in future value currency, of what the “price tag” of the business is in each year of the forecast period, based on your expectations of prevailing conditions in that period. You must incorporate the costs of liquidation, including such items as transaction cost and recapture tax in this value.
Entering Data for Economic Profit Method Accounts

The Economic Profit (EP) method assumes that a company's value equals the amount of invested capital plus a premium equal to the present value of the economic profit in each forecast year. Economic Profit equals the spread between the rate of return on invested capital and the rate of return on required capital, multiplied by the invested capital.

See “Valuation Theory” on page 132.

14 Click OK.

Entering Data for Economic Profit Method Accounts:

1 Access Tax and Valuation Options.
   See “About Tax and Valuation Options” on page 121.

2 Select EP tab.

3 From the associated grid, select the Required Return on Capital from the drop-down list and then enter the account values.
   The Required Return on Capital is the discount rate used to determine the discount factor which is used to calculate the present value of economic profit. The rate should be entered as a percentage, not as a decimal.

4 From the associated grid, select the Long Term Required Return from the drop-down list and then enter the account values.
   Enter the Long Term Required Return which is the rate used to discount the residual value of the economic profit. The rate should be entered as a percentage, not as a decimal.

5 In Residual Value Tax Rate (%), enter a value.
   Enter the Residual Value Tax Rate which is applied during the years following the forecast period.

6 In Residual NOPAT Adjustment, enter a value.
   Enter adjustments to NOPAT for the residual period.

7 From the associated grid, select the NOPAT Adjustment from the drop-down list and then enter the account values.
   Enter adjustments to NOPAT.

8 From the associated grid, select the Assets Adjustment from the drop-down list and then enter the account values.
   Enter the Asset Adjustment which is used to adjust Book Value.

9 From the associated grid, select the Liabilities Adjustment from the drop-down list and then enter the account values.
   Enter the Liabilities Adjustment which is used to adjust Book Value.

10 Click OK.
Entering Data for Other Valuation Accounts

On the Other Valuations tab, select to have your cash flows discounted at mid-period or end-of-period. Mid-period discounting assumes that cash flows arrive (on average) at the mid-point of a period; end-of-period discounting assumes that the cash flows all arrive at the end of a period. You can enter some other adjustments to each of the three valuation methods used in Strategic Finance.

See “Valuation Theory” on page 132.

1 Access Tax and Valuation Options.

   See “About Tax and Valuation Options” on page 121.

2 Select Other Valuation tab.

3 In Current Stock Price, enter a value.

   Enter the stock price as of the last day in history. This value can be compared to the Shareholder Value per Share, Equity Value Per Share and Economic Profit Shareholder Value per Share to see if the market seems to be undervaluing or overvaluing the stock.

   **Note:** Enter the current stock price for the company you are modeling to use for comparison to the Shareholder Value per Share on the valuation reports. This amount appears at the bottom of the reports with the Shareholder Value per share. The Premium/Discount Over/Under Market (%) account calculates and display the percent that the Shareholder Value per Share is over or under the current stock price.

4 Select a Calculate Discount Factor as option.

   - **End-of Period.** Select the End-of-Period Discount Factor if discounting is to be done at the end of a period.
   
   - **Mid-Period.** Select the Mid-Period Discount Factor if discounting is to be done at the mid-point of a period.

5 In Market Value of Debt, enter a value.

   Enter the Market Value of Debt which is calculated using the yield to maturity of all debt instruments in a company’s debt portfolio. The Market Value of Debt must be deducted from Corporate Value or Economic Profit Corporate Value to arrive at Shareholder Value or Economic Profit Shareholder Value.

6 In Underfunded Pension Liabilities, enter a value.

   Enter Underfunded Pension Liabilities which must be deducted from Corporate Value or Economic Profit Corporate Value to arrive at Shareholder Value or Economic Profit Shareholder Value.

7 In Market Value of Other Obligations, enter a value.

   Enter the Market Value of Other Obligations which represents the market value of other obligations not included in Market Value of Debt or Underfunded Pension Liabilities. Market Value of Other Obligations must be deducted from Corporate Value or Economic Profit Corporate Value to arrive at Shareholder Value or Economic Profit Shareholder Value.
Profit Corporate Value to arrive at Shareholder Value or Economic Profit Shareholder Value.

8 In Investments in Stocks and Bonds, enter a value.

Enter the Investments in Stocks and Bonds which represents the market value of the company’s current portfolio of long-term investments in stocks and bonds. Investments in Stocks and Bonds are included in Corporate Value.

9 In Cost/Equity Adjustment, enter a value.

Enter the adjustment to be added to Corporate Value for an investment using the Cost or Equity method of consolidation. This adjustment should be the ownership % * Shareholder Value of the investment.

This adjustment calculates if the investment is consolidated into the current Strategic Finance file using the Cost or Equity method of consolidation.

10 In Minority Interest Adjustment, enter a value.

Enter the adjustment to be subtracted from Shareholder Value for an investment using the Minority Interest method of consolidation. This adjustment should be the ownership % * Shareholder Value of the investment.

This adjustment is automatically calculated if the investment is consolidated into the current Strategic Finance file using the Minority Interest Method of consolidation.

11 In Market Value of Other Liabilities, enter a value.

Enter the Market Value of Other Liabilities - DDM which is deducted from the Estimated Equity Value.

12 In Market Value of Other Assets, enter a value.

Enter the Market Value of Other Assets - DDM which is added to the Estimated Equity Value.

13 In Cost/Equity Adjustment, enter a value.

Enter the adjustment to be added to Economic Profit Corporate Value for an investment using the Cost or Equity method of consolidation. This adjustment should be the ownership % * Economic Profit Shareholder Value of the investment.

This adjustment is automatically calculated if the investment is consolidated into the current Strategic Finance file using the Cost or Equity method of consolidation.

14 In Minority Interest Adjustment, enter a value.

Enter the adjustment to be subtracted from Economic Profit Shareholder Value for an investment using the Minority Interest method of consolidation. This adjustment should be the ownership % * Economic Profit Shareholder Value of the investment.

This adjustment is automatically calculated if the investment is consolidated into the current Strategic Finance file using the Minority Interest Method of consolidation.

15 Click OK.
Strategic Finance supports three methods of valuation. The Shareholder Value and Dividend Discount models are cash flow methods that provide information about the sources of value creation, the duration of the value creation period, and the discounted value of the future stream of cash flows. One of the limitations in traditional dividend discount models is that they typically relate cash dividends to earnings, an accrual accounting flow, which can mask capital structure and funding effects. The dividends a company can afford to pay depend upon the cash consequences of its planned sales growth, cash margins on sales, cash taxes, required working and fixed capital investments, constrained by its target capital structure. Strategic Finance captures these constraints and opportunities explicitly, providing support for your valuation assumptions.

The Economic Profit model is a “mixed” model (mixing cash flow and book value concepts) often called the Economic Profit Model. This approach discounts an expected cash flow in excess of a capital charge (cost-of-capital multiplied by the previous period’s adjusted book value).

All three methods can compute identical equity values, given certain assumptions (e.g., keeping the ratio of market debt to market equity constant). In practice, the results of the models are often different, because the required assumptions have been ignored. Experienced practitioners not only can explain the differences (“small”, in most cases), but often gain insights by comparing the results from the different approaches.

**Free Cash Flow Methods**

The free cash flow methods, Shareholder Value and Dividend Discount, measure the value of a business based on its ability to generate returns on investments in excess of its weighted average cost of capital.

Excess funds can be reinvested by the business or paid to the shareholders as dividends. In the first case, the business might invest in such areas as plant & equipment, additional working capital, or acquisitions, expecting to receive returns in excess of the cost of capital for the selected strategy.

Alternatively, the shareholders can reinvest their dividends in a capital market to earn risk-adjusted rates of return.
Shareholder Value Method

In simplest terms, the value of a company or business equals the combined values of its debt plus its equity. In Strategic Finance, the value of the whole firm to both debt and equity holders is called “corporate value;” the value of the equity portion is called “shareholder value”.

In general: this is

\[(\text{Corporate Value}) = \text{"Debt" + Equity}\]

The “debt” portion of corporate value refers to the current value of the firm’s total obligations, which include:

1. Market value of all debt
2. Underfunded Pension Liabilities
3. Other Obligations - preferred stock (market value), golden parachutes, contingent liabilities, etc.

Note: You should use the market value rather than the book value of debt because during periods of rising interest rates, market values fall below book values. Using book values overstates the value of the liabilities, thus understates shareholder value. The reverse is true when interest rates are falling.

Corporate Value = Debt + Shareholder Value

where: Debt = Market Value of Debt + Underfunded liabilities + Market value of other obligations

Rearranging the corporate value equation to solve for Shareholder Value:

Shareholder Value = Corporate value - Debt

To determine shareholder value, you first calculate the corporate value, the value of the total firm or business unit.

- “Corporate Value Components” on page 133
- “Value Drivers: Key Factors Affecting Corporate Value” on page 135

Corporate Value Components

Corporate value, the economic value of the business or strategy, consists of:

- The present value of all expected cash flow from operations during the forecast period, known as discounted cash flows.
- The value of the firm beyond the forecast period, known as residual value.

The cash flows are “discounted” by the firm’s “cost of capital,” or required rate of return, which takes into account the firm’s level of both business and financial risk.
There is a third component, the value of investments in assets not involved in operations (passive investments). Their value can be added as a “plugged” number or separately modeled and added to Corporate value. See (c) below.

In general, then: Corporate Value = Value created during the Forecast Period (discounted cash flows) + Value after the Forecast Period (residual value)

**Discounted Cash Flows Component**

The discounted cash flows (or, more precisely, the “cumulative present value of cash flows”) represent the expected net cash inflows to the business, independent of the firm’s financing or dividend policies:

In general, then:

Cash Flow from Operations = Actual dollar inflows + Out of Pocket Dollars

In Strategic Finance, after you’ve determined the cash flow from operations for each year in the forecast period, those flows are discounted back to present-value terms, using a discount factor based on the cost of capital.

**Residual Value Component**

Only a small portion of a company’s market value can be reasonably attributed to its estimated cash flows during a forecast period of 5 or 10 years. The remaining portion, called the residual value, typically represents well over 50% (and usually closer to 80%) of the total corporate value. There are several different ways to measure this value.

**Passive Investments Component**

For a precise estimation of corporate value, a third component must also be included - the current market value of investment holdings. Examples include: marketable securities, investments in stocks and bonds, investments in unconsolidated subsidiaries, an overfunded pension plan, and liquid non-operating assets. These items are not accounted for in the cash flows, but they have a value to the firm, so their value must be added to the other two components.

**Note:** The reason that marketable securities are not included in the working capital requirements used in estimating cash flow is that they represent cash holdings beyond those necessary for operating the business. Note also that debt (specifically, the current portion of long-term debt) is not included. Debt holders and equity holders hold the “claims” to the net cash flows generated by the firm. They are part of the capital structure and to include them in the investment requirements is “double counting”.

To summarize, Corporate value has three components: Cash flows, residual value and investments
Value Drivers: Key Factors Affecting Corporate Value

There are six key macro variables affecting values of discounted stream of cash flow from operations:

- Sales Growth Rate (g)
- Operating Profit Margin (p)
- Cash Taxes on Operating Profit (t)
- Fixed Capital Investment (f)
- Incremental Working Capital Investment (w)
- Cost of Capital (K)

These variables, or value drivers, determine each year's cash flow from operations. After each year's cash flow from operations is calculated, those flows are each discounted based on the cost of capital (K).

Because these value drivers determine the expected cash flow from operations, you can evaluate these factors to determine which ones have the greatest impact on corporate shareholder value.

To learn the value drivers, use Scratchpad to estimate corporate value, so you can focus on key valuation variables.

The inputs are:

1. Number of Forecast Periods
2. Sales (Last Historical Period)
3. Sales Growth Rate (G)
4. Operating Profit Margin (P)
5. Incremental Fixed Capital Investment (F)
6. Incremental Working Capital Investment (W)
7. Tax Rate on Operating Profit (Tc)
8. Residual Value Income Tax Rate (Tr)
9. Cost of Capital (K)
10. Marketable Securities and Other Investments
11. Debt and Other Obligations
12. No. of Common Shares

After completing your scratchpad analysis, which holds each of these variables constant throughout the forecast period, you can use a more explicit model in Strategic Finance to evaluate these variables in greater detail and changing over time. Using the Scenario Manager, you can determine the impact on shareholder value of changing variables contributing to value drivers.
**Dividend Discount Method**

The Dividend Discount Model calculates the value of the equity of a firm directly from the expected cash flows received by the shareholders—the Dividends. These flows are discounted at the cost of equity. The advantage of this method is that it enables you to compute Shareholder Value directly from the flows that the shareholders are actually forecast to receive.

Dividend Discount Model has disadvantages:

- If a firm adopts a fixed dividend policy, that firm's leverage may drift from the target leverage. If a firm is accumulating and investing cash in the form of marketable securities, leverage falls as does the Cost of Equity used to discount the dividend flows. If a firm is taking on debt to maintain its dividend policy, leverage and the Cost of Equity rise. Because the Cost of Equity is sensitive to changes in leverage, it needs to be adjusted for these changes in leverage to produce an accurate valuation.

- If a firm is accumulating cash or debt, sooner or later it needs to adjust the flows to shareholders to account for this. Strategic Finance assumes that, if such an adjustment is required, it can be done at the end of the forecast period.

- If a firm is accumulating cash, it is de-levering and its Cost of Equity is being reduced. Consider the firm as engaging in two businesses: the normal business of the firm, and the business of investment (which you would expect to be less risky than the normal business of the firm).

If a firm adjusts its dividend policy to maintain a constant leverage, it is paying what Strategic Finance refers to as the “Affordable Dividend.” This eliminates the problems with changes in leverage, but few firms are expected to pay their Affordable Dividend in each year. Thus, you would no longer be forecasting the expected real flows to shareholders.

“Mid-Period versus End-of-Period Discounting” on page 136

**Mid-Period versus End-of-Period Discounting**

Consider when a firm is expected to pay its dividends. Most firms pay dividends on a quarterly or semi-annual basis. Mid-period discounting should be used here. If a firm paid only annual dividends, end-of-period discounting is appropriate.

**Economic Profit Method**

Although this method mixes cash and book items, it can lead to correct equity valuations if applied carefully. There are many ways to formulate this model, the most common being: EP = Net Operating Profit - Capital Charge

where: Capital Charge = Cost of Capital * Adjusted Book Value in Previous Period

The EP is calculated each period and discounted at the Cost of Capital to get a present value (PVEP). Adjusted Book Value is increased by the total incremental net investment for each period, so in general, a growing firm increases Capital charge over time. Then: Corporate Value = PVEP + Beginning Adjusted Book Value
which should be the same as the Corporate Value computed using the Shareholder Value Method. The Equity Value can be computed by the usual method of subtracting the market value of debt and other obligations and adding back the market value of investments.

If the Adjusted Book Value is a proxy for the owner investment in the business, the Capital Charge is the hurdle that must be reached to provide a break-even return on that investment. The Adjustments (on both the asset and liability side of the equation) that are made to Book Value make it a more reasonable proxy for owner investment in the firm, whether in the form of cash or as foregone dividends. The Economic Profit Model focuses management’s attention on obtaining returns greater than the “floor” imposed by the Capital Charge.

The problems with the Economic Profit approach are:

- Beginning Adjusted Book Value is used as a proxy for the investment in the firm, but this number requires you to decide on the adjustments necessary to obtain the actual economic value of the firm. If the Adjusted Book Value is higher than the actual economic value, Economic Profit in the forecast period appears to be lower than it actually is—possibly causing a firm that is actually creating value to appear to be destroying value. For firms whose economic value can be measured in market terms, requiring historical, albeit adjusted, book values as part of the model is an unnecessary complication.

- Economic Profit is a short-term measure which may cause management to focus on the “wrong” targets, leading to dysfunctional behavior. Many value-creating projects don’t return the cost of capital in their first or second year, although the long-term cash flows easily make up for the investment required in the early years of the project. A manager measured on EP may not propose such a project because of the negative Economic Profit impact in the short-term.

- The Economic Profit Model usually assumes that a firm can generate excess returns indefinitely, which runs counter to the idea that a firm creates value due to a competitive advantage that can only be maintained for a limited number of years.

**Cost of Capital for Free Cash Flow Methods**

The Cost of Capital (K) represents the weighted average costs of debt and equity, in proportion to the levels specified by the company’s debt/equity ratio (based on market rather than book values).

The “cost” refers to the fact that suppliers of capital demand a return on their investment, and that return represents a cost to the recipient (i.e., the firm).

The Cost of Debt is less than the Cost of Equity to the borrower for these reasons:

1. The interest portion of the return to debtholders is tax deductible.
2. Debtholders usually require a lower return because:
   a. Debtholders’ claims have a higher priority than stockholders’ claims in the event of liquidation.
   b. Debt has a fixed rate of return, whereas the return on stock depends on company performance.
The returns demanded by debtholders and stockholders are both important because the Shareholder Value Method discounts after-tax, pre-interest cash flows—cash flows on which both debtholders and shareholders have claims. The cost of capital, therefore, incorporates the claims of both these groups in proportion to their relative capital contribution. The cash flows discounted by the cost of capital yields corporate value. The market value of debt is subtracted from the corporate value to obtain shareholder value (the value of the equity).

By establishing a cost of capital, you are estimating a minimum acceptable rate of return. Returns above that rate create value for shareholders.

Most firms are comprised of different business units, each with a different exposure to macro-economic events. Not only should these units be analyzed as businesses, but each may well have a different cost of capital.

- “Recommendation to Use a Constant Cost of Capital” on page 138
- “Cost of Debt” on page 139
- “Cost of Preferred” on page 139
- “Cost of Equity” on page 139
- “Risk-Free Rate” on page 140
- “Beta of Equity” on page 140
- “Market Risk Premium” on page 141

### Recommendation to Use a Constant Cost of Capital

From a practical matter, you should use a cost of capital that is constant over time in Strategic Finance. In other words, the cost of capital for each forecast period should be the same as the long-term cost of capital. Think of this cost of capital as being a “yield to maturity” concept. The alternative is to forecast a “term structure”. Except in very special situations, the value of attempting these forecasts is minimal. Another factor to consider is that the first few years of expected cash flows only contribute a small fraction of the firm’s total value, and that is when most of the potential capital structure changes occur. Consequently, even if you could estimate these changes, it would not change the firm’s calculated value.

Analysts occasionally claim, for a variety of reasons, that the cost of capital for a company changes over time and they want to change the cost of capital used in future periods. Here are two frequently cited reasons given for wanting to change the cost of capital, with the rationale for why the rate should remain constant:

1. Claim: “Interest rates are changing in the future, so our cost of capital should also be changing.”

   **Response:** Long-Term interest rates incorporate the market’s expectations of average future interest rates. Although future interest rates change, people cannot consistently outguess the real market changes.

2. Claim: “Although I feel reasonably confident about my forecast for next year, I’m less certain about the forecasts five years from now. Therefore I should use a higher cost of capital in later periods to discount those less certain cash flows.”

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Response: The discounting approach, in which cash flows are discounted by $1 \div (1+K)^n$, compounds the risk and reflects the assumption that the further into the future you project, the riskier the estimates are.

Note: There are occasionally situations when the cost of capital during the forecast period is not the same as the long-term cost of capital, usually when the capital structure is expected to change dramatically over time. (e.g., the case of a typical LBO)

Cost of Debt

The Cost of Debt represents the after-tax cost of debt capital to a company. It can be determined in The Cost of Capital Calculator based on the rates you enter for the Yield to Maturity (YTM) and the Marginal Tax Rate.

It is important that the rate you enter is the current yield to maturity rather than the nominal cost of debt. The nominal or coupon rate (which is based on the face amount of the debt) determines the interest payment, but it does not necessarily reflect the actual cost of the corporation's debt today. As required returns change (because of changing expectations about future inflation levels and economic conditions), the price of a debt issue changes so that the actual interest payments (the nominal rate multiplied by the face amount) and anticipated proceeds at maturity yield the investors their revised required return. The yield to maturity, not the nominal rate, fully reflects the current return demanded by debtholders and the rate at which debt should be replaced.

In estimating the Cost of Debt (yield to maturity), be sure to use a long-term rate. Short-term interest rates do not incorporate long-term expectations about inflation. In projecting financial data for 5 to 10 years into the future, you should use a cost of capital that is consistent with the long-term time horizon of the forecast. Also, even if a company routinely “rolls over” short-term debt as permanent financing, the long-term rate is still a better approximation of the future Cost of Debt because interest rates on long-term debt incorporate the expected cost of repeated short-term borrowing.

The Cost of Debt represents the future cost of debt over a long period. Use the yield to maturity on long-term debt.

Cost of Preferred

The Cost of Preferred represents the expected return to preferred stockholders. Like debt, you must enter the yield to maturity on preferred stock, but without the tax shielding.

Cost of Equity

The return expected by investors for an individual stock - referred to in Strategic Finance as the Cost of Equity - equals the Risk-Free Rate (RF) plus the Market Risk Premium multiplied by the stock’s beta ($\beta$):
**Risk-Free Rate**

The Risk-Free Rate (RF) is the rate of return investors expect from holding “safe” investments such as long-term U.S. government securities, which are considered virtually free of risk of default because of the stability of the U.S. government. The return demanded by investors consists of two elements: the “pure” or “real” interest rate (compensation for making the investment) and the compensation for expected inflation.

\[
\text{Risk-Free Rate} = \text{"Real" Interest Rate} + \text{Expected Inflation Rate}
\]

The rate of return on common stock (from dividends and stock price appreciation) is less certain (i.e., riskier) than the relatively predictable returns available from U.S. government bonds. As compensation for the higher risk involved in owning common stock, investors demand a rate of return on stocks that is greater than the Risk-Free Rate. Therefore the rate of return on stock equals the Risk-Free Rate plus a “risk premium” for holding that stock rather than holding U.S. government bonds.

For the Risk-Free Rate, it is wise to use the current rate on long-term government bonds, which is quoted daily in publications such as the Wall Street Journal and the Financial Times. The use of short-term rates such as the current rates on Treasury bills is not recommended because they incorporate expectations about only short-term (i.e., less than 90 days) inflation. Using the longest term Risk-Free Rate available incorporates expectations for inflation and interest rate fluctuations.

**Beta of Equity**

Individual stocks tend to be more or less risky than the overall market. The riskiness of a stock, measured by the variance of its return relative to the market’s return is indicated by an index called “beta” (\(\beta\)).

- If \(\beta = 1\), the stock’s return fluctuates identically with the market’s return.
- If \(\beta > 1\), the stock’s return varies more than the market’s return, and therefore its risk exceeds that of the market as a whole.
- If \(\beta < 1\), the stock’s return varies less than the market’s return, and therefore its risk is less than that of the market as a whole.

For example, if a stock’s return normally moves up or down 1.2% when the market moves up or down only 1%, the stock has a beta of 1.2. The beta is used to calculate the Cost of Equity (the return expected by stockholders) as follows:

\[
\text{Cost of Equity} = \text{Risk Free} + \beta \times \text{Market Risk Premium}
\]

**Public Companies**

Beta estimates are published by a number of brokerage and advisory services, including Value Line and Merrill Lynch. Check the beta listed in one of these services as a measure of the company’s past riskiness.
Private Companies

Check the betas listed in the preceding services for public companies that might be expected to share degree of market risk.

Beta is a past measure of riskiness. When making future projections, you should consider anticipated changes in the company's business or financial risk profile.

Note: If the company's Target Debt Capacity changes or you estimate a beta based on the beta of another company, you may need to adjust the beta for difference in financial risk. This is known as “unlevering” and “relevering” the beta.

Market Risk Premium

The market risk premium is the additional rate of return that must be paid over the risk-free rate to persuade investors to hold investments with systematic risk equal to the market portfolio.

The market risk premium is calculated by subtracting the expected long-term risk-free rate from the expected market return. These figures should model future market conditions closely. There are two approaches:

- “Historical” or “ex-post” risk premia approach, which claims that past market returns are the best estimator of future market returns. See “Historical (Ex-Post) Risk Premium” on page 141.
- “Forecast” or “ex-ante” risk premia approach, which claims that current market information can be used to improve the accuracy of historically based estimates. See “Forecast (Ex-Ante) Risk Premium” on page 141.

Historical (Ex-Post) Risk Premium

The historical approach relies on the assumption that the market risk premium is basically stable over time. It uses an arithmetic average of past risk premia to estimate future risk premia. Because it relies on actual historical information, this method can be considered an objective measure of the long-term expected market risk premium.

However, those who use this method must decide subjectively how many historical periods to use in the average. Some people believe that using the longest available data period is most objective. Since market statistics have been monitored since 1926, this period is from 1926 until today. Other people select milestones such as World War II, on the assumption that the risk premium is more stable since that time.

Forecast (Ex-Ante) Risk Premium

Other financial professionals believe that information besides historical data can be useful in predicting future market risk premia. They believe that there may have been structural changes in investment markets that affect the market risk premium and therefore historical estimates should be modified by or replaced altogether with, present expectations of future market conditions. This approach is called “forecast,” “ex-ante” or “future” risk premium determination.
To calculate a forecast risk premium, a forecasted risk-free rate is subtracted from a forecasted market return. The current yield curve is a valuable source of information about forecasted risk-free rates. It is composed of the current yields to maturity of risk-free bonds of various maturities. Because future rates can be “locked in” today and realized later, many people believe that these rates offer accurate estimates of future rates. Therefore, they use these rates as a proxy for future risk-free rates in calculating forecast risk premia.

There is much less agreement on how to forecast future market returns. In fact, the main problem with the forecast approach is that it requires a great deal of subjective judgment by the person doing the calculation. Which forecast estimates for the expected market return should be used? Should historical information be used at all? If so, what time period or periods is used and how should they be weighted with forecast estimates?

Methods of forecasting future market conditions are as varied as the assumptions on which they are based. A desirable forecast risk premium takes full advantage of the information currently available in the yield curve, includes structural changes in the risk premium, but involves a minimum amount of subjective judgment.

### Residual Value for Free Cash Flow Methods

- “Perpetuity for Shareholder Value Method” on page 142
- “Growth in Perpetuity for Shareholder Value Method” on page 143
- “Value Growth Duration for Shareholder Value Method” on page 143
- “Price/Earnings Ratio for Shareholder Value Method” on page 144
- “Liquidation Value for Shareholder Value Method” on page 144
- “Market-to-Book Ratio for Shareholder Value Method” on page 145

### Perpetuity for Shareholder Value Method

The Perpetuity Method measures Residual Value by assuming that the firm provides a level stream of cash flows to its stakeholders forever. This assumption seems counter-intuitive. You expect that your firm continues to grow.

But, you can use a simple Perpetuity to compute Residual Value. Strategic Finance computes the perpetuity using a pre-investment cash flow stream. Because this stream doesn’t include investment, the issue of future growth can be simplified by assuming that future investments earn exactly at the firm’s Long-Term Cost of Capital rate—in other words, the Net Present Value of new investment after the forecast period is zero. (Another way to look at it is that the Internal Rate of Return on new investment equal the Long-Term Cost of Capital.)

Next it is necessary to determine which flows accrue to your firm in Perpetuity. Strategic Finance uses the after-tax value of Operating Profit, which includes Depreciation. (Depreciation represents the amount of investment needed to replace physical assets that wear out or become obsolete.) You can adjust this value if you believe that the last forecast period’s Operating Profit is not representative of the on-going Operating Profit for the firm -- similar to the adjustment to Earnings in the P/E Ratio Method.
The formula for Perpetuity in Arrears (that is, when the payment occurs at the end of the period) is as follows:

\[(\text{Operating Profit} + \text{Operating Profit Adj.}) \times (1 - \text{RV Tax Rate}) / \text{Long-Term Cost of Capital}\]

where:

<table>
<thead>
<tr>
<th>Operating Profit Adj.</th>
<th>(v5110)</th>
<th>Taxable Operating Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV Tax Rate</td>
<td>(v4.00.560)</td>
<td>Residual Value Tax Rate</td>
</tr>
<tr>
<td>L-T Cost of Capital</td>
<td>(v5005)</td>
<td>Long-Term Cost of Capital</td>
</tr>
</tbody>
</table>

**Growth in Perpetuity for Shareholder Value Method**

This variation of the Perpetuity Method assumes that the cash flows grow (or decay) at a compound rate of \(g\) forever. This method, usually referred to as the Gordon Model, is characterized by the \(K - g\) term in the denominator and next year’s cash flow in the numerator.

The main limitation to this approach is that it may not fully recognize the cash outflows for additional investments that are likely to be required for continued growth. Also, it ignores capital structure: the growing cash flows can often lead to severe changes in capital structure (e.g., high debt/equity ratios) that are undesirable or economically unrealistic. Finally, the method makes no assumption about the economic return on the investment required for the growth. Thus, the net present value of the growth in perpetuity can yield a value less than, equal to or greater than that of the Perpetuity Method (where the economic assumption of growth yielding NPV = 0 is invoked).

**Note:** As perpetuity growth rates approach the long-term cost of capital, the residual value rises toward infinity - because the denominator in the formula below goes toward zero - which is clearly not a reasonable assumption.

**Value Growth Duration for Shareholder Value Method**

The Value Growth Duration Method enables you to assume that the post-investment cash flows that the stakeholders receive increase at a specified growth rate for a specified number of years. Thus, it explicitly assumes that value creation occurs after the forecast period but not indefinitely -- an assumption many investors consider reasonable. What is unclear for this method is how to estimate that growth rate, especially given that it needs to take investment into account, and the length of time horizon for value-creating growth.

The Value Growth Duration Method starts with the formula for a Growing Perpetuity of one dollar in Arrears: \((1 + g) / (K - g)\)

where:
<table>
<thead>
<tr>
<th>g</th>
<th>(v4.00.520)</th>
<th>Perpetuity growth rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>(v5005)</td>
<td>Long-Term Cost of Capital</td>
</tr>
</tbody>
</table>

However, Strategic Finance assumes the time horizon is limited to a fixed number of years. Thus, in the Nth year, at the end of the Value Growth Duration, Strategic Finance converts from a Growing Perpetuity to a simple Perpetuity.

**Price/Earnings Ratio for Shareholder Value Method**

This is one of the two common “rule-of-thumb” techniques supported by Strategic Finance (the similar Market / Book Ratio method follows). The P/E Ratio method multiplies an estimate for a future P/E ratio by the Net Income in the last period to determine an equity value.

To calculate the Residual Value using the Price/Earnings Ratio Method, Strategic Finance uses Income Available for Common as earnings, which is net of Preferred Dividends. In addition, because there is the possibility that the final forecast period’s earnings are atypical and not representative of what the firm would earn going forward, Strategic Finance includes a “Normalized Earnings Adjustment” variable to enable you to adjust the earnings accordingly.

Finally, because this method estimates an equity value, Strategic Finance adds back the future market value of the debt to get the corporate value. Strategic Finance enables you to determine the book value of the debt and enables you to input a Debt Discount factor to adjust the book value of the debt to market value.

The formula for the Price/Earnings Ratio Residual Value Method (v5200) is:

\[
P/E \times (Earnings + Earnings \ Adj.) + Book Value of Debt - Debt Discount
\]

where:

<table>
<thead>
<tr>
<th>P/E</th>
<th>(v5130) User-supplied P/E Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings</td>
<td>(v1850) Income Available for Common</td>
</tr>
<tr>
<td>Earnings Adj.</td>
<td>(v5140) Normalized Earnings Adjustment</td>
</tr>
<tr>
<td>Book Value of Debt</td>
<td>(v3510) Total Debt and Preferred Stock</td>
</tr>
<tr>
<td>Debt Premium</td>
<td>(v5150) Debt Discount/(Premium)</td>
</tr>
</tbody>
</table>

**Liquidation Value for Shareholder Value Method**

The simplest of the supported methods for determining Residual Value is the Liquidation Value method. Using this method, you enter the estimate worth of the company at the end of the forecast period. That amount should include the cash required to retire all the debt of the firm.

You can enter Liquidation Residual Value in v5180. This can include a formula based on key financial accounts in your analysis.
Market-to-Book Ratio for Shareholder Value Method

The Market-to-Book Ratio method for calculating Residual Value is similar to the Price/Earnings Ratio method. It uses a “rule-of-thumb” for determining the equity value of a company and, like the P/E method, must be adjusted by adding back the value of the debt to obtain corporate value.

The Market-to-Book Residual Value (v5190) is calculated as follows:

\[ M/B \times \text{Common Equity} + \text{Value of Dept} - \text{Debt Discount} \]

where:

<table>
<thead>
<tr>
<th>M/B Ratio</th>
<th>(v5120) User-supplied Market-to-Book Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Equity</td>
<td>(v2890) Common Equity</td>
</tr>
<tr>
<td>Book Value of Debt</td>
<td>(v3510) Total Debt and Preferred Stock</td>
</tr>
<tr>
<td>Debt Discount</td>
<td>(v5150) Debt Discount/(Premium)</td>
</tr>
</tbody>
</table>
Using Worksheets

About Worksheets
Worksheets are spreadsheets for entering and calculating data outside the main financial model. You can use them to detail information that feeds into the model, but does not need be expressed directly in the model. You can enter Worksheet data manually, from Excel, or use formulas to calculate values. Once data is in a Worksheet, you can link it into the financial model on the Accounts spreadsheet. Each Strategic Finance file comes with a built-in worksheet. It can be accessed by selecting the Worksheet tab to the left of the Accounts tab.

Using Worksheets

Subtopics
- Guidelines
- Opening Worksheets
- Closing Worksheets
- Adding Worksheets
- Deleting Worksheets
- Manually Entering Data into Worksheets
- Copying and Pasting Data into Worksheets
- Creating Formulas in Worksheets

Guidelines
- When you copy a range of cells on the Worksheet and paste on the Account Spreadsheet:
  1. Highlight a range of target cells with a number of rows and columns equal to the size of those copied, or
  2. Highlight only the upper-left corner cell of the target, and the paste fills accordingly.
Ensure that data linked to the Account Spreadsheet corresponds with the chosen forecast method. For example, if you are linking growth percentages, the forecast method should use a growth rate.

### Opening Worksheets

To open the worksheet from the Strategic Finance spreadsheet.

> From **Start** grouping label, click **WorkSheet**, and then select **Open**. A new worksheet is displayed at the bottom of the **Sheet** tab.

### Closing Worksheets

To close the worksheet from the Strategic Finance spreadsheet.

> From **Start** grouping label, click **WorkSheet**, and then select **Close**.

### Adding Worksheets

To add the worksheet from the Strategic Finance spreadsheet.

1. **To access the worksheet.** See “Opening Worksheets” on page 148

   *Note:* You cannot add the worksheet from **Account View** at the bottom of the **Sheet** tab. You must open the worksheet. See “Opening Worksheets” on page 148

2. **From Start grouping label, click WorkSheet, and then select Add Sheet.**

   A new worksheet is added at the bottom of the **Sheet** tab.

### Deleting Worksheets

To delete the worksheet from the Strategic Finance spreadsheet.

1. **Select the worksheet that you want to delete.**

2. **From Start grouping label, click WorkSheet, and then select Delete Sheet.**

   The worksheet is deleted from the **Sheet** tab.

   *Note:* You cannot delete the last model worksheet.
Manually Entering Data into Worksheets

➤ To manually data into worksheets:
1. Click on a cell.
2. Enter data.

Copying and Pasting Data into Worksheets

You can copy and paste data into a worksheet from other applications.

➤ To paste data from another source into the worksheet:
1. Open the source application, highlight the data and copy.
2. In the worksheet, highlight the cell or range and select Edit, then Paste.

Creating Formulas in Worksheets

You can create formulas in worksheet cells. Formulas are stored until deleted from the cell.

➤ To create formulas within cells:
1. In the worksheet, click a cell.
2. Enter a formula.
   
   Begin with an equal sign and proceed with the formula. For example:
   
   \[ =\text{SUM}(B5:B18) \]

   To reference a cell in your calculation, click that cell following a mathematical operator.

Linking to Account Spreadsheets

You can link data in worksheet cells directly to the Account spreadsheet for use in financial models. When you are viewing the cells on the Account Spreadsheet, cells that include data linked from a worksheet are highlighted in green.

➤ To link data from worksheet to the Account spreadsheet:
1. Select a worksheet.
2. In the worksheet, highlight a cell or range of cells.
3. From Start grouping label, click WorkSheet, then Copy Worksheet Link.
4. Select the Account spreadsheet.
5. In the Account spreadsheet, highlight a cell or range of cells.
6. Select Edit, then Paste Worksheet Link.
About Dimensions

Subtopics
- Creating User-Defined Dimensional Structures
- Deleting Dimensions or Members
- Assigning Dimensions to Accounts
- Allocating Aggregate Amounts to Lower-Level Values

Dimensions are a concise, intuitive way of organizing data. Each dimension is an attribute containing members, representing variations of the data. For example, the Region dimension might include the members North, South, East and West.

A dimension member is a part of a dimension—a dimension within a dimension. For example:
- January 2005 or 1Qtr05 are members of the dimension Time.
- Wholesale and Retail are members of the dimension Distribution Channel.
- Base, Optimistic, and Pessimistic are members of the dimension Scenario.

Account instances are unique intersections of dimension members within accounts where values are stored. For example, Sales of Radios/Retail Stores, or Sales of Clothes/Retail Stores might be instances of the account Sales.

Creating User-Defined Dimensional Structures

Caution! When dimensional accounts contain data, adding child members deletes all data in the parent member.

Use these rules when naming dimension or members:
- Dimension names are validated against other dimensions.
• Member names must be unique—even across dimensions.
• Members are not case sensitive (South=souTh=SOUTH).
• Member cannot share names with dimensions.
• Dimension and member names can contain alphanumeric characters, spaces, hyphens, slashes, periods, commas, and colons.

➤ To create user-defined dimensional structures:
1. Select Accounts, then Dimension, and then Maintenance.
2. Option: To create dimensions, click Add Sibling and enter a name.
3. Option: To create members, select a dimension, click Add Child, and enter a member name.
4. Option: To create nested members, select a member, click Add Child, and enter a member name.
5. Click OK.

Deleting Dimensions or Members

Caution! When dimensional accounts contain data, deleting child members deletes all data in the parent member.

➤ To delete dimension or members:
1. Select Accounts, then Dimension, and then Maintenance.
2. Select a dimension or member.
   Dimension and member children are also deleted.
3. Click Delete.
4. Click OK.

Assigning Dimensions to Accounts

When you assign a dimension to an account, those dimensions become another way of storing detailed information within the account.

➤ To add one or more dimensions to accounts:
1. On the Accounts spreadsheet, select an account.
2. Select Accounts, then Dimension, and then Assign Dimension.
3. In Available Dimensions, select one or more dimension and click Add.
   Selected dimensions move from Available Dimensions to Assigned Dimensions.
4. Optional: Select a dimension in Assigned Dimensions, and click Remove to remove dimensional assignments.
5. Click OK.

Strategic Finance adds an instance of that account for each member. In the example following, the account Other Operating Expenses (v1090) is assigned to the dimension Time, and displays instances for each member: Year, Month, and Week. See “Viewing Dimensional Accounts” on page 153.

Allocating Aggregate Amounts to Lower-Level Values

When data is entered in dimensional accounts and outputs are calculated, you can enter aggregate amounts at top or mid-level accounts and allocate them to the lower-level members in proportion to the lower-level values. These outputs are backsolved for inputs for the lower-level members.

To allocate dimensional accounts:

1. On the Accounts spreadsheet, select an aggregate dimensional account.
   For example: Sales/Stereos
2. Select Accounts, then Dimension, and then Account Allocation.
3. Under New Amount, enter the an amount of the aggregate account.
4. Click OK.

Strategic Finance allocate amounts to each year in proportion to the outputs for the Current Amount value. For example, you could change the allocation of the aggregate for 2001 by entering the New Amount of 40. Strategic Finance backs into dimensional data. For example, the New Amount of 40 is divided equally into each account dimension combination for 2001.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Current Amount</th>
<th>New Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>2002</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>2003</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>2004</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>2005</td>
<td>30</td>
<td>10</td>
</tr>
</tbody>
</table>

Viewing Dimensional Accounts

After dimensions are assigned accounts, you select which dimensional accounts to display from the drop-down list in the upper-left corner, and clicking Apply.

- “Dimensional Input View” on page 154
- “Dimensional Report View” on page 156
**Dimensional Input View**

When dimensions are first assigned to accounts, Strategic Finance automatically creates account instances according to the dimensional structure. These accounts are both input and calculated for aggregate values.

For example:

**Non-dimensional:**

<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Input</td>
</tr>
</tbody>
</table>

**Dimensional:**

<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/North</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Illinois</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Illinois/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Illinois/Televisions</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Michigan</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Michigan/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Michigan/Televisions</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/South</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Florida</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Florida/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Florida/Televisions</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Georgia</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Georgia/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Georgia/Televisions</td>
<td>Input</td>
</tr>
</tbody>
</table>

- “Dimension Order” on page 155
- “Dimension Level of Detail” on page 155
- “Selecting Specific Dimension Members” on page 156
**Dimension Order**

To reorder the dimension list:

1. From the Accounts grouping label, and select Dimension, and then Maintenance.

2. **Option:** From the list, select the member and then click Up Arrow button to move the selected dimension up the order.

3. **Option:** From the list, select the member and then click Down Arrow button to move the selected dimension down the order.

Accounts display in this order:

<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Stereos</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Stereos/North</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Stereos/Illinois</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Stereos/Michigan</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Stereos/South</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Stereos/Florida</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Stereos/Georgia</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Televisions</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Televisions/North</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Televisions/Illinois</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Televisions/Michigan</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Televisions/South</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Televisions/Florida</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Televisions/Georgia</td>
<td>Input</td>
</tr>
</tbody>
</table>

**Note:** Data for input accounts remains the same, regardless of order.

**Dimension Level of Detail**

Use dimension settings to display varying levels of detail such as member names, or only specific members. See “Selecting Specific Dimension Members” on page 156.
<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Illinois</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Illinois/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Illinois/Radios</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Illinois/Televisions</td>
<td>Input</td>
</tr>
</tbody>
</table>

**Selecting Specific Dimension Members**

If you select `<Selected Members>`, the Dimension dialog enables you to display multiple members—for example, select North, Illinois, and Michigan, and click Apply to display:

<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/North</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Illinois</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Illinois/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Illinois/Radios</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Illinois/Televisions</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Michigan</td>
<td>Calc</td>
</tr>
<tr>
<td>Sales/Michigan/Stereos</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Michigan/Radios</td>
<td>Input</td>
</tr>
<tr>
<td>Sales/Michigan/Televisions</td>
<td>Input</td>
</tr>
</tbody>
</table>

**Dimensional Report View**

In report, dimensional children display above aggregate account values, separated by subtotal lines. With “All Members” of both dimensions showing, the Income Statement appears as follows:

<table>
<thead>
<tr>
<th>Sales Dimension</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Illinois/Stereos</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Illinois/Radios</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Illinois/Televisions</td>
<td>0.00</td>
</tr>
</tbody>
</table>

--------------

Sales/Illinois   0.00
<table>
<thead>
<tr>
<th>Sales Dimension</th>
<th>1999</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Michigan/Stereos</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Michigan/Radios</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Michigan/Televisions</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Michigan</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/North</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Florida/Stereos</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Florida/Radios</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Florida/Televisions</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Florida</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Georgia/Stereos</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Georgia/Radios</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Georgia/Televisions</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Georgia</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/South</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales</td>
<td>0.00</td>
</tr>
</tbody>
</table>

- “Display Order” on page 157
- “No Detail Display” on page 159
- “Non-Selected Member Display” on page 159
- “Selected Member Display” on page 159

**Display Order**

As on the Accounts spreadsheet, reports enable you to reorder the dimensional structure—for example, switch Product with Region and the report appears as follows:
<table>
<thead>
<tr>
<th>Sales/Stereos/Illinois</th>
<th>0.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Stereos/Michigan</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Stereos/North</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Stereos/Florida</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Stereos/Georgia</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Stereos/South</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Stereos</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios/Illinois</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios/Michigan</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios/North</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios/Florida</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios/Georgia</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios/South</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Radios</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Televisions/Illinois</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Televisions/Michigan</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Televisions/North</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Televisions/Florida</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Televisions/Georgia</td>
<td>0.00</td>
</tr>
<tr>
<td>Sales/Televisions/South</td>
<td>0.00</td>
</tr>
</tbody>
</table>
No Detail Display

You can show no detail on reports—for example, choose “Product” and “Region” and the report displays as follows:

<table>
<thead>
<tr>
<th>Sale</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Non-Selected Member Display

Unlike on the Accounts spreadsheet, non-selected dimensional members must be aggregated into the account “Other” to reconcile the report properly—for example, selecting “Illinois” in the Region dimension, the report displays as follows:

<table>
<thead>
<tr>
<th>Sales/Stereos/Illinois</th>
<th>12.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Radios/Illinois</td>
<td>6.00</td>
</tr>
<tr>
<td>Sales/Televisions/Illinois</td>
<td>18.00</td>
</tr>
<tr>
<td>Sales/Other</td>
<td>26.00</td>
</tr>
<tr>
<td>Sales</td>
<td>62.00</td>
</tr>
</tbody>
</table>

Selected Member Display

If you select <Selected Members>, the Dimension dialog enables you to display multiple members—for example, if you select Illinois and Michigan, the report displays as follows:

<table>
<thead>
<tr>
<th>Sales/Stereos/Illinois</th>
<th>12.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales/Stereos/Michigan</td>
<td>4.00</td>
</tr>
<tr>
<td>Sales/Stereos/North</td>
<td>16.00</td>
</tr>
<tr>
<td>Sales/Radios/Illinois</td>
<td>6.00</td>
</tr>
<tr>
<td>Sales/Stereos/Illinois</td>
<td>12.00</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Sales/Radios/Michigan</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales/Radios/North</td>
<td>8.00</td>
</tr>
<tr>
<td>Sales/Televisions/Illinois</td>
<td>18.00</td>
</tr>
<tr>
<td>Sales/Televisions/Michigan</td>
<td>7.00</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales/Televisions/North</td>
<td>25.00</td>
</tr>
<tr>
<td>Sales/Other</td>
<td>13.00</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales</td>
<td>62.00</td>
</tr>
</tbody>
</table>

All selected members appear in the “Sales/Other” account to reconcile to Sales.
Using Debt Scheduler and Value Calculators

About Debt Scheduler and Value Calculators
Strategic Finance provides tools designed with built-in corporate finance theory for calculating valuation assumptions.

- Debt Scheduler—Calculates debt amortization information.
- Depreciation Scheduler—Creates time periods for calculating depreciation of assets.

Using Debt Scheduler
Debt Scheduler helps you capture and manage cash flow involved in debt investments, such as debt amortization, payments, interest, and interest rates:

- In setting the term (time) of the debt, you decide the number of years to repay. You can define debt as acquisition-related, to issue debt as acquisition flows instead of investing flows.
- In setting the principal, you define the money borrowed, premiums or discounts, and one-time costs incurred at the time of debt issuance.
- In scheduling payments, you can have recurring monthly payments, payments on dates for amounts, and additional payments.
- In setting interest rates, you can define rates with macroeconomic variables, calculate interests rate as percentages of spread accounts, calculate interest rate changes with grid pricing to model company performance in a given time period, or add paid-in-kind (PIK) interest to the principal.
- In setting the debt recapture, you apply performance-based excess cash flow to the debt.
- In setting inheritance, you can define parameters inherited by other scenarios from Base scenarios.

If using Debt Scheduler to calculate amortization, transfer the resulting data directly into debt accounts:
New Senior Notes (v2652)
New Senior Subordinated Notes (v2654)
Total Long Term Debt (v2660)

You must select one of these debt accounts or a related account to create a debt schedule.

Debt schedules are scenario-specific. When you create debt schedules, ensure you are in the correct scenario. You cannot create debt schedules in Actual scenarios.

**Debt Schedule Guidelines**

With debt schedules, use these guidelines:

- Time structures of financial models must be in calendar time before creating debt schedules. Non-calendar time structures, such as years in which each month has exactly 30 days, cannot handle debt schedules.

- Calculate all inputs for time periods before you running debt schedules to produce outputs. For example, PIK Interest Rate is an input to the calculation and cannot be forecast using Cash Interest Rate after Repricing, which is an output of the calculation—a circular reference may result.

- Do not create debt schedules in accounts containing debt. In particular, avoid:
  - The target account contains aggregate periods accepting input, and the debt schedule starts in a time period inside the boundary of the aggregate period.
  - The account contains debt before creating the debt schedule.
  - Currency Translator affects the account.
  - The vxxxx.04 and/or vxxxx.35 accounts contain input values in the time period immediately preceding the start of the debt schedule.

**Manually Modelling Debt Recapture Without Debt Scheduler**

To model debt recapture without using Debt Scheduler, you define the recapture in debt accounts (v2652, v2654, or v2660).

*Caution!* Do not manually model recapture in debt accounts when some periods are covered by Debt Scheduler and others are covered manually, because the methods used to calculate recapture in these two cases are incompatible. With 999 subaccounts of debt available, this is no limitation.

To manually model debt recapture:

- So that the debt recapture affects the debt balance, set the forecast method for the balance account (.00) of the debt schedule to Forecast as... using the Change In method, instead or
directly forecasting the debt balance. Then, set the forecast method to As Actual Value and use a Constant Input value of 0.

- So that the debt balance cannot go negative due to recapture, cap the forecasted maximum recapture account (.17) against the trial debt balance before recapture. For example, you can use a Freeform Formula for the .17 account such as:

  \[
  \min(\max( X, 0 ), \sub(\text{v2660} \ (\text{inputpd}(-1))) +\sub(\text{v2660.03})
  +\sub(\text{v2660.35}) +\sub(\text{v2660.04}) +\sub(\text{v2660.13}) -\sub(\text{v2660.15})
  +\sub(\text{v2660.09}))
  \]

  where \( X \) represents the formula used to calculate the maximum recapture amount available. The recapture must be at least 0, but no larger than the anticipated debt balance.

---

**Caution!** If you use Freeform Formulas when debt balances are forecast directly (not as the related funds flow account), circular references occur—no debt is recaptured and the calculation fails.

---

**Defining Debt Schedules**

You can access Debt Scheduler from the Accounts spreadsheet, Freestyle reports, or non-debt accounts. When you access Debt Scheduler from accounts that are not long term debt, you must select a long-term debt account. Create debt schedules for these long-term debt accounts:

- New Senior Notes (v2652)
- New Senior Subordinated Notes (v2654)
- Total Long Term Debt (v2660)

Before creating a debt schedule in one of these accounts, access the Funding Options dialog, select **Common**, and then select **Term Debt** in the Type column for the account.

See “Account Types” on page 109 and See “Setting Common Attributes for Funding Accounts” on page 112.

➤ **To define debt schedules:**

1. From the **Data** grouping label, and select **Debt Schedule**, and then **New/Edit**.
2. **Optional:** On **Debt Scheduler**, select a scenario from **Scenario**.
   - For creating debt schedules, this scenario contains the debt schedule.
   - For editing debt schedules, select the name of the scenario containing the debt schedule.
3. **Optional:** To create debt schedules, in **Create new Debt Schedules**, select an account and click **OK**.
4. **Optional:** To edit debt schedules, in **Edit existing Debt Schedules**, select an account and click **OK**.
5. **Set parameters:**
   - **Term**—see “Setting the Term of Debt Schedules” on page 164.
   - **Principal**—see “Setting the Principal of Debt Schedules” on page 165.
● Payments—see “Setting the Payments of Debt Schedules” on page 166.
● Interest—see “Setting the Interest of Debt Schedules” on page 167.
● Recapture—see “Setting the Recapture of Debt Schedules” on page 170.
● Inheritance Rules—see “Setting the Inheritance of Debt Schedules” on page 170.

6 Click OK.

Deleting Debt Schedules

➢ To delete Debt Schedule:
1 From the Data grouping label, and select Debt Schedule, and then Delete.
2 Optional: On Delete debt schedule, select a Scenario from drop-down list, and then click OK.

Setting the Term of Debt Schedules

The term is the time duration over which debts are paid. Use Debt Scheduler—Term to set the start and end dates of the debt schedule.

➢ To set the debt schedule term:
1 Access Debt Scheduler.
   See “Defining Debt Schedules” on page 163.
2 Select Term.
3 In Start Date, enter a date to begin debt payments.
   Default: current date
   Click the down arrow to display a calendar—select a date. The debt is issued at the end of that day. If a report is issued on the start day, the balance sheet shows debt, but calculates no interest.

   Note: The financial model must be in calendar time. For information, see “Debt Schedule Guidelines” on page 162.
4 In End Date, select a date by which the debt should be paid in full.
   Default: current date
   Default exception: If you enter data in Term (Years), the default end date is calculated based on the number of years.
   Click the down arrow to display a calendar—select a date. Outstanding debt balance is paid at the end of that day.
5 Optional: In Term (Years), enter the total number of years over which to pay the debt.
   Integers only—no decimal.
• If you manually enter a number of years, the end is calculated from the start date.
• If you set Start Date and End Date, Strategic Finance calculates Term (Years).
• If Start Date and End Date the same day, the term value is zero.

6 **Optional:** In Days, enter the total number of days beyond the last year over which to pay the debt. Integers only—no decimal.
• If a loan does not span an exact number of years, include extra days here.
• If you enter a value manually, End Date is automatically calculated. Changes to End Date cause Days to be recalculated.

7 **Optional:** Select Debt Issued in Deal Period to set End Date to the deal period of the financial model.
   Available only with Deal Periods. The .02 accounts for debt aggregate to a separate account in the Financing section of the FAS95 cash flow statement.
   Automatically selects Acquisition Related Debt.

8 **Optional:** Select Acquisition Related Debt to set cash flows related to the issuance as acquisition flows instead of investing flows.
   You can have acquisition-related debt that does not start in a deal period.

## Setting the Principal of Debt Schedules

Use Principal to enter the loan amount, which is the principal.

► To set debt schedule principal:

1 **Access Debt Scheduler.**
   See “Defining Debt Schedules” on page 163.

2 **Select Principal.**

3 **In Principal, enter a value.**
   This is the loan amount—it must be greater than zero. Values must be in the scale of the account. For example, if an account is in millions, the value 100 equals 100,000,000.

4 **In Premium/Discount, enter a value.**
   If the loan is issued at a premium or discount, enter the percentage. Calculated as a percent of the principal.
   • Enter a premium as a positive number.
   • Enter a discount as a negative number.

5 **In Issue Costs, enter a value.**
   If there issuing costs, enter the value. This value represents a percentage of the principal.

6 **Optional:** Select Expense issue costs as incurred to expense the issue costs.
   Issue costs are usually capitalized and amortized over the life of the debt. Select this option so issue costs are calculated and shown on the income statement when the debt is issued.
Optional: Select Calculate current portion of long-term debt to calculate the current portion of long-term debt by determining the payments scheduled to be made over the next 12 months.

**Setting the Payments of Debt Schedules**

Payments are reductions of principal. Use Payments to schedule payments to the principal. You can schedule payments at intervals or set dates and amounts. You can set payments as currency values or as percentages of the principal.

To set debt schedule payments:

1. **Access Debt Scheduler.**
   
   See “Defining Debt Schedules” on page 163.

2. **Select Payments.**

3. **In Frequency, select an option to define the frequency of payments:**
   
   - **Balloon**
     
     The amount is paid on the last day of the debt schedule.
   
   - **Annual, Semi-Annual, Quarterly, Monthly**
     
     These options define periodic payments.
   
   - **Schedule**
     
     Use the Scheduled Payments grid to define payment dates and amounts.

4. **In Payments are in, select an option to define payments:**
   
   - **Currency**
     
     Payments are calculated and displayed as currency values.
   
   - **Percent**
     
     Payments are calculated and displayed as a percentage of the principal.

5. **In Total Payments and Amount Remaining, verify the number of payments.**

   Displays the number of payments and the amount of the principal paid, and the amount remaining unpaid.

   **Note:** You need not schedule all payments in a debt schedule, as the remaining balance is paid on the last day of the loan.

6. **Under Recurring Payments, define the amount and day of each debt payment.**

   - **In Amount**, enter a value for the amount of the recurring payment.
     
     This is the amount of money paid on the specified dates or time intervals. The value here is determined by the Payments are in option.
   
     - **Currency**
If Currency is selected in Payments are in, the text below Amount displays the scale of the currency, and values are in currency.

- Percent
  If Percent is selected in Payments are in, the text below Amount reads ‘Percent’, and values are as a percentage.

- In Day of the Month for Payments, select a day to make payment. Debt Scheduler needs the actual payment day to calculate interest:
  - Issue Day
    The payment day is same as the day of issuance. For example, quarterly payments made on a debt issued on June 8 are paid on September 8, December 8, March 8, and June 8.
  - Last Day of the Month
    All debt payments occur on the last day of the month.
  - Specified Day of the Month
    If a contract specifies a date within each month on which payments should occur, but the date on which the loan is issued does not fall on the specified day, select this option.
    For example, if a loan is issued on April 7 but payments should occur on the 15th of each month, use this option to specify the 15th.
    With Specified Day of the Month, enter the payment day of the month in Payment Day.

7 Optional: In the Scheduled Payments grid, create payment dates and amounts.

Note: If you select Schedule in Frequency, you must define the date and amount of those payments in the Scheduled Payments grid.

To use the Scheduled Payments grid:
- Click the Create.
- In the Date column, enter a date.
  You enter values directly from the keyboard, click the scroll arrows, or click the down arrow to use the calendar tool
- In the Amount column, enter a payment amount.
- To delete a payment, select a row and click delete.
- To reorder a payment, select the row and click the up or down arrow.

Setting the Interest of Debt Schedules
You manage interest on the debt on Interest.
To set debt schedule interest:

1. Access Debt Scheduler.
   See “Defining Debt Schedules” on page 163.
2. Select Interest.
3. In Day of the Month for Interest Payments, select a day of the month to make interest payments:
   - Issue Day
     The interest payment day is the same as the debt was issued. For example, quarterly interest payments on a debt issued on June 8 are paid on September 8, December 8, March 8, and June 8.
   - Last Day of the Month
     All interest payments occur on the last day of the month.
   - Specified Day of the Month
     If a contract specifies a date within each month for interest payments, but the issue date of the loan is not that same day, select this option. For example, if a loan is issued on April 7, but interest payments should occur on the 15th of each month, use this option to specify the 15th.
     With Specified Day of the Month, enter the day of each month for interest payments in Payment Day.
4. Under Cash Interest, define how cash interest is handled:
   - In Frequency of Interest Payment, select the frequency of interest payments.
     Debt Scheduler calculates interest expense on a daily basis, but you define when interest payments occur. Each option has a different effect on overall cash flow:
     - Annual, Monthly, Quarterly, Semi-Annual
       Calculate interest at the selected interval.
     - Daily
       If interest payments occur on any day except the last of the month, interest accrues at the end of every reporting period. With Daily, interest is paid as it is incurred, so the cash flow of the interest matches the expense, and no interest accrues.
     - Balloon
       Use Balloon to calculate zero interest payments through the life of the debt, but pay all interest in one lump sum at the end of the schedule.
     - Never
       Calculates no interest.
   - Select Interest Rate Input Is to define variable or constant interest rates for each period.
     Applies only to simple interest—does not include compounding.
     - Variable in each period
       Enter interest rates on Accounts.
- **Constant for all periods**
  Use the same rate throughout the loan term.
  
  With **Constant for all periods**, enter a value in **Interest Rate** to define the constant interest rate.

- **Optional:** Select **Spread over another account** for loans affected by macroeconomic variable.
  
  Default = off
  
  Some loans interest rates depend on macroeconomic variables. With **Spread over another account**, Debt Scheduler calculate interest by combining the rate in **Interest Rate Input Is** combined with output values from an account you select in **Spread Account** as the macroeconomic variable.

- **Optional:** Select **Use Grid Pricing** to define rules changing interest rates according to criteria over time.
  
  Default = off
  
  Use grid pricing to define rules changing the interest rate according to company performance in time periods.
  
  Enter a date when the grid pricing rule takes effect in **Date to start repricing**, and click **Edit Grid Pricing** to create rules.

5 **Optional:** Under **PIK Interest**, define paid-in-kind (PIK) interest:

- In **Added to Principal**, define how often interest is added back into principal:
  
  - **Never**
    
    Calculate no interest.
  
  - **Daily**
    
    Calculates interest daily.
  
  - **Monthly**
    
    Calculates interest monthly.
  
  - **Quarterly**
    
    Calculates interest quarterly.
  
  - **Semi-Annually**
    
    Calculates interest semi-annually.
  
  - **Annually**
    
    Calculates interest annually.

- **PIK Interest Rate** displays the rate of paid-in-kind interest. The PIK interest rate account (v16xx.65) must be forecast as constant in all periods. Varying PIK interest rates can not be forecast here.
  
  Paid-in-kind interest is non-cash interest, so it is added back to the principal. You define how often to add interest back into the principal. As interest is calculated on a daily
basis, subsequent interest calculations are increased depending on how often interest is added back into the principal.

**Setting the Recapture of Debt Schedules**

Recapture uses excess cash flow based on performance and to make additional payments on principal.

To set debt schedule recapture:

1. **Access Debt Scheduler.**
   
   See “Defining Debt Schedules” on page 163.

2. **Select Recapture.**

3. **Under Recapture as, select an option:**
   - None
   - Independent Item
     
     Recapture is stored as a line item.

4. **In Date of First Annual Recapture Payment, select a date.**

**Setting the Inheritance of Debt Schedules**

Using Inheritance, define which base scenario debt schedule attributes are inherited by all scenarios.

- When selected, each attribute is disabled on the corresponding tab, showing the base scenario's schedule value.
- When not selected, the attribute is available.

To set debt schedule inheritance:

1. **Access Debt Schedule.**
   
   See “Defining Debt Schedules” on page 163.

2. **Select Inheritance.**

3. **Optional: Under Term, select Term.**

4. **Optional: Under Principal, select inherited parameters:**
   - Principal
   - Premium/Discount
   - Issue Costs
   - Expense Issue Costs
   - Calc Current Portion of LTD
5 Optional: Under Payments, select inherited parameters:
   - Payment Frequency
   - Payment Type
   - Payment Amount
   - Payment Date
   - Payment Schedule

6 Optional: Under Cash Interest, select inherited parameters:
   - Interest Frequency
   - Single Interest Rate
   - Interest Spread
   - Repricing

7 Optional: Under PIK Interest, select inherited parameters:
   - PIK Frequency
   - PIK Interest Rate

**Debt Schedule Related Accounts**

You create debt schedules under three main accounts:

- New Senior Notes (v2652.00)
- New Senior Subordinated Notes (v2654.00)
- Total Long Term Debt (v2660.00)

After you create a debt schedule in one of these accounts, it includes these debt-schedule-related accounts:

- (.02)
- (.03)
- (.06)
  Defines the minimal amount of debt and constrains debt payments.
- (.11)
  The issuance of non-acquisition debt. If you enter a value for the principal and the debt is not acquisition related, the value is added to debt in the main account.
- (.13)
  Total issuances—the sum of all acquisition-related and non-acquisition-related debt issuances.
- (.14)
- (.15)
Payments that have actually been paid. This may deviate from scheduled payments in the form of recapture, funding options, or if they run below the minimum debt or not.

- (0.17)
  The maximum excess cash flow that can potentially be applied to recapture payments.

- (0.18)
  The actual amount of recaptured cash flow paid to the debt. It is constrained by the amount of debt that can actually be paid.

- (0.19)
  The total payments in a given period that you can control.

- (0.50)
  Accrued cash interest.

- (0.51)
  Cash interest expense. In any period, the account value should be the equivalent of principal times the rate, which can change in a period.

- (0.52)
  Cash interest paid.

- (0.55)
  Cash interest rate you have entered.

- (0.56)
  Interest rate after re-pricing.

- (0.60)
  Accrued PIK interest.

- (0.61)
  PIK interest expense.

- (0.62)
  PIK interest paid.

- (0.65)
  PIK interest rate.

- (0.70)
  Unamortized issue cost. Treated as a non-current asset.

- (0.71)
  Change in unamortized issue cost.

- (0.75)
  Amortization of issue cost—a non-cash item. You control where it appears in the income statement.
Unamortized premium or discount. When bonds are issued at more or less than face value, the issue must record a premium or discount.

Change in unamortized discount or premium.

Identifies how the premium or discount is amortized.

Current portion of long-term debt. The current portion is the amount of debt that is scheduled to be paid within the next 12 months.

Long-term portion of long-term debt. The long-term portion is the total minus the current portion. A reporting item only.

Triggers calculating debt schedules.

Using Depreciation Schedules

Subtopics

- Adding Depreciation Schedules
- Deleting Depreciation Schedule
- Setting the Length of Depreciation Schedules

You create depreciation schedules to depreciate capital assets over time in formulas.

To use depreciation schedules:

1. From the Analysis grouping label, and then select Depreciation Scheduler.
2. Add a depreciation schedule—see “Adding Depreciation Schedules” on page 174.
3. Option: To change schedule lengths, in Schedule, select a schedule and click Length—see “Setting the Length of Depreciation Schedules” on page 174.
4. Delete a depreciation schedule—see “Deleting Depreciation Schedule” on page 174
5. Optional: To distribute the depreciation percentage across the schedule years, click each year cell and enter a percentage.
   - First column—Year number
   - Percent column—Percentage of depreciation per year. Use digits for percentages, for example, enter 20 for 20%, as opposed to .2. For salvage value reasons, the rates need not equal 100.
6. Click OK.
Adding Depreciation Schedules

➤ To create depreciation schedules:
1 On Edit Depreciation Schedule, click Add.
2 In Name, enter a name.
3 In Length in Years enter a number of years.
4 Click OK.

Deleting Depreciation Schedule

➤ To delete depreciation schedule:
1 From the Analysis grouping label, and then select Depreciation Scheduler.
2 On Edit Depreciation Schedule, select a Schedule from the drop-down, and then click Delete.
3 Click OK.

Setting the Length of Depreciation Schedules

➤ To change the length of depreciation schedules:
1 On Edit Depreciation Schedule in Schedule, select a schedule, and click Length.
2 In New Length, enter a number of years.
3 Click OK.
About Consolidation

Subtopics

- Consolidation Structures
- Limitations
- Selecting Consolidation Parent Entities or Files
- Rolling Up Consolidations
- Entering Data in Consolidation Parent Entities or Files
- Tree View
- Using Entity Scenarios in Consolidation Structures
- Running Consolidations

Combine multiple Strategic Finance (*.alc) models to form a single entity to better analyze your enterprise. Consolidator helps determine how changing business unit conditions affect parent company earnings and values. After reviewing the consolidated entity, you can make informed decisions about individual business units.

You can consolidate business unit information such as method, scenario, time period, subaccount detail, organizational levels, and export the consolidated parent, in addition to consolidation metadata, to your relational database for advanced querying, analysis, and reporting. See “About Exporting Consolidation Metadata for Extended Analytics” on page 201.

Business unit entities do not require matching structures—they can have different scenarios, time periods, forecast methods, subaccount structures, residual value methods, currency denominations, and treatments for debt/interest and taxes. You may include entities with
incomplete financial structures, such as corporate files containing only general expenses and fixed assets. There are some restrictions on consolidating data.

Identify the information for analysis before deciding what to consolidate to determine business unit details and the manner of consolidation. For example, if you are considering divesting a portion of a business unit, you would want to consolidate 100% of the earnings and the balance sheet amounts up until the transaction date, consolidate the unsold portion of the unit after the transaction date—you would enter the child entity twice, with the appropriated time periods selected for consolidation.

For optimizing consolidations:

- Parent entities should never forecast variables accepting input based on funding options results.
- To optimize consolidation speed at the cost of storage, activate Store outputs for all accounts in Scenario Manager for each entity to avoid recalculating unchanged values.

**Consolidation Structures**

You can create consolidation structures locally or on the Strategic Finance Server. Consolidation structures represent organizational structures, where each department of a company has a child entity or business unit file, and the values from all are rolled-up, or totalled, into a consolidated parent entity.

The consolidated parent entity (consolidated parent, consolidation file) becomes the root of all child entities in the structure, and data from the child entities is rolled-up into the parent when the consolidation is run. This gives you the overall financial picture of an organization.

For example, say you have a manufacturing company with West Coast regional operations. You could have a parent file or entity called ‘West Coast’ for the root of the structure, and files or entities for departments such as ‘Accounting’ and ‘Manufacturing’ as children, so their numbers are rolled-up into ‘West Coast’ to give you the total numbers for the whole region.

**Limitations**

To ensure data integrity, server-based consolidation structures allow only one data representation per entity, no matter how many consolidation structures share each entity.

For example, a consolidation structure called ‘West’ contains child entities ‘Accounting’ and ‘Manufacturing’. ‘Purchasing’ is a child of ‘Accounting’, but you want to create a copy to see what happens if ‘Purchasing’ rolls into ‘Manufacturing’. You can not do this on the server, because moving ‘Purchasing’ into a second consolidation structure breaks the first structure.

*Note:* Use consolidation labels to create variations of consolidation runs within the server.
Selecting Consolidation Parent Entities or Files

The first step in consolidation is selecting or creating a consolidated parent, which is the entity or file receiving the consolidated data. The consolidated file determines the time period and account structure, so all business units' time periods should match, as should the fiscal year ends of the consolidation and child entities. If time periods are different, create a consolidated parent including all relevant time period detail and account information.

Rolling Up Consolidations

The full consolidation method adds output values from business units to produce output values in the consolidated parent. Consolidator calculates each file before adding the values to the consolidated parent. Input values in the consolidated parent is calculated based on output values from the child entities and the forecast method selected in the consolidated parent. For example, if you consolidate two business units containing forecast data in Table 3 on page 177 for Sales, if each unit's previous period sales was $100:

<table>
<thead>
<tr>
<th>Business Unit</th>
<th>Input</th>
<th>Output</th>
<th>Forecast Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit #1</td>
<td>10%</td>
<td>$110</td>
<td>Growth Rate</td>
</tr>
<tr>
<td>Business Unit #2</td>
<td>$125</td>
<td>$125</td>
<td>As Actual Value</td>
</tr>
<tr>
<td>Consolidated Parent</td>
<td>0</td>
<td>$0</td>
<td>Growth Rate</td>
</tr>
</tbody>
</table>

After consolidating, the Sales account in the consolidated parent reflect the growth rate necessary to achieve the sales total of the two business units combined. In this example, you need a growth rate of 17.5% to achieve the additive sales value of $235.

<table>
<thead>
<tr>
<th></th>
<th>Input</th>
<th>Output</th>
<th>Forecast Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Parent</td>
<td>17.5</td>
<td>$235</td>
<td>Growth Rate</td>
</tr>
</tbody>
</table>

Most consolidated accounts are calculated like this. There may be occasions when the additive process does not apply. For example, User Defined Accounts are typically used for non-currency items such as inflation rates and price/quantity relationships—the additive consolidation process would yield meaningless results. Such accounts are candidates for blocking, so you can manually enter data in the consolidated parent—see “Excluding Entities from Consolidations” on page 187.

There may be accounts in the child entities that should not be included in the consolidated parent. To eliminate an account completely, you include it in an elimination group.

Entering Data in Consolidation Parent Entities or Files

When accounts are blocked, they are not included in the consolidation. You can manually enter data for those accounts in the consolidated parent for calculating output values of blocked accounts.
Tree View

The Tree View display the same information, but with variation:

- **Parent Scenario for Consolidation**
  In the parent entity, this is the scenario that receives the consolidated data.

- **Scenario**
  You can switch parent structures, parent scenarios, and the scenario for consolidation in the current entity.

- **Entity Name/Tree**
  The entity name.

- **Scenario**
  The scenario active scenario in the entity is for the current consolidation.

- **Method**
  The method for consolidating the entity—see **Method Used** in “Specifying Child Entity Characteristics” on page 186.

- **% Ownership**
  The percentage of its value each individual account contributes—see **Ownership % of Selected Entity** in “Specifying Child Entity Characteristics” on page 186. For example, at 50% only half of the listed account value contributes to the consolidation.

- **Status**
  Entities have these possible states:
  - **Consolidate**
    The consolidation needs to be run.
  - **Working**
    The consolidation is processing.
  - **Calc**
    The entity is calculated.
  - **Change**
    The entity has changed.
  - **Ready**
    The consolidation is complete.

- **Perform a task:**
  - To deselect excluded entities—Select an entity, and then right-click on the entity and then deselect the following option: **From the Parent Scenario** and **From All Parent scenario**
To select excluded entities—Select an entity, and then right-click on the entity and then select the following option: From the Parent Scenario and From All Parent scenario, and the entities are displayed as follows:

Tree View—Excluded entities display “[Excluded]” by the entity name.

Using Entity Scenarios in Consolidation Structures

For each consolidation structure, you select which scenario an entity contributes. For entities different scenarios in multiple consolidation structures, entity changes require you to rerun only those consolidation structures using the changed scenario.

Running Consolidations

After building consolidation structures and assigning entity characteristics, you can run consolidations, “Setting Up Server Consolidations” on page 180, and “Working with Consolidation Structures” on page 181.

To run local consolidations:

1. Open a consolidation structure.
2. Select Consolidation, and then right click on the entity and then select Run.
   - Entities display the Working status as the consolidation processes.
   - A Consolidation Completed prompt and a Ready status displays.

Running Multiple-Scenario Consolidations

If a consolidation structure contains multiple target scenarios, you can run multiple consolidations simultaneously.

To run multiple-scenario consolidations:

1. Open a consolidation structure.
   - See Opening Server Consolidation Structures section.
2. Select Consolidation, and then right-click on the entity and then select Run Multiple.
3. In Consolidation Scenarios, select the target scenarios to consolidate, and click OK.

Creating Offline Consolidations

You can use Strategic Finance files as consolidated parents.
To create offline consolidations:

1 Expand Offline folder from the Smart View pane, and then select Consolidation Structures.
2 Right-click on the Consolidation Structures, and then select New.
   The Consolidation Structure dialog is displayed.
3 In Entity Tree, right-click and then select Add Entity, and then Add Parent.
4 On Entity Assignment, click New.
5 On New Alias, in Alias, enter a name for the parent file.
6 Click Browse to select a parent file.
7 On New Alias, click OK.
8 On Entity Assignment, click OK.
9 Click New to add child or sibling nodes.
10 After adding the entities within the Entity Tree, and then click Close.
   The Strategic Planning dialog is displayed. You can perform these options:
   - Click Yes to save the consolidation files.
   - Click No to exit the consolidation without saving them in the local drive.
11 You can save the *.cns file.

Note: If you save the *.cns file, under the following location: [Local Drive]:\Oracle\Middleware\EPMSystem11R1\products\hsf\Client\offline\\<myserver>\<Database>, then the files are visible within the Offline–Consolidation Structures folder.

Setting Up Server Consolidations

Subtopics
- Managing Server Consolidation Structures
- Creating Server Consolidation Structures
- Removing Entities from Server Consolidation Structures

Consolidations can be created and run on the Strategic Finance server.

Managing Server Consolidation Structures

To manage server consolidation structures:

1 Select Server, then Consolidation Structures.
2 Optional: To create consolidation structures, click New—see “Creating Server Consolidation Structures” on page 181.
Creating Server Consolidation Structures

To create server consolidation structures:

1. From the Smart View panel, select the Consolidation Structures and then right click on the Consolidation Structures folder and then select New.

   see “Managing Server Consolidation Structures” on page 180.

2. On Structure Name, enter and click OK.

   The name must be unique within the server.

Removing Entities from Server Consolidation Structures

To remove entities from server consolidations:

1. Select an entity.

2. Perform an action:
   - To delete entities from the database and consolidation structure, right-click on the entity, and then select Remove Entity.
   - To delete scenario from the database and consolidation structure, right-click on the scenario, and then select Remove Scenario.

Working with Consolidation Structures

Subtopics

- Adding Entities to Consolidation Structures
- Specifying Parent Entity Characteristics
- Specifying Child Entity Characteristics
- Excluding Entities from Consolidations
- Deleting Business Unit Entities

Most tasks for consolidation structures are the same for both local and server versions. After you open a consolidation structure, these tools are available:

- Parent Scenario for Consolidation displays the target scenario within the consolidated parent. Read-only.
**Scenario** enables you to select an active scenario for an entity with the consolidation. You can create a consolidation scenario in the parent entity.

- For *<New Parent Scenario>*,
- For other scenarios.

**Tree View** displays the consolidation structure as an entity tree.

### Adding Entities to Consolidation Structures

To add entities to consolidation structures:

1. **Perform an action:**
   - To add parent entities, select an entity, and then right-click on the entity, and then select **Add Entity**, then **Add Parent**.
   - To add child, select a parent, and then right-click on the entity, and then select **Add Entity**, and then **Add Child**.
   - To add siblings, click a child, and then right-click on the entity, and then select **Add Entity**, and then **Add Sibling**.

2. In **Add Entity**, in **Entities**, select an entity.

3. Click **OK**.

4. Select the contributing scenario.

### Specifying Parent Entity Characteristics

Use **Parent Attributes** to define parent-level parameters: blocking account groups, elimination groups, or whether to use account inputs or outputs in calculating data in non-consolidated Time Periods.

To specify parent entity characteristics:

1. Open a consolidation structure.

2. Select the parent entity.

3. Right-click on the entity and then select **Entity Characteristics**, and then **Parent Attributes**.

4. **Optional:** Blocking Accounts—Under **Blocking Groups**, select account groups to block from consolidation.

   You select items under **Blocking Groups** to block accounts, so those accounts are not summed up from the child entities into the consolidated parent. You can enter values manually into the consolidated parent for those accounts.

   - Select **Residual Value** to manually enter consolidated residual values.
Selected—You can manually input Residual Value in the consolidated parent, and Consolidator blocks the Residual Valuation Calculation accounts set in the consolidated parent.

Deselected—Consolidator calculates the consolidated Residual Value by adding the Residual Valuation Calculation accounts for all child entities. Only the Liquidation method is available for the Shareholder Value and Dividend Discount models and the Perpetuity method for the Economic Profit model. See “Calculating the Tax Effect of Operating Losses” on page 121 and “Valuations with Consolidation Structures” on page 195.

Select Cost of Capital to manually enter consolidated cost of capital values.

Selected—You can manually input Cost of Capital in the consolidated parent, and Consolidator blocks the Cost of Capital accounts set in the consolidated parent.

Perform an action to enter data manually in the cost of capital accounts of the consolidated parent:

- Cost of Capital (v5000) and Long-Term Cost of Capital (v5005)
- Cost of Equity (v5300) and Long-Term Cost of Equity (v5305)
- Economic Profit RROC (v5700) and Long-Term Required Return (v5705)

Deselected—Consolidator calculates the consolidated Cost of Capital from combinations of the cost of capital accounts in the child nodes—see “Valuations with Consolidation Structures” on page 195.

Select Tax Rates to manually enter tax rates in the consolidated parent.

Selected—You can manually input Tax Rates in the consolidated parent, and Consolidator blocks the Tax and Valuation accounts set in the consolidated parent.

Enter data manually in the tax rate accounts of the consolidated parent:

- Trial Provision for Income Taxes (v1610)
- Deferred Provision for Income Taxes (v1660)
- Interest Tax Shield (v3220)
- Tax Rate on Non-Operating Profit (v3230)
- Temporary Differences (v3120)

Deselected—Consolidator sums the tax rate accounts from the child nodes “Valuations with Consolidation Structures” on page 195.

Select Interest Rates to manually enter interest rates in the consolidated parent.

Selected—You can manually input interest rates in the consolidated parent, and Consolidator blocks the interest rate accounts set in the consolidated parent.

Enter data manually in the interest rate accounts of the consolidated parent:

- Marketable Securities (v2010.05)
- Interest on Excess Marketable Securities (v2015.05)
- Interest on Current Portion of Long-Term Debt (v2510.05)
- Interest on Notes Payable (v2520.05)
- Non-cash Interest on Long-Term Debt: Scheduled (v2660.03)
- Interest on Long-Term Debt
  - Scheduled (v2660.51)
  - Interest on Excess Debt (v2690.05)

  - Deselected—Consolidator calculates consolidated interest rates by summing the interest rate accounts from all child nodes—see “Calculating the Tax Effect of Operating Losses” on page 121 and “Valuations with Consolidation Structures” on page 195:

- Select **Common Dividends** to manually enter Common Dividends (v1880) in the consolidated parent.

  - Selected—You can manually input Common Dividends (v1880) in the consolidated parent, and Consolidator blocks the common dividend accounts set in the consolidation node.

  - Deselected—Consolidator calculates consolidated common dividends by summing Common Dividends (v1880) accounts from all child nodes—see “Calculating the Tax Effect of Operating Losses” on page 121 and “Valuations with Consolidation Structures” on page 195:

- Under **User Defined Blocking Groups**, select account groups to block from consolidation.

5 **Optional: Eliminating Accounts**—Under **Elimination Groups**, select accounts to eliminate from consolidation.

Eliminated accounts are set to zero in the consolidation parent during processing. For example, an intercompany transaction modeled in a child entity may not be needed in the consolidation, so it can be eliminated.

Accounts must be in account group to be eliminated. Elimination can be based on account groups in the consolidation parent or business unit entities.

- Under **Eliminate Based On**, select the source for elimination groups:

  - **Current Entity**
    Eliminates accounts using account groups in the consolidation parent.

  - **Business Unit**
    Eliminates accounts using account groups in the child entities.

  **Note:** Accounts that are both eliminated and blocked are eliminated.

- Under **User Defined Elimination Groups**, select account groups to eliminate from consolidation.

6 **Optional:** Under **For time periods in which data will not be consolidated in the current entity**, define how data is used in non-consolidated time periods.
Data in non-consolidated time periods must be handled differently. For example, if you are consolidating these accounts:

<table>
<thead>
<tr>
<th>Account</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 Budgeted Sales</td>
<td>11%</td>
<td>1889</td>
</tr>
<tr>
<td>2005 Plan (growth rate)</td>
<td>9%</td>
<td>2058</td>
</tr>
</tbody>
</table>

Because sales are down, you revise 2004 Budgeted Sales, so you must recalculate 2005 Plan:

<table>
<thead>
<tr>
<th>Account</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 Budgeted Sales</td>
<td>5%</td>
<td>1787</td>
</tr>
<tr>
<td>2005 Plan (growth rate)</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

For time periods in which data will not be consolidated in the current entity determines how these fields recalculate:

- **Don’t Preserve Data**—Blocks data from non-consolidated time periods, resulting in zero values. For example:

<table>
<thead>
<tr>
<th>Table 4  Don’t Preserve Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
</tr>
<tr>
<td>2004 Budgeted Sales</td>
</tr>
<tr>
<td>2005 Plan (growth rate)</td>
</tr>
</tbody>
</table>

- **Preserve Inputs**—Data recalculates using Input cells, for example:

<table>
<thead>
<tr>
<th>Table 5  Preserve Inputs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account</td>
</tr>
<tr>
<td>2004 Budgeted Sales</td>
</tr>
<tr>
<td>2005 Plan (growth rate)</td>
</tr>
</tbody>
</table>

**Note:** **Preserve Input** does not work on these input accounts because Consolidator treats them as calculated accounts: v5000 Cost of Capital (Kw), v5005 Long-Term Cost of Capital (%), v5300 Cost of Equity (Ke), v5305 Long-Term Cost of Equity (%), v5700 Economic Profit PROC (%), and v5705 Long-Term Required Return (%). To preserve the values of these accounts in the consolidation, block these accounts.

- **Preserve Outputs**—Data recalculates using Output cells, for example:
Table 6  Preserve Outputs

<table>
<thead>
<tr>
<th>Account</th>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004 Budgeted Sales</td>
<td>5%</td>
<td>1787</td>
</tr>
<tr>
<td>2005 Plan (growth rate)</td>
<td>15.2%</td>
<td>2058</td>
</tr>
</tbody>
</table>

7 Click Apply or Apply to All Scenarios.

Note: While on Parent Attributes, this saves parent attributes only.

Specifying Child Entity Characteristics

Child entity characteristics define how children behave during consolidation.

➢ To specify child entity characteristics:
  1 Open a consolidation structure.
  2 Select an entity, then right-click and then select Entity Characteristics
     The entity name displays in the title bar: Consolidation Data for <Entity name>.
  3 On Consolidation Data for <Entity name>, select Child Attributes.
  4 Optional: Under Method Used, select a consolidation method to determine the consolidated accounts:

Note: Information about using methods—When you use the Cost, Equity, or Minority Interest Consolidation methods, the subaccount structures should be similar. See “Important Facts about the Equity, Cost, and Minority Interest Methods” on page 188.

- Full Consolidation—Consolidates 100% of all accounts.
- Equity—Less than 20% (see “Consolidator Equity Method” on page 189)
- Cost—At least 20% but less than 50% (see “Consolidator Cost Method” on page 188)
- Minority Interest Consolidation—At least 50% but less than 100% (see “Consolidator Minority Interest Method” on page 190)
- Optional: Under Target Subaccount, select a subaccount.
  Target Subaccount is available with Equity if account v2420 in the parent entity has subaccounts. This method has calculations for v2420. If v2420 has subaccounts, specify which subaccount receives the child entities values.
- Optional: Under Equity Groups, select an account group.
  With Equity, account groups you select here are consolidated into the parent.
  5 Optional: In Ownership % of Selected Entity, enter a value.
Enter the percentage of the entity to be consolidated. Enter the number as an integer with two decimal places.

For example, if sales in the first forecast period of the child entity were $200 and 100% is consolidated, $200 are consolidated. If it is 80%, $160 are consolidated.

6 Under **Periods to Consolidate into the Parent**, select time periods for the consolidation.
   - **Period to Begin Consolidation**
     Select the starting time period.
     The time period range must be within the range of the consolidated parent—see “Time Periods in Consolidated Parents and Child Entities” on page 190.
     - **First Period in File**—Consolidates starting in the first time period in the entity.
     - **<Deal Period>**—Consolidates starting in the deal period. Balance sheets from the main or .00 accounts consolidate into the respective accounts .2 or acquisition-related accounts in the consolidated parent.
     - Other available options display.
   - **Period to End Consolidation**
     Select the last time period.

7 Click **Apply** or **Apply to All Scenarios**.

**Note:** On **Child Attributes**, this saves child attributes only.

### Excluding Entities from Consolidations

You exclude entities from consolidations. If excluded entities contain children, they are also excluded.

- To exclude entities from consolidations:
  1 On **Tree View**, select an entity.
  2 Right-click on the entity, and then select **Exclude**, and then **From the Parent Scenario**.

### Deleting Business Unit Entities

- To delete business unit entities:
  1 Select an entity.
  2 Right-click on the entity, and then select **Remove Entity**
  3 On the confirmation prompt, click **Yes**.
Data Management

Subtopics

- Important Facts about the Equity, Cost, and Minority Interest Methods
- Time Periods in Consolidated Parents and Child Entities
- Consolidation of Files with Dissimilar Currencies
- Freeform Formulas in Consolidation Structures
- Valuations with Consolidation Structures
- Residual Values in Consolidated Parent Entities or Files

Important Facts about the Equity, Cost, and Minority Interest Methods

Before running consolidations, review this information about Consolidation methods:

- If the consolidation parent has subaccounts for accounts used by the Cost, Equity, and Minority Interest methods, Consolidator uses the first subaccount to hold the consolidated results. Applies to these accounts:
  - Cost Method (v1190) — see “Consolidator Cost Method” on page 188
  - Equity Method (v2420) — see “Consolidator Equity Method” on page 189
  - Minority Interest Method (v1720), (v2780) — see “Consolidator Minority Interest Method” on page 190

- Consolidator enables blocking accounts used by Cost, Equity, and Minority Interest methods in parent files. A warning is written to the Consolidation log when one of these accounts is blocked:
  - Cost Method (v1190) — see “Consolidator Cost Method” on page 188
  - Equity Method (v2420.2), (v2420.3) — see “Consolidator Equity Method” on page 189
  - Minority Interest Method (v1720), (v2780) — see “Consolidator Minority Interest Method” on page 190

Consolidator Cost Method

Use Consolidator Cost Method when the amount of investment in a company is less than 20% and is held for at least one year. Only three calculations are performed and added to the consolidated parent:

- Dividends from Investments: Cost (v1190) account is increased by the ownership percentage times the investment’s cash dividends (v1900 Total Common Dividends);
  
  \[ \text{Parent’s v1190} = \text{Ownership} \times \text{investment’s v1900} \]

- In the valuation adjustment for Cost and Equity methods, SVA (v5.00.900) increases by the ownership percentage times the investment’s SVA value (v5070 Shareholder Value):
Parent's v5.00.900 = Ownership% x investment’s v5070

- In valuation adjustment for Cost and Equity methods, EP (v5.00.910) increases by the ownership percentage times the investment’s EP value (v5790 Economic Profit Shareholder Value):

  Parent’s v5.00.910 = Ownership% x investment’s v5790

**Note:** The opening balance for the investment account (v2430.00 Investments: Cost Method) is in the parent company’s file. The investment is carried at the lower of acquisition cost or market value.

**Consolidator Equity Method**

Use Consolidator Equity Method when the amount of investment in a company is at least 20% and less than 50% and is held for at least one year. Business unit values roll-up into Dividends from Subsidiaries and Earnings from Investments accounts, which are used to calculate the parent’s Investments: Equity Method:

- v2420.00 Investments: Equity Method (prior period)
- + v2420.01 Increase in Investments: Equity Method
- - v2420.02 Dividends from Subsidiaries
- + v2420.03 Earnings from Investments: Equity
- = v2420.00 Investments: Equity Method

Four calculations are added to the consolidated parent:

- The Dividends from Subsidiaries (v2420.02) account increases by the ownership percentage times the subsidiary’s cash dividends (v1900 Total Common Dividends), automatically reducing the balance in the investment account:

  Parent’s v2420.02 = Ownership% x subsidiary’s v1900

- The Earnings from Investments: Equity (v2420.03) account increases by the ownership percentage times the subsidiary’s after-tax net income (v1750 Net Income), automatically increasing the balance in the investment account:

  Parent’s v2420.03 = Ownership% x subsidiary’s v1750

- In the valuation adjustment for the Cost and Equity methods, SVA (v5.00.900) increases by the ownership percentage times the subsidiary’s SVA value (v5070 Shareholder Value):

  Parent’s v5.00.900 = Ownership% x investment’s v5070

- In the valuation adjustment for the Cost and Equity methods, EP (v5.00.910) increases by the ownership percentage times the subsidiary’s EP value (v5790 Economic Profit Shareholder Value):

  Parent’s v5.00.910 = Ownership% x investment’s v5790
Note: The opening balance for the subsidiary investment account (v2420.00 Investments: Equity Method) should be in the parent company's file. The initial investment in the subsidiary should be recorded at cost.

Consolidator Minority Interest Method

Use Consolidator Minority Interest Method when the amount of investment is between 50% and 100% of the company's stock. This method also rolls up output values. While 100% of the business unit is consolidated, these calculations recognize the outside interest in the business:

- Minority interest percentage calculates as the difference between 100% and the ownership percentage in the Consolidator:
  \[ MI\% = 100\% - \text{ownership}\% \]

- Minority Interest (v1720) on the Income Statement increases by the minority interest percentage times the subsidiary's after-tax net income (v1750 Net Income):
  \[ \text{Parent's v1720} = MI\% \times \text{sub's v1750} \]

- Minority Interest (v2780) on the Balance Sheet increases by the minority interest percentage times the subsidiary's Common Equity account (v2890):
  \[ \text{Parent's v2780} = (MI\% \times \text{sub's v2890}) \]

- In the valuation adjustment for Minority Interest, SVA (v5.00.920) increases by the minority interest percentage times the investment's SVA value (v5070 Shareholder Value):
  \[ \text{Parent's v5.00.920} = \text{Ownership}\% \times \text{investment's v5070} \]

- In the Valuation Adjustment for Minority Interest, EP (v5.00.930) increases by the minority interest percentage times the investment's EP value (v5790 Economic Profit Shareholder Value):
  \[ \text{Parent's v5.00.930} = \text{Ownership}\% \times \text{investment's v5790} \]

Time Periods in Consolidated Parents and Child Entities

The analysis length and time period detail level should be the same for all files in the consolidation. To ensure the integrity of the consolidation, the time period information in the consolidated parent is compared to the time period information in the child entities as they are consolidated.

Several time period conditions could affect the results of consolidations:

- Uneven time periods are time periods exist in child entities the consolidated parent, but not in both. Depending on the condition, data may or may not be included in the consolidation. See “Uneven Time Periods” on page 191.

- Mismatched historical and forecast period boundaries occur when the files in the consolidation do not match the last historical period. See “Uneven Fiscal Year Ends” on page 191.
Uneven fiscal year ends exist when the year ends of the files in the consolidation do not match, and stops consolidating. See “Mismatched Historical and Forecast Period Boundaries” on page 191.

Different levels of time detail occur when one or more files in the consolidation have different time dimensions than the other files. Some differences are acceptable, while others stop consolidating. See “Differing Levels of Time Detail” on page 192.

Subperiods must be consistent between the child entities and the consolidation parent to be included in the consolidation. If they are not, consolidating could stop. See “Mismatched Subperiods” on page 192.

Uneven Time Periods

If the consolidated parent has more historical periods than the child entities, Consolidator assumes zero values in the consolidated parent, but not in child entities. You can block the non-consolidated time period data to maintain data in other time periods of the consolidated parent.

If the consolidated parent has fewer historical periods than the child entities, only data for historical periods in the consolidated parent is included in the consolidation.

If the consolidated parent has more forecast periods than the child entities, Consolidator assumes zero values for those periods in the consolidated parent but not the child entity.

If the consolidated parent has fewer forecast periods than the child entities, Consolidator include the child entity forecast data in the residual value of the consolidated parent instead of the forecast —see “Valuations with Consolidation Structures” on page 195 and “Residual Values in Consolidated Parent Entities or Files” on page 196.

Uneven Fiscal Year Ends

The fiscal year end of each child entity must match that of the consolidated parent. If they do not match, Consolidator logs an error stops consolidating.

For example, if the consolidated parent uses a fiscal year end of July 31, all child entities must use a fiscal year end of July 31.

Mismatched Historical and Forecast Period Boundaries

The last historical period in the consolidated parent defines the last historical period for the consolidation. The historical and forecast boundaries of both the consolidated and child entities are compared based on the system labels assigned to files when created or imported. If the historical and forecast boundaries are different, a warning message displays, but the consolidation finishes.

For example, if the child entity uses months and the last historical period is 5/96, the consolidated parent uses quarters and the last historical period is 2Q96 (or 6/96). Data from the child entity from the first forecast period (6/96) shifts to the last historical period in the consolidated parent.
Differing Levels of Time Detail

If files in consolidation structures have different time detail levels, the consolidated parent cannot have a more detailed time structure than the least detailed child entity. This table illustrates how level-of-time-detail rules apply to child entities based on the level of time detail in the consolidated parent:

<table>
<thead>
<tr>
<th>Consolidated Parent Uses:</th>
<th>Child Entities Can Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years</td>
<td>Years, Halves, Quarters, Months, or Weeks</td>
</tr>
<tr>
<td>Halves</td>
<td>Halves, Quarters and Halves, Months and Halves, or Weeks and Halves</td>
</tr>
<tr>
<td>Quarters</td>
<td>Quarters, Months and Quarters, or Weeks and Quarters</td>
</tr>
<tr>
<td>Months</td>
<td>Months or Weeks and Months</td>
</tr>
<tr>
<td>Weeks</td>
<td>Weeks</td>
</tr>
</tbody>
</table>

If mismatched time periods do not fall within these rules, the consolidated parent uses the aggregate data from the child entities. For example, if the consolidated parent is in years and the child entities are in quarters, the consolidation uses yearly values for each of the child entities. If a time period mismatches is not covered by these rules, Consolidator logs an error and stops the consolidation.

Mismatched Subperiods

Strategic Finance consolidates subperiods if the consolidated parent and child entities have matching subperiods.

If child entities contain subperiods but the consolidated parent does not, the consolidation does not include subperiods. Subperiod data aggregates to the full period in the consolidated parent.

Number of Days

<table>
<thead>
<tr>
<th>Before Consolidation:</th>
<th>Subperiod #1</th>
<th>Subperiod #2</th>
<th>Total Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit File</td>
<td>30</td>
<td>335</td>
<td>365</td>
</tr>
<tr>
<td>Consolidated Parent</td>
<td>None</td>
<td>365</td>
<td>365</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After Consolidation:</th>
<th>Subperiod #1</th>
<th>Subperiod #2</th>
<th>Total Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consolidated Parent</td>
<td>None</td>
<td>365</td>
<td>365</td>
</tr>
</tbody>
</table>

If the consolidated parent has subperiods and the child entities do not have matching subperiods, Consolidator logs an error and stops the consolidation.

The same condition exists for subperiods with uneven lengths of time. In this example, the consolidated parent contains subperiods which match the length of time of the subperiods in
business unit #1. The subperiods in child entity #2 do not match, so Consolidator would log an error and stops the consolidation.

**Number of Days**

<table>
<thead>
<tr>
<th>Before Consolidation:</th>
<th>Subperiod #1</th>
<th>Subperiod #2</th>
<th>Total Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit File #1</td>
<td>30</td>
<td>335</td>
<td>365</td>
</tr>
<tr>
<td>Business Unit File #2</td>
<td>45</td>
<td>320</td>
<td>365</td>
</tr>
<tr>
<td>Consolidated Parent</td>
<td>30</td>
<td>335</td>
<td>365</td>
</tr>
</tbody>
</table>

**Consolidation of Files with Dissimilar Currencies**

Consolidator compares the Default Currency Name for each child entity to that in the consolidated parent. If they are different, Consolidator logs a warning, but continues the consolidating. The consolidated values may not be meaningful.

This rule holds unless Currency Translator is involved.

**Freeform Formulas in Consolidation Structures**

Consolidator preserves the additivity of the child entity output data whenever possible. Consolidator solves for @input if the consolidated parent contains a Freeform formula using @input.

For example, child entities and the consolidated parent use the same Freeform formula, which contains the @input function, to calculate Depreciation Expense (v1110) on the Income Statement. Strategic Finance solves the consolidated parent input using the output values of the child entities. In this example, the input of .86 is necessary to achieve the additive output of $430 in the consolidated parent.

**Business Unit File Freeform formula:**

@input * v2190.1

**Consolidated parent Freeform formula:**

@input * v2190.

**Input Data:**

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Business Unit File #1</th>
<th>Business Unit File #2</th>
<th>Consolidated Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (Funds) (v2190.1)</td>
<td>$200</td>
<td>$300</td>
<td>$500</td>
</tr>
<tr>
<td>Depreciation Expense (v1110.0)</td>
<td>.80</td>
<td>.90</td>
<td>.86</td>
</tr>
</tbody>
</table>
Output Data:

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Business Unit File #1</th>
<th>Business Unit File #2</th>
<th>Consolidated Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (v1110.0)</td>
<td>$160</td>
<td>$270</td>
<td>$430</td>
</tr>
</tbody>
</table>

If the consolidated parent contains a Freeform Formula that does use @input, the consolidation checks the consolidated parent to see if the account has currency overrides. If there are, the currency override is the sum of the output data of all child entities in the consolidation.

For example, both business units use the same Freeform Formula, which contains @input, to calculate Depreciation Expense (v1110) on the Income Statement. The consolidated parent does not use @input. It sets Depreciation Expense (v1110) equal to Depreciation Expense (Funds) (v2190.1). Consolidator solves this using the output values of the child entities. In this example, a currency override of #430 achieves the additive output of $430 in the consolidated parent.

Business Unit File Freeform formula:
@input * v2190.01

Consolidated parent Freeform Formula:
v2190.01

Input Data:

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Business Unit File #1</th>
<th>Business Unit File #2</th>
<th>Consolidated Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (Funds) (v2190.1)</td>
<td>$200</td>
<td>$300</td>
<td>$500</td>
</tr>
<tr>
<td>Depreciation Expense (v1110.0)</td>
<td>.80</td>
<td>.90</td>
<td>#430</td>
</tr>
</tbody>
</table>

Output Data:

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Business Unit File #1</th>
<th>Business Unit File #2</th>
<th>Consolidated Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (v1110.0)</td>
<td>$160</td>
<td>$270</td>
<td>$430</td>
</tr>
</tbody>
</table>

If there are no currency overrides, the Freeform Formula in the consolidated is executed. It is possible, with no currency overrides, that the consolidated parent output is not equal to the sum of the child entities.

Take the previous example, but with no currency override, and the Freeform Formula in the consolidated parent executes.

Business Unit File Freeform formula: @input * v2190.01

Consolidated parent Freeform Formula: v2190.01
Valuations with Consolidation Structures

Performing valuations in a consolidated parent and in a child entity are similar. While most of the data comes from the child entities, some accounts may be manually entered in the consolidated parent, depending on the consolidation structure.

Cash flows from child entities are additive in full consolidation methods, unless you have selected to block accounts—see “Rolling Up Consolidations” on page 177. Other child entity accounts are also cumulative:

- Market Value of Debt (v5.00.500)
- Market Value of Other Obligations (v5.00.540)
- Underfunded Pension Liabilities (v5.00.520)
- Investment in Stocks and Bonds (v5.00.560)
- Market Value of Other Liabilities (v5.00.700)
- Market Value of Other Assets (v5.00.720)
- Residual NOPAT Adjustment (v5.00.820)

If these accounts contain data at a consolidated level, but not in child entities, consider entering the data into one of the child entities. Or, enter the account data in child entities, to avoid changing files.

You can block the Cost of Capital account group and manually enter those accounts in the consolidated parent.

Otherwise, the cost of capital is calculated as a weighted average of the child entities.

- “Residual Values in Consolidated Parent Entities or Files” on page 196
- “Consolidator Cost Method” on page 188
- “Consolidator Equity Method” on page 189
- “Consolidator Minority Interest Method” on page 190

### Input Data:

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Business Unit File #1</th>
<th>Business Unit File #2</th>
<th>Consolidated Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (Funds) (v2190.1)</td>
<td>$200</td>
<td>$300</td>
<td>$500</td>
</tr>
<tr>
<td>Depreciation Expense (v1110.0)</td>
<td>.80</td>
<td>.90</td>
<td>Executes Freeform Formula</td>
</tr>
</tbody>
</table>

### Output Data:

<table>
<thead>
<tr>
<th>Account Name</th>
<th>Business Unit File #1</th>
<th>Business Unit File #2</th>
<th>Consolidated Parent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciation Expense (v1110.0)</td>
<td>$160</td>
<td>$270</td>
<td>$500</td>
</tr>
</tbody>
</table>
Residual Values in Consolidated Parent Entities or Files

If you consolidate Residual Values, Consolidator calculates them using the Liquidation method for both the Shareholder Value and Dividend Discount models. The Perpetuity method applies to the Economic Profit model. The Future Value of Residual Value (FVRV) from the child entities are added to calculate the FVRV for the consolidated parent. The consolidated FVRV is discounted using a weighted average discount rate from the child entities. If the Cost of Capital account group is blocked, discount rates in the consolidated parent are used instead of the weighted average.

If you block Residual Values, Consolidator calculates them using the residual value method selected in the consolidated parent.

If you block the Residual Value account group is blocked, you must manually enter data in these accounts of the consolidated parent:

- “Shareholder Value Model” on page 196
- “Dividend Discount Model” on page 197
- “Economic Profit Model” on page 197

Shareholder Value Model

Perpetuity
Normalized Operating Profit Adjustment (v5110.00)
Residual Value Tax Rate (v4.00.560)

Growth in Perpetuity
Normalized Operating Profit Adjustment (v5110.00)
Residual Value Tax Rate (v4.00.560)
Perpetuity Growth Rate (v4.00.520)

Value Growth Duration
Normalized Operating Profit Adjustment (v5110.00)
Residual Value Tax Rate (v4.00.560)
Perpetuity Growth Rate (v4.00.520)
Perpetuity Value Growth Duration (v4.00.540)

Price/ Earnings Ratio
Normalized Earnings Adjustment (v5140.00)
Price/ Earnings Ratio (v5130.00)
Debt Discount/ (Premium) (v5150.00)
Market-to-Book Ratio
Market-to-Book Ratio (v5120.00)
Debt Discount/ (Premium) (v5150.00)

Liquidation
Liquidation Value (v5210)

**Dividend Discount Model**

Perpetuity
Long-Term Return on Book Equity (v4.00.780)
Residual Value Target Leverage Ratio (4.00.760)

Growth in Perpetuity
Long-Term Return on Book Equity (v4.00.780)
Perpetuity Growth Rate (4.00.720)
Residual Value Target Leverage Ratio (4.00.760)

Value Growth Duration
Perpetuity Value Growth Duration (v4.00.740)
Residual Value Target Leverage Ratio (4.00.760)
Perpetuity Growth Rate (4.00.720)

**Price/ Earnings Ratio**
Normalized Earnings Adjustment (v5440.00)
Price/ Earnings Ratio (v5430.00)

**Market-to-Book Ratio**
Market-to-Book Ratio (v5420.00)

Liquidation
Equity Liquidation Value (v5480.00)

**Economic Profit Model**

Perpetuity
Economic Profit Residual Tax Rate (v5.00.800)
Residual NOPAT Adjustment (v5.00.820)
Consolidated Funding Options

Subtopics

- Funding Options Table
- Order of Repayment and Funding
- Consolidation Process for Funding Options Accounts
- Accounts Associated with Funding Options Accounts

Consolidator uses Funding Options attributes in the consolidated parent when handling consolidated surpluses or deficits.

Funding Options Table

Child entities do not change the characteristics of the Funding Options table in the consolidated parent, for example:

Consolidated Parent

<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
<th>Surplus</th>
<th>Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>v2520.0.000</td>
<td>Term</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>v2460.0.000</td>
<td>Asset</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Child Entity

<table>
<thead>
<tr>
<th>Account</th>
<th>Type</th>
<th>Surplus</th>
<th>Deficit</th>
</tr>
</thead>
<tbody>
<tr>
<td>v2520.0.000</td>
<td>Rev</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>v2460.0.000</td>
<td>Asset</td>
<td></td>
<td>x</td>
</tr>
</tbody>
</table>

Order of Repayment and Funding

Consolidator uses the order of repayment in the consolidated file when consolidating Funding Options and disregards attributes in the child entity, for example:

Consolidated Parent

Apply Cash Surplus to...
Business Unit File

Apply Cash Surplus to...

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketable Securities</td>
<td>1</td>
</tr>
<tr>
<td>Notes Payable</td>
<td>2</td>
</tr>
<tr>
<td>Long-Term Funding Asset</td>
<td>3</td>
</tr>
</tbody>
</table>

**Consolidation Process for Funding Options Accounts**

For accounts that are Funding Option surpluses or deficits, the input values forecast the maximum account output. For accounts that are not in Funding Options, the input values forecast the actual output values. For example, to repay early a term loan of $100 and there is sufficient cash, enter $100 for that account. After calculating, the output is between 0 and $100, depending on the available cash. If the term loan should not be paid early, input $100 and the output is $100.

Funding Option accounts have main accounts and maximum accounts: for example, Marketable Securities has the main account v2010.00.000 and the maximum account v2010.07.000. Maximum account output calculates based on the main account value:

- If main accounts have surplus/deficit settings, maximum account outputs calculate using main account inputs.
- If main accounts do not have surplus/deficit settings, maximum account outputs calculate using main account outputs.

The basic roll-up process backsolves output values from business units to calculate the consolidated input. Funding Options accounts backsolve differently:

- If main accounts have surplus/deficit settings in the consolidated parent, Consolidator adds all business unit maximum account outputs, backsolves the main account input, and determines the main account output using the rest of the data.
- If main accounts do not have surplus/deficit settings, Consolidator adds all business unit main account outputs and backsolves the main account input. The rest of the data is irrelevant.

Consider:
In business unit A, Marketable Securities (v2010) has a surplus/deficit setting. There is not enough cash to use the maximum. In business unit B, Marketable Securities (v2010) does not have a surplus/deficit setting. Business unit B runs a large cash surplus. The table shows the consolidated results if Marketable Securities (v2010) has a surplus/deficit setting in the consolidated parent (SD) and if it does not (No SD).

<table>
<thead>
<tr>
<th>Task</th>
<th>Business Unit A</th>
<th>Business Unit B</th>
</tr>
</thead>
<tbody>
<tr>
<td>input (v2010.0)</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>output (v2010.0)</td>
<td>85</td>
<td>200</td>
</tr>
<tr>
<td>maximum (v2010.7)</td>
<td>100</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task</th>
<th>Cons (SD)</th>
<th>Cons (No SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>input (v2010.0)</td>
<td>300</td>
<td>285</td>
</tr>
<tr>
<td>output (v2010.0)</td>
<td>300 (A)</td>
<td>285</td>
</tr>
<tr>
<td>maximum (v2010.7)</td>
<td>300</td>
<td>285 (B)</td>
</tr>
</tbody>
</table>

(A) This could be up to 300, depending on the consolidated cash position.

(B) This is determined by the input of v2010.00, so the maximum on these facts is not additive.

Debt accounts act like asset accounts: If the item is a term loan, the surplus/deficit setting matters.

- If the item is a revolver, its accounts roll-up like assets with surplus/deficit settings, regardless of whether the revolver has a surplus/deficit setting.
- If the term loan has a surplus/deficit setting, it rolls up like a revolver.
- If the term loan does not have a surplus/deficit setting, it rolls up like assets with no surplus/deficit settings.

**Accounts Associated with Funding Options Accounts**

Funding Options accounts have accounts recording interest income or expense. For example, Marketable Securities (v2010) and Interest on Marketable Securities (v2010.05) behave in consolidations according to their forecast method and their associated accounts. Consolidated interest income/expense for given Funding Options accounts is generally not the sum of the business units.

**Consolidated Interest Income Example**

If a business unit generates a cash surplus of $100 invested in Marketable Securities and those securities earn 7%, the business unit has an interest income of $7. Consolidate this business unit with one generates a large cash deficit. After consolidation, if Marketable Securities has a surplus/deficit setting in the consolidated parent, the consolidated business unit shows marketable securities of 0. As long as the forecast method for interest income is a percent of Marketable Securities, interest income is zero. The interest rate is 7% in the consolidated parent.
If Marketable Securities does not have a surplus/deficit setting, the consolidated parent has $100 of Marketable Securities and $7 of interest income.

If interest income is forecast as an actual value in the consolidated parent but marketable securities has a surplus/deficit setting, Marketable Securities is zero, but interest income is $7.

**Consolidated Interest Rate Example**

To get consolidated interest rates, Consolidator temporarily assumes that Marketable Securities does not have a surplus/deficit setting, and adds up all child entity output values for both marketable securities and interest income, and solves for the rate. This rate becomes the input for interest income. If marketable securities has a surplus/deficit setting, this rate applies to whatever output Marketable Securities uses for consolidated interest income.

<table>
<thead>
<tr>
<th>Item</th>
<th>File</th>
<th>Business unit 1</th>
<th>Business unit 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mkt. sec.</td>
<td></td>
<td>300</td>
<td>400</td>
</tr>
<tr>
<td>Interest rate</td>
<td>6.57%</td>
<td>6%</td>
<td>7%</td>
</tr>
<tr>
<td>Interest inc.</td>
<td>18</td>
<td>28</td>
<td></td>
</tr>
</tbody>
</table>

Marketable Securities and Interest Income values depend on other data, but rates can be determined by adding 18 and 28 and dividing the sum by the sum of 300 and 400.

**About Exporting Consolidation Metadata for Extended Analytics**

You can now export consolidation metadata for extended querying and reporting to your Oracle, IBM DB2, or SQL database. This enables you to identify and analyze consolidation data for entities and better query entity relationships. For example, you can define a custom consolidation to evaluate the allocation of resources to different projects and companies, or create consolidation reports that display general and specific entity relationships and contributions.

You can export these tables:

- **CN_STRUCTURE** — Contains basic consolidation structure information
- **CN_ENTITY** — Describes the entities in the hierarchy, indicating parent child relationships
- **CN_SCENARIO** — Describes the scenario used by an entity in the consolidation, indicating how it is used in the entity rollup, and the parent and child attributes being applied
- **CN_GRP_EQUITY** — Describes the equity subaccount groups rolled up into the specified parent equity subaccount. This table is linked to the child attributes table.
- **CN_GRP_BLOCKED** — Describes the blocking groups defined in the parent attributes for the given entity scenario. These groups define accounts that are not rolled up to the parent, so the original value of the parent is maintained before consolidation.
- **CN_GRP_ELIM** — Describes the elimination groups in the parent attributes for the given entity scenario. These groups define accounts that are not rolled up to the parent, but the corresponding parent account value will be zeroed out.

- **CN_ATTR_PARENT** — Describes the parent attributes, if applicable, for the entity scenario and the roll-up contribution made to the parent. The root entity of the consolidation does not define parent attributes for any of its scenario rows and will not contain an entry in this table. Each row additionally describes the periods that were preserved and not rolled up to the parent.

- **CNS_ATTR_CHILD** — Describes any child attributes for the entity scenario and the roll-up contribution made to the parent. The leaf entities of the consolidation do not define child attributes for their scenarios and do not contain an entry in this table. Each row additionally defines the consolidation method used for the roll-up, the period range, the ownership percentage, and an equity subaccount, if applicable.

For more information about these tables, see Chapter 3 of the *Oracle Hyperion Strategic Finance Administrator’s Guide*.

**Notes**

- You can perform on-demand exports based on consolidation labels.

- The export populates relational database tables configured by a Strategic Finance Administrator. See Chapter 3 of the *Oracle Hyperion Strategic Finance Administrator’s Guide*.

**About the Consolidation Metadata**

You can export this additional consolidation data:

- Entities in the consolidation including the scenarios
- Scenarios for each entity
- Parent or child characteristics for each scenario
- For entity nodes — Name, hierarchy relationships, inclusion or exclusion indicators
- For scenario nodes — Name and inclusion or exclusion indicators
- For parent attributes:
  - Preserve periods indicator
  - Lists of blocked groups. Accounts do not roll up and parent values are retained
  - List of elimination groups. Accounts do not roll up.
- Child attributes:
  - Consolidation method, such as cost or minority interest
  - % ownership
  - Beginning period
  - End period
Equity: Subaccounts in parent and list of entity groups to roll up

**Requirements**

Before exporting consolidation metadata, ensure that an administrator has configured for extended analytics as follows:

- If using an Oracle database, ensure that you have these system privileges in Oracle:
  - ALTER ANY [INDEX/TABLE/SEQUENCE]
  - CREATE ANY [INDEX/TABLE/SEQUENCE]
  - DROP ANY [INDEX/TABLE/SEQUENCE]
- Database Connectivity Enabled is enabled on the External Database dialog
- Enable EA Consolidation Tables is selected on the Extended Analytics Database Configuration dialog before the database tables are created.

See Chapter 3 of the *Oracle Hyperion Strategic Finance Administrator’s Guide*. 
In This Chapter

About Currency Translator ................................................................. 205
Adding Currency Codes ....................................................................... 211
Currency Translator Default Assignments ............................................ 211
Currency Translator Calculation and Adjustment Process ...................... 212
Currency Translator Reports ................................................................. 220

About Currency Translator

Subtopics

- Using the Currency Translator
- Setting General Information About Currency Translations
- Setting Exchange Rates for Currency Translations
- Rules for Importing Exchange Rates
- Revaluations
- Avoiding Revaluation in Equity Accounts
- Copying Local Files to the Server for Currency Translation
- Currency Translator Retained Earnings Adjustment

Currency Translator expresses data in international currencies when creating multinational financial models. For example:

- A financial model including international subsidiaries, and the data is in different currencies.
- Associates or lenders in other countries need your data expressed in their national currency.

Using Currency Translator, you add exchange rates to financial models and assign those rates to currency accounts to translate the data to a new currency. After you translating, you can view or print reports showing the results.

If you are translating data from a company in a country with high inflation, please review Currency Translator Calculations before translating the data—you should remeasure the data first.

Note: Use Currency Translator to apply rates to currency accounts only. You cannot apply rates to accounts expressed in items or ratios.
Using the Currency Translator

To use Currency Translator:

1. From the Data grouping label, click Currency Translator.
   A warning is displayed stating that Strategic Finance adds Currency Translator accounts to the model.

2. Click OK to display Currency Translator.
   The actual exchange rates are defined in Currency Translator memo accounts added to the Accounts spreadsheet:
   - v100.00.000 Weighted Average Exchange Rate
   - v105.00.000 Period End Exchange Rate
   - v110.00.000 Equity Historical Exchange Rate
   - v115.00.000 User Defined Exchange Rate—The only subaccountable Currency Translator account.
     By default, the v115 rate is assumed for all subaccounts.

3. Select General Information to define basic currency translation information—see “Setting General Information About Currency Translations” on page 206.


5. Click OK.

Setting General Information About Currency Translations

On General Information, you define source and target currencies, exchange scales, and rate names, if applicable.

For importing exchange rates, see “Rules for Importing Exchange Rates” on page 207 before proceeding.

To set general currency translation information:


2. Select General Information.

3. Under Define Exchange Rates As, select the currency-to-currency type conversion.
   - The first box is the destination currency.
     Currency Translator assumes the default currency in the Summary Information is the translated currency.
     See “Specifying File Summary Data Displayed in Reports” on page 39
   - The second box is the source currency.
For example, you are translating Dollars per Peso. The rate in the memo account is the number of Dollars equalling one Peso.

If you do not see the currency in the list, enter the name.

4 **Optional:** Under Scale, change the scale of the translated data.

Change the scale when more of one currency to makes less of the other. For example, you change the scale to millions or thousands to eliminate trailing zeros.

As with the default currency, enter the default scale in File, then Summary Info, and then see the following link:

See “Specifying File Summary Data Displayed in Reports” on page 39

5 **Optional:** Select Use Rates from Current Source File to import forecasted rates, and click Browse to select a file.

After choosing a file, click Import Rates to load the rates. This creates a dynamic link—any changes made to the source file affect the translated file. Last Imported Source File and Last Imported Date reflect the most recent import.

6 Set exchange rates—see “Setting Exchange Rates for Currency Translations” on page 207

7 Click Translate.

### Setting Exchange Rates for Currency Translations

- To set exchange rates for currency translation:
  1 Access the Currency Translator.
  2 Select Assigning Exchange Rates.
  3 Under Account/Dialog Variable select accounts.
  4 Under Exchange Rate select exchange rates:
    - Weighted Average Exchange Rate
    - Period End Exchange Rate
    - Equity Historical Exchange Rate
    - User Defined Exchange Rate—enter custom exchange rates in the spreadsheet
  5 Click Translate.

### Rules for Importing Exchange Rates

When you import exchange rates, follow these rules:

- Years in source but not in destination files are not imported.
- Exchange rates for time periods in destination but not source files, are not imported. This also applies to subperiods.
The source file can have more detail than the destination file. For example, the source file can be in months and the destination file in quarters. However, the source file cannot have less detail than the destination file.

- The source and destination files must have matching fiscal year ends.
- Source files must closed.
- If the source and destination files are password-protected, the passwords must match.
- You must calculated source files before importing.

### Revaluations

Currency Translator translates only the first time period and time periods with value changes, and calculates others. This avoids revaluations and provides accurate results without requiring a blended exchange rate of all equity components.

For example, consider these values in American dollars:

<table>
<thead>
<tr>
<th>Year</th>
<th>Dollars</th>
<th>Rate of Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock in 2003</td>
<td>100</td>
<td>exchange rate: 3</td>
</tr>
<tr>
<td>Common Stock issued in 2004</td>
<td>50</td>
<td>exchange rate: 4</td>
</tr>
<tr>
<td>Common Stock in 2004</td>
<td>150</td>
<td>exchange rate: 3</td>
</tr>
</tbody>
</table>

If you use the standard method to translate American dollars to the German deutschmark, these values result:

| Common Stock in 2003          | 300     | translated at 3 |
| Common Stock issued in 2004   | 200     | translated at 4 |
| Common Stock in 2004          | 450     | translated at 3 |
| Revaluation of Stock          | -50     |                 |

The translations should be:

- Equity—from 100 to 300
- Issuance—from 50 to 200

The total should be 500, but the translation is 450—a -50 revaluation difference. This error occurs when calculating every time period, regardless of change.

To avoid this error, Currency Translator translates the equity of the first period at the equity historical rate, and translates subsequent periods only if the value changes. Otherwise, they use the first period's value. The values are correct:
Table 7  Currency translation

<table>
<thead>
<tr>
<th>Common Stock in 2003</th>
<th>300</th>
<th>translated at 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock issued in 2004</td>
<td>200</td>
<td>translated at 4</td>
</tr>
<tr>
<td>Common Stock in 2004</td>
<td>500</td>
<td>calculated</td>
</tr>
<tr>
<td>Revaluation of Stock</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

See “Avoiding Revaluation in Equity Accounts” on page 209.

Avoiding Revaluation in Equity Accounts

For equity accounts, Currency Translator translates the first period balance and all subsequent flows. As a result, there are no values in the .04 accounts. If there were values in the .04 accounts before translation, they remain in the original currency afterwards. Equity accounts are designed to avoid revaluation, so you should zero the .04 values for all equity accounts.

Copying Local Files to the Server for Currency Translation

If you copy a local file to a server and that file uses translation rates from another local file, it defaults to using residual rates from the last translation run. On subsequent retrievals of the file copied to the server, the local client searches for the local file containing the translation rates.

Currency Translator Retained Earnings Adjustment

Currency Translator assumes that exchange rates for retained earnings reflect the historical basis of the account, and translates retained earnings in historical periods. It calculates the retained earnings and compares it to the translated data. If they do not match, Currency Translator adjusts the translated data to balance the Funds Flow report.

Currency Translator calculates retained earnings as:

\[
\text{Retained Earnings} = \text{Retained earnings (prior period)} + \text{Income available for common dividends} - \text{Common dividends} + \text{Funds flow adjustment: sources} - \text{Funds flow adjustment: uses}
\]

\[
\text{Retained Earnings Adjustment} = \text{Retained earnings} - \text{Retained earnings (prior periods)} - \text{Income available for common dividends}
\]
Retained Earnings Adjustment = Retained earnings

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>.</td>
<td>+ Common dividends</td>
</tr>
<tr>
<td>.</td>
<td>- Funds flow adjustment (sources)</td>
</tr>
<tr>
<td>.</td>
<td>+ Funds flow adjustment (uses)</td>
</tr>
</tbody>
</table>

Strategic Finance adds the retained earnings adjustment to the account structure so you can review how it calculates. The Translator adjusts the amount and creates an account called the Retained Earnings Adjustment Account (v2853.0.000)

Example:

In Deutschemarks

(adjustment applies to all historical periods, except the first historical period)

<table>
<thead>
<tr>
<th>Item</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td>500</td>
<td>2000</td>
</tr>
<tr>
<td>Net income</td>
<td></td>
<td>2100</td>
</tr>
<tr>
<td>Dividends</td>
<td></td>
<td>600</td>
</tr>
<tr>
<td>Equity exchange rate</td>
<td>.7</td>
<td>.7</td>
</tr>
<tr>
<td>Year-end exchange rate</td>
<td>.667</td>
<td>.75</td>
</tr>
<tr>
<td>Weighted avg. rate</td>
<td></td>
<td>.72</td>
</tr>
</tbody>
</table>

In U.S. Dollars - After Translation

<table>
<thead>
<tr>
<th>Item</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained earnings</td>
<td>350</td>
<td>1400 direct translation at equity historical rate</td>
</tr>
<tr>
<td>Net income</td>
<td></td>
<td>1512 weighted average rate</td>
</tr>
<tr>
<td>Dividends</td>
<td></td>
<td>432 weighted average rate</td>
</tr>
</tbody>
</table>

The retained earnings calculated by the normal retained earnings formula is:

\[
\begin{align*}
350 \\
1512 \\
(432) \\
1430
\end{align*}
\]
The retained earnings is not calculated for 1400. This difference of 30 is the retained earnings adjustment.

**Adding Currency Codes**

All ISO recognized currencies are available and internally tracked in currencies.xml. You specify currency for use at the entity level using Summary Information. Although it is not recommended, you can add currencies to applications using the currencies_user.xml file.

**Currency Translator Default Assignments**

Subtopics
- Assignments by Account Type
- Default Assignments

**Assignments by Account Type**

The default exchange rates by account type:

**Input Accounts**

- Income and expense accounts default to Weighted Average Exchange Rate.
- Asset and liability accounts (.00 accounts) default to the Period End Exchange Rate.
- Equity accounts default to the Equity Historical Exchange Rate.
- Increases in asset and liability accounts (.01 accounts) default to the Weighted Average Exchange Rate.

**Calculated Accounts**

- Cash Flow from Operations defaults to the Weighted Average Exchange Rate.
- Present Value of Cash Flow (PVCF) defaults to the Period End Exchange Rate for the last historical year.
- Future Value of Residual Value (FVRV) defaults to Period End Exchange Rate for the last forecast period.

Certain accounts such as Cost of Capital and Number of Shares do not have exchange rates.

**Default Assignments**

This table lists the default exchange rates for accounts:
<table>
<thead>
<tr>
<th>Dialog Variable</th>
<th>Description</th>
<th>Default Exchange Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.00.200</td>
<td>Current Stock Price</td>
<td></td>
</tr>
<tr>
<td>5.00.500</td>
<td>Market Value of Debt</td>
<td></td>
</tr>
<tr>
<td>5.00.520</td>
<td>Underfunded Pension Liabilities</td>
<td></td>
</tr>
<tr>
<td>5.00.540</td>
<td>Market Value of Other Obligations</td>
<td></td>
</tr>
<tr>
<td>5.00.560</td>
<td>Investment of Stocks and Bonds</td>
<td></td>
</tr>
<tr>
<td>5.00.700</td>
<td>Market Value of Other Liabilities</td>
<td></td>
</tr>
<tr>
<td>5.00.720</td>
<td>Market Value of Other Assets</td>
<td></td>
</tr>
<tr>
<td>5.00.820</td>
<td>Economic Profit Normalized Earnings Adjustment</td>
<td></td>
</tr>
<tr>
<td>5.00.900</td>
<td>Valuation Adj. for Cost and Equity: SVA</td>
<td></td>
</tr>
<tr>
<td>5.00.910</td>
<td>Valuation Adj. for Cost and Equity: EP</td>
<td></td>
</tr>
<tr>
<td>5.00.920</td>
<td>Valuation Adj. for Minority Interest: SVA</td>
<td></td>
</tr>
<tr>
<td>5.00.930</td>
<td>Valuation Adj. for Minority Interest: EP</td>
<td></td>
</tr>
<tr>
<td>315.00.300</td>
<td>Initial Loss Balance</td>
<td></td>
</tr>
<tr>
<td>316.00.300</td>
<td>Initial Gain Balance</td>
<td></td>
</tr>
<tr>
<td>316.00.500</td>
<td>Initial Balance of Taxes Paid</td>
<td></td>
</tr>
</tbody>
</table>

**Currency Translator Calculation and Adjustment Process**

**Subtopics**

- Remeasurement for High Inflation
- Adjustment Exceptions
- Currency Translator, Cash Flow and Valuation
- Revaluation
- Translation Adjustment

Currency Translator automatically calculates the exchange data for all currency accounts simultaneously. When necessary, it adjusts the accounts so that your model remains balanced. It places the adjustments in special accounts where you can review them.

**Note:** Currency Translator assumes all financial data in a file share one currency. To use data in several currencies, change foreign currency entries to the operational currency before translating the file.
Currency Translator adjustment information is in several reports: Funds Flow, Direct Cash Flow, Indirect Cash Flow, and FAS 95—see “Currency Translator Information in Other Reports” on page 220.

## Remeasurement for High Inflation

Currency Translator supports FASB 52, so fluctuations in the exchange rates are recorded as equity, not income. If you are modeling a company in a country with high inflation and the parent company is in a country with low inflation, remeasure the company financial statements before translation.

After remeasuring, you can translate all financial statements using one exchange rate: Currency Translator will not calculate the income effect. This is useful for companies presenting last year’s financial data based on the current year’s currency.

## Adjustment Exceptions

### Subtopics

- Fixed Assets
- Accumulated Depreciation
- Fixed Asset Accounts
- Other Intangibles
- Long-Term Debt
- Investment Equity Method

When the adjustments are complex, Currency Translator adjusts translated data in a unique manner as described in this topic.

### Fixed Assets

Currency Translator makes a special adjustment when the fixed asset formula is:

\[
\text{Fixed Assets} = \text{Fixed assets (prior period)} + \text{Fixed Capital Investment (FCI)} - \text{Retirements}
\]

**Example:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Deutschemarks</th>
<th>Rate</th>
<th>Dollars</th>
<th>Rate Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed assets (year 1)</td>
<td>6000</td>
<td>.75</td>
<td>4500</td>
<td>year-end rate (year 1)</td>
</tr>
<tr>
<td>FCI (year 2)</td>
<td>700</td>
<td>.72</td>
<td>504</td>
<td>weighted average rate</td>
</tr>
</tbody>
</table>
The fixed assets formula expressed in dollars does not balance, that is, \(4500 + 504 - 432 - 3660\). Currency Translator adjusts the amount and store the adjustment in Adjustment to Fixed Assets (v2170.4.000).

Following is the adjustment formula:

\[
\text{Adjustment to Fixed Assets} = \text{Fixed Assets} - \text{Fixed assets (prior period)} - \text{Fixed Capital Investments} + \text{Retirements}.
\]

\[
\begin{array}{lcl}
\text{Result} & = & 3660 - 4500 - 504 + 432 \\
& = & -912
\end{array}
\]

**Accumulated Depreciation**

Currency Translator makes a special adjustment when the accumulated depreciation formula is:

\[
\text{Accumulated Depreciation} = \text{Accumulated depreciation (prior period)} + \text{Depreciation expense (Funds)} + \text{Accumulated depreciation on retirements}
\]

Example:

\[
\begin{array}{lcl}
\text{Depreciation} & \text{Deutschemarks} & \text{Rate} & \text{Dollars} & \text{Rate} \\
\text{Acc. Dep. (year 1)} & 1200 & .75 & 900 & \text{year-end rate (year 1)} \\
\text{Depr. exp. (year 2)} & 1220 & .72 & 878.4 & \text{weighted average rate} \\
\text{Retirements (year 2)} & (120) & .72 & (86.4) & \text{weighted average rate} \\
\text{Acc. Dep. (year 2)} & 2300 & .60 & 1380 & \text{year-end rate (year 2)}
\end{array}
\]

In this circumstance, Depreciation Expense: Funds = Depreciation Expense: Book before translation but not after, so the dollars column is not balanced. Currency Translator adjusts depreciation expense to correct the imbalance by adding -312 to 878.4, and stores the adjustment value in the Adjustment to Accumulated Depreciation (v2190.4.000) account.

The adjustment formula:
**Fixed Asset Accounts**

Unlike cash accounts, fixed-asset accounts rely on additions and retirements, so Currency Translator adjusts them differently. For example, Goodwill:

\[
\text{Goodwill} = \text{Goodwill (prior period)} + \text{Additions to goodwill} - \text{Amortization of goodwill}
\]

Currency Translator adjusts it:

\[
\text{Adjustment to Goodwill} = \text{Goodwill} - \text{Goodwill (prior period)} - \text{Additions to goodwill} + \text{Amortization of goodwill}
\]

The Goodwill adjustment value is stored in the Adjustment to Goodwill (v2400.4.000) account. Currency Translator adjusts the other fixed-asset accounts as follows:

**Other Intangibles**

\[
\text{Adjustment to Other Intangibles} = \text{Other intangibles} - \text{Other intangibles (prior period)} - \text{Additions to other intangibles} + \text{Amortization of other intangibles}
\]
### Long-Term Debt

\[
\text{Adjustment to Long-Term Debt} = \text{Long-term debt: scheduled} - \text{Long-term debt: scheduled (prior period)} - \text{Increase in long-term debt: scheduled} - \text{Non-cash interest on long-term debt: scheduled} + \text{Long-term Debt}
\]

### Investment Equity Method

\[
\text{Adjustment to Inv. Eq. Method} = \begin{align*}
\text{Investments: equity method} \\
\text{Investments: equity method (prior period)} \\
\text{Increase in Investments: equity method} \\
\text{Dividends from subsidiaries} \\
+ \text{Earnings from investments: equity} \\
\text{Adjustment to Inv. Equity}
\end{align*}
\]

### Currency Translator, Cash Flow and Valuation

**Subtopics**

- Cash Flow from Operations
- Present Value of Cash Flow
- Cost of Capital
- Future Value of Residual Value
- Shareholder Value and Dividend Discount Method
- Economic Profit

### Cash Flow from Operations

Currency Translator neither creates nor destroys cash flows when translating one currency to another—it applies an exchange rate to Cash Flow from Operations and translates directly. It does the same for the items constituting Cash Flow from Operations, which can cause an imbalance. To rebalance, Currency Translator makes an adjustment and stores the adjustment value in the Cash Flow Adjustment: Currency (v4090) account.
Present Value of Cash Flow

Currency Translator neither creates nor destroys values when translating from one currency to another—it applies the year-end exchange rate from the last year in history to Present Value of Cash Flow and translates it directly.

Note: You can change the exchange rate.

Cost of Capital

Because Currency Translator translates both the Cash Flow from Operations and Present Value of Cash Flow directly, it can calculate the Cost of Capital for each period. The Cost of Capital may be different after translation because it reflects the original currency’s economic factors. After translation, it should balance the future and present values of the cash flows.

Future Value of Residual Value

Currency Translator translates the Future Value of Residual Value directly—it applies the year-end exchange rate from the last year in forecast period to Future Value of Residual Value and translates it directly.

Note: You can reassign the exchange rate if needed.

Currency Translator calculates the residual value based on the method you select—see “Modeling Valuation Accounts” on page 125. In some circumstances, it may be necessary to use a value when translating data—see “Shareholder Value and Dividend Discount Method” on page 217.

Shareholder Value and Dividend Discount Method

These are the residual value methods and values used:

<table>
<thead>
<tr>
<th>Method</th>
<th>Specific Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perpetuity Method</td>
<td>Long-term cost of capital</td>
</tr>
<tr>
<td>Growth in Perpetuity</td>
<td>Long-term cost of capital</td>
</tr>
<tr>
<td>Value Growth Duration</td>
<td>Long-term cost of capital</td>
</tr>
<tr>
<td>Price/Earnings Ratio</td>
<td>Normalized earnings adjustment</td>
</tr>
<tr>
<td>Market-to-Book Ratio</td>
<td>Market-to-book ratio</td>
</tr>
<tr>
<td>Liquidation Value</td>
<td>Liquidation value</td>
</tr>
</tbody>
</table>
**Economic Profit**

Economic profit only supports the perpetuity method, and its value is the residual NOPAT adjustment.

**Revaluation**

Currency Translator distinguishes between actual increases and decreases in balance sheet accounts and period-to-period changes caused by currency fluctuations. For example:

<table>
<thead>
<tr>
<th>Cash</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$100</td>
<td>$150</td>
</tr>
<tr>
<td>Increase in cash</td>
<td></td>
<td>$50</td>
</tr>
</tbody>
</table>

If you translate the preceding dollar amounts to French Francs using these exchange rates:

<table>
<thead>
<tr>
<th>Year</th>
<th>Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>4 FF per $1</td>
</tr>
<tr>
<td>2004</td>
<td>5 FF per $1</td>
</tr>
</tbody>
</table>

After translation, the data is:

<table>
<thead>
<tr>
<th>Amount</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>FF400</td>
<td>FF750</td>
</tr>
<tr>
<td>Increase in cash</td>
<td></td>
<td>FF250 ($50 x 5)</td>
</tr>
</tbody>
</table>

After translation, the increase in cash is incorrect because of the currency fluctuation—it should be FF350. Currency Translator adjusts for the fluctuation, in this case adding FF100, and notes the adjustment value in the Adjustment To Cash (v2000.04.000) account.

Most balance sheet accounts must be adjusted similarly, and adjustment values recorded in additional .04 accounts. Currency Translator sometimes makes different adjustments—see “Translation Adjustment” on page 218.

**Translation Adjustment**

Currency Translator translates most balance sheet accounts at the year-end exchange rate. It translates equity accounts using the equity historical exchange rate. In forecast periods, it does not translate retained earnings, but translates the weighted average of the items constituting retained earnings. Because the use of different exchange rates causes an imbalance, Currency Translator adjusts the data.

If you do not use the default exchange rate assignments (see “Setting Exchange Rates for Currency Translations” on page 207), Currency Translator uses this formula to calculate CTA:
Currency Translator enters the value in the currency translation adjustment account, in the equity section of the balance sheet. Period-to-period changes appear on the cash and funds flow reports.

*Note:* The account does not have an analysis trail because the data is not available after translation.

In Dollars (U.S.)

<table>
<thead>
<tr>
<th>Cash</th>
<th>2003</th>
<th>Type</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>100</td>
<td>Cash</td>
<td>100</td>
</tr>
<tr>
<td>Debt</td>
<td>100</td>
<td>Retained Earnings</td>
<td>100</td>
</tr>
</tbody>
</table>

The cash from sales pays the debt.

<table>
<thead>
<tr>
<th>Period end rate</th>
<th>2003</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted avg. rate</td>
<td>2004</td>
<td>5</td>
</tr>
<tr>
<td>Period end rate</td>
<td>2004</td>
<td>6</td>
</tr>
</tbody>
</table>

After the translation:

<table>
<thead>
<tr>
<th>Cash or Dept</th>
<th>2003</th>
<th>Type</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>400</td>
<td>Cash</td>
<td>600</td>
</tr>
<tr>
<td>Debt</td>
<td>400</td>
<td>Retained Earnings</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Adjustment</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sales</td>
<td>500</td>
</tr>
</tbody>
</table>
## Currency Translator Reports

### Currency Translator Information in Other Reports

Currency Translator creates .04 accounts containing adjustment values which are displayed in these reports.

<table>
<thead>
<tr>
<th>Report</th>
<th>Adjustment Accounts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Funds Flow Report</td>
<td>Total Adjustment to Assets:</td>
</tr>
<tr>
<td></td>
<td>● Sums all .04 asset accounts</td>
</tr>
<tr>
<td></td>
<td>● Part of Total Uses of Funds</td>
</tr>
<tr>
<td></td>
<td>Total Adjustment to Liabilities:</td>
</tr>
<tr>
<td></td>
<td>● Sums all .04 liability accounts</td>
</tr>
<tr>
<td></td>
<td>● Part of the Total Sources of Funds</td>
</tr>
<tr>
<td>Direct Cash Flow Report</td>
<td>Total of all .04 accounts</td>
</tr>
<tr>
<td>Indirect Cash Flow Report</td>
<td>Total of all .04 accounts.</td>
</tr>
<tr>
<td>FAS 95 Report</td>
<td>Total of all .04 accounts.</td>
</tr>
</tbody>
</table>
In This Chapter

About What If? Analysis ................................................................. 221
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Using Sensitivity Analysis ............................................................ 227
Using Goal Seek .......................................................................... 232

About What If? Analysis

There are three What If? Analysis utilities for creating financial model variations:

- Scenario Manager—you create variations, or scenarios, on a model, with accounts specific to that scenario.
- Sensitivity Analysis—you can change values for some accounts to evaluate the effects on key metrics.
- Goal Seek—you set target values for accounts, evaluate changes to other accounts to reach those target values.

Using Scenarios

Subtopics

- Accessing the Scenario Manager
- Maintaining Scenarios
- Creating Scenarios
- Storing and Displaying Output Values for Multiple Scenarios
- Sorting Scenarios
- Exporting Scenarios by Scenario Type
- Working with Combined Scenarios

Scenarios are variations on an analysis. You create scenarios to evaluate different sets of forecast assumptions, evaluating different possible outcomes in strategic planning.
Accessing the Scenario Manager

> From the Analysis grouping label, click Scenario Manager.

Maintaining Scenarios

➤ To maintain scenarios:

1. **Access Scenario Manager.**

   See “Accessing the Scenario Manager” on page 222.

2. **Select Account Scenarios.**

   The Scenario Manager dialog box displays the scenarios in a model. Base and Actual are default scenarios:
   - Base—contains the original inputs of each account.
   - Actual—isolates actual data.

   **Note:** You cannot edit the accounts for Base and Actual scenarios.

3. **Perform an action:**
   - To create a scenario, click New. See “Creating Scenarios” on page 223.
   - To rename a scenario, in Scenarios, select a scenario, and click Rename.
   - To delete a scenario, in Scenarios, select a scenario, and click Delete.
   - In Comments, enter comments about the scenario.

4. In Scenarios, select a scenario.

5. In Scenario Type, select a type.

6. **Optional:** In Use Actuals, indicate if and when to compare actual and budgeted forecast data.

7. In Accounts, select the accounts that should be specific to that scenario.

8. In Find Accounts, search for an account or enter text or numbers to search.

   As you enter values, Strategic Finance generates the list.

9. **Optional:** Select a Process:
   - Check Accounts (s)—to add them as member accounts for the scenario.
   - Uncheck Accounts (s)—to remove them as member accounts for the scenario.

10. **Optional:** Select Show inputs for all Inputs Accounts to display all input accounts.

11. **Optional:** Select Show only selected accounts to hide deselected accounts.

12. Click OK.
Creating Scenarios

To create scenarios:

1. From the Analysis grouping label, select Scenario Manager.
2. To create a scenario, click New, enter a name.
   The name must be unique among scenarios in the model. Not case sensitive.
3. Click OK.

Storing and Displaying Output Values for Multiple Scenarios

By default, Strategic Finance stores and displays output values for an account for the currently selected scenario. You can optionally store output values for an account for all scenarios.

To display output values for an account for the currently selected scenario:

1. Access Scenario Manager.
   See “Accessing the Scenario Manager” on page 222.
2. Select Outputs.
3. In Accounts for which Strategic Finance should store outputs for all scenarios, select accounts:
4. Optional: Select Store outputs for all accounts to store output values for all accounts when saving files.
5. Optional: Select Store subaccounts if main account is stored to save outputs for related subaccounts when saving main accounts.
6. Optional: Select Store dimensional members if main account is stored to save the outputs for all related dimensional account members when saving main accounts.
7. Click OK.

Sorting Scenarios

To reorder scenarios:

1. Access Scenario Manager.
   See “Accessing the Scenario Manager” on page 222.
2. Select Order.
3. Under Scenario, select a scenario.
4. Click the arrows to reorder the scenario.
5. Click OK.
Exporting Scenarios by Scenario Type

Scenarios can be exported to external databases by scenario type.

➤ To specify the scenario to export for each scenario type:

1. **Access Scenario Manager.**
   - See “Accessing the Scenario Manager” on page 222.

2. **Select the Scenario to Export tab.**
   - Under Scenario Type, view scenario types.

3. Under Scenario to Export, select scenarios.

4. Click OK.

Working with Combined Scenarios

Subtopics

- Sample Combined Scenario
- Combined Scenarios Requirements
- Creating Combined Scenarios
- Creating Combined Scenarios

Use Combined Scenarios to create and evaluate variant models by combining multiple scenarios into a single scenario, saving you time in data entry.

Sample Combined Scenario

For a combined scenario example, assume an entity with this Base Scenario:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Account</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base</td>
<td>Sales</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Interest on Debt</td>
<td>6%</td>
</tr>
</tbody>
</table>

You create these scenarios on the Sales account:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Account</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasting 1</td>
<td>Sales</td>
<td>12%</td>
</tr>
<tr>
<td>Forecasting 2</td>
<td>Sales</td>
<td>14%</td>
</tr>
<tr>
<td>Forecasting 3</td>
<td>Sales</td>
<td>16%</td>
</tr>
</tbody>
</table>

You create these scenarios on the Interest account:
To evaluate values in Sales with different values in Interest, you create a combined scenario with information from the Forecasting scenario, adding different Financing scenarios to evaluate varying Interest on Debt account numbers.

You can create several Combined Scenarios, each of which pulls data from the different preceding scenarios:

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Account</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing 1</td>
<td>Interest on Debt</td>
<td>7%</td>
</tr>
<tr>
<td>Financing 2</td>
<td>Interest on Debt</td>
<td>3%</td>
</tr>
<tr>
<td>Financing 3</td>
<td>Interest on Debt</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scenario 2</th>
<th>Account</th>
<th>Value</th>
<th>Combination</th>
<th>Scenario 3</th>
<th>Account</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecasting 2</td>
<td>Sales</td>
<td>14%</td>
<td>Combined Scenario 1</td>
<td>Financing 3</td>
<td>Interest on Debt</td>
<td>4%</td>
</tr>
<tr>
<td>Forecasting 1</td>
<td>Sales</td>
<td>12%</td>
<td>Combined Scenario 2</td>
<td>Financing 2</td>
<td>Interest on Debt</td>
<td>3%</td>
</tr>
<tr>
<td>Forecasting 3</td>
<td>Sales</td>
<td>16%</td>
<td>Combined Scenario 3</td>
<td>Financing 1</td>
<td>Interest on Debt</td>
<td>7%</td>
</tr>
</tbody>
</table>

**Combined Scenarios Requirements**

These rules apply in creating Combined Scenarios:

- **Combined Scenarios inherit the Actuals Rule from the last Scenario in the list.** Each scenario in the combined scenario uses the same actuals rule in the last scenario listed in Selected Scenarios. See “Creating Combined Scenarios” on page 225.

- **Overlapping accounts may be used, but the order of the Scenarios is important.** If combined scenario accounts exist in multiple account scenarios, calculations use the data from the account in the last scenario in Selected Scenarios. See “Creating Combined Scenarios” on page 225. To use a different version of the account, select the name of the scenario in Selected Scenarios, and reorder it.

- **An account with Actuals must have at least as many Time Periods as the Scenario to which it belongs.** If an account is introduced by a scenario, it must use Actuals for at least as many periods as the Account scenario specifies. It may use Actuals for more periods if the last scenario in Selected Scenarios requires—see “Creating Combined Scenarios” on page 225.

- **You cannot add new accounts or Subaccounts directly into Combined Scenarios.** New accounts or subaccounts cannot be created in an Entity while you are in a Combined Scenario. To add subaccounts, access the Entity using the Accounts spreadsheet of the client application workspace.

**Creating Combined Scenarios**

Use the Scenario Manager—Combined Scenarios tab to create combined scenarios. See “Creating Combined Scenarios” on page 225 for rules.
To create combined scenarios:

1. Select Analysis, then What if?, and then Scenario Manager.
2. Select Combined Scenarios.
3. Click New.
4. In Create Combined Scenario, enter a name and click OK.
5. Optional: In Comments, enter a description.
6. In Available Scenarios, select a scenario and click >> to add it to Selected Scenarios.
   Repeat for each scenario.
7. Optional: Select Warn about Overlapping Accounts to receive warnings with overlapping accounts between scenarios.
8. Optional: Use the arrows to reorder the scenarios in Selected Scenarios.

Follow these rules:

- Combined scenarios inherit the Actuals Rule from the last Scenario in Selected Scenarios.
- Overlapping accounts may be used, but the order of the scenarios is important.
9. Click OK.

Creating Combined Scenarios

Use the Scenario Manager-Combined Scenarios tab to create combined scenarios. See “Combined Scenarios Requirements” on page 225 for rules.

To create combined scenarios:

1. Access Scenario Manager.
   See “Accessing the Scenario Manager” on page 222.
2. Select Combined Scenarios.
3. Perform an action:
   - To create a scenario, click New. See “Creating Scenarios” on page 223.
   - To rename a scenario, in Scenarios, select a scenario, and then click Rename.
   - To delete a scenario, in Scenarios, select a scenario, and then click Delete.
   - In Comments, enter comments about the scenario.
4. In Available Scenarios, select a scenario and then click > to add it to Selected Scenarios.
   Repeat for each scenario.
5. Optional: Select Warn about Overlapping Accounts to receive warnings with overlapping accounts between scenarios.
6. Optional: Use the arrows to reorder the scenarios in Selected Scenarios.
Follow these rules:

- Combined scenarios inherit the Actuals Rule from the last Scenario in Selected Scenarios.
- Overlapping accounts may be used, but the order of the scenarios is important.

7 Click OK.

Using Sensitivity Analysis

Subtopics

- Accessing Sensitivity Analysis
- Setting Global Sensitivity Analysis Options
- Setting Shareholder Value Options
- Setting Economic Profit Options
- Viewing Sensitivity Analysis Results
- Using One Variable for Sensitivity Analysis

Use Sensitivity Analysis to manipulate selected accounts and evaluate the effect on key variables. For example, you can see how much you must increase product sales to balance an increase in manufacturing expenses.

You can use Sensitivity Analysis to isolate the “value drivers” in financial models. Value drivers are key variables that, when manipulated, impact values. Knowing which accounts affect your enterprise helps you make informed decisions.

There are three sensitivity models:

- Full Strategic Finance model
- Shareholder Value model
- Economic Profit model

Accessing Sensitivity Analysis

➤ To use Sensitivity Analysis:

1 From the Analysis grouping label, select Sensitivity Analysis
2 Set full model options.
   See “Setting Global Sensitivity Analysis Options” on page 228
3 Set shareholder value options.
   See “Setting Shareholder Value Options” on page 230
4 Set economic profit options.
   See “Setting Economic Profit Options” on page 231
Test results in the matrix.
See “Viewing Sensitivity Analysis Results ” on page 231

Click OK.

**Setting Global Sensitivity Analysis Options**

Use the Sensitivity Analysis-Full Model tab to analyze the entire model. Because it uses the full model, it has the longest calculation time.

To set the full model options for sensitivity analysis:

1. **Access Sensitivity Analysis.**
   See “Accessing Sensitivity Analysis ” on page 227.

2. **Select Full Model.**

3. **In Sensitivity, select an account for analysis.**

   **Note:** Accounts using scalar inputs or historical average forecast method are not listed. Accounts using Freeform Formulas that respond to changes in other accounts are included.

4. **In period, select a time period.**

   **Note:** To aggregate time periods, select *Multiplying By* in *Change by*.

Exceptions
From All Forecast Periods, you can select an account in the Sensitivity of field:

**Note:** Relative variables in forecast time periods change to calculate the sensitivity of the valuation account.

5. **In Display, define how values are presented:**

6. **In Relative to - Top, select the item on which the sensitivity of the item in Sensitivity of is determined and the calculation based on.**

   Enter information for the first account variable that is changed. This information is displayed on the matrix.

   **Account:** Select the top variable of the matrix on which the sensitivity is performed.

   The list includes all accounts from the model, plus:
   - Input accounts with no freeform formulas
   - Input accounts with freeform formulas using @input
   - Main accounts calculated as a sum of their subaccounts
   - Subtotal subaccounts
For accounts calculated through subaccounting and subtotal subaccounts, the increment percentage applies to the subaccounts output values. Using these accounts, you must select **Multiplying by** in the **Change by** field.

- Calculated accounts such as Net Income are not included.

**Change by** Select a method for changing the sensitivity variable:

- **Adding** Add the change amount to the input value of the relative variable. The change amount is based on the input type and scale of the relative variable. For example:
  - An increment of 3 for A/R, if it is forecast in Days of Annualized Sales, adds three days to the input value of A/R.
  - An increment of 2 for Sales, if it is forecast as a Growth Rate, adds 2 percent to the input value of Sales.
  - An increment of 5 for Fixed Capital Investment, if it is forecast as Actual Value in Millions, adds 5 million dollars to the input value of Fixed Capital Investment.

- **Multiplying by** Multiplies the input value for the Relative to account by a percentage. For example:
  - An increment of 2 for Sales, if it is forecast as a 10% Growth Rate, multiplies the input value of 10% by 2%, equalling 10.2%.

**Percent**

Enter the amount multiplied by or added to the Relative to account. The maximum is 999.9. You cannot enter negative amounts.

Examples:

- If you enter 2% for Sales Growth Rate and select **Multiplying** in the **Change by** field, Strategic Finance multiplies the Sales Growth Rate by 98% to obtain the -2% result and multiplies the Sales Growth Rate by 102% to obtain the +2%.

- If you enter 2% for Sales Growth Rate and select **Adding** in the **Change by** field, Strategic Finance adds or subtracts 2% to calculate the results. So 10% becomes 8% and 12% growth rate.

**Forecast**

Displays the forecast method of the Relative account.

**Optional:** To add another sensitivity variable, in **And Relative to - Left**, select an **Account**.

To perform a sensitivity using a second variable, enter information about the account (displayed at the left of the matrix). Complete the fields as you did in the **Relative to** fields.

**Note:** The default account is Period End Exchange Rate unless you have saved another setting.

You cannot select the same account for both relative variables.
To perform an analysis using only one variable, enter a zero for the change amount for one of the relative variables.

8 Click OK.

**Setting Shareholder Value Options**

Use the Shareholder Value tab to perform a sensitivity analysis using a limited number of value driver variables from the Shareholder Value model. Because this group is a subset, calculations are faster, but may give different results than the Full Model.

To set the shareholder value options for sensitivity analysis:

1. **Access Sensitivity Analysis.**
   
   See “Accessing Sensitivity Analysis” on page 227.

2. **Select Shareholder Value.**

3. In **Sensitivity**, select an account for analysis.

4. In **Display**, select a display option.

5. In **Relative to - Top**, select the top variable of the matrix on which the sensitivity is performed in addition to the increment type and amount. The default is Sales Growth Rate.

   In **Change %**, enter the percent multiplied or added to the Relative to account.

   You cannot enter negative amounts.

   Examples:
   
   - If you enter 2% for Sales Growth Rate here and select Multiplying in the Change % field, Strategic Finance multiplies Sales Growth Rate by 98% to obtain the -2% result and multiplies Sales Growth Rate by 102% to obtain the +2%. So, 10% becomes 9.8% and 10.2%.
   - If you enter 2% for Sales Growth Rate here and select Adding in the Change % field, Strategic Finance adds or subtracts 2% to obtain the result. So 10% becomes 8% and 12% growth rate.

6. In **And relative to - Left**, select the left variable of the matrix on which the sensitivity is performed.

   The variables are the same as in the Relative (top) text box. Default: Profit Margin.

   - In **Change %**, enter the percent increment for the left variable. The rules in the Change % for the top variable field apply.
   - In **Change by**, specify how to modify the variable, such as adding the percentage or multiplying the variable by a percentage.
Setting Economic Profit Options

Use the Sensitivity Analysis—Economic Profit tab to analyze sensitivity using a subset of value driver variables from the Full Model. Because this group is a subset, calculations are faster, but may give different results than the Full Model.

To set the shareholder value options:

1. **Access Sensitivity Analysis.**
   - See “Accessing Sensitivity Analysis” on page 227.

2. **Select Economic Profit.**

3. **In Sensitivity**, select an account variable on which to perform sensitivity analysis.

4. **In Display**, select an option for displaying results.

5. **In Relative to - Top**, select the top variable of the matrix on which the sensitivity is performed in addition to the increment type and amount. The default is Sales Growth Rate.

6. **In Change %**, enter the percent multiplied by or added to the Relative to account.
   - You cannot enter negative amounts.

7. **In And relative to - Left**, select the left variable of the matrix on which the sensitivity is performed.
   - The variables listed are the same as the Relative (top) field.
   - The default is Profit Margin.

8. **In Change %**, enter the percent increment for the left variable.
   - The Change % rules for the top variable field apply.

9. **In Change by**, select a method to changing the sensitivity variable is changed.

10. **Click OK.**

Viewing Sensitivity Analysis Results

To view Sensitivity Analysis results:

1. **Access Sensitivity Analysis.**
   - See “Accessing Sensitivity Analysis” on page 227.

2. **Select the Full Model, Shareholder Value, or Economic Profit tabs.**

3. **Click Update.**

4. **View results in the matrix:**
   - When you enter values and click Update, Strategic Finance updates the matrix on the Sensitivity Analysis, showing how the two variables affect the sensitivity of the selected account. You can print or copy and paste from the matrix.
Using One Variable for Sensitivity Analysis

To analyze sensitivity for one variable, enter the top variable information, and enter 0 (zero) for left variable's percent change. Displays only one row (the middle, horizontal row of numbers) of calculated results.

Using Goal Seek

Subtopics

- Using Goal Seek for Single Periods
- Using Goal Seek for a Time Series

Use Goal Seek to identify a target value for an account. Strategic Finance calculates changes to another account to reach that target. This eliminates manipulating accounts manually.

Using Goal Seek for Single Periods

To use Goal Seek for single periods:

1. On the Accounts spreadsheet, select a cell or account, and then Goal Seek.
2. Select Single Period.
3. In Set Account, select the goal account.
4. In In Period, select a time period.
5. In To Value, enter the target amount.
6. In Change Account, select the source account affecting the goal.
   This account must be related to the goal account through a formula.
7. In In Period and To Period, enter the years to change the source account.
8. In Adjust By, specify the adjustment method.
9. Optional: Select Continuous Seek to perform the prior goal seek(s) in the model.

   Note: When continuous seek is active the results of the prior goal seek(s) are incorporated in the model for the current goal seek. If the continuous seek option is not active the results of the prior goal seek are undone prior to starting the current goal seek.

10. Click Seek.
11. Optional: Select Undo Last to revert just prior to last seek.
12. Optional: Select Undo All to revert all changes to the account values by all seeks since the dialog was opened.
13. Use the returned adjustments in your mode or reject the results.
Using Goal Seek for a Time Series

To use Goal Seek for a time series:

1. On the Accounts spreadsheet, select a cell or account and then Goal Seek.
2. Select the Time Series tab.
3. In Set Account, select the goal account.
4. In To Values in Account, select a source account to contain the goal.
   You can use Memo Accounts.
5. In Change Account, select the source account affecting the goal.
   This account must be related to the goal account through a formula.
6. In In Period and To Period, enter the years to change the source account.
7. Click Seek.
8. Optional: Select Continuous Seek to perform the prior goal seek(s) in the model.

   Note: When continuous seek is active the results of the prior goal seek(s) are incorporated
   in the model for the current goal seek. If the continuous seek option is not active the
   results of the prior goal seek are undone before starting the current goal seek.

9. Click Seek.
10. Optional: Select Undo Last to revert just prior to last seek.
11. Optional: Select Undo All to revert all changes to the account values by all seeks since the dialog was
    opened.
12. Use the returned adjustments in your mode or reject the results.
In Applying Model Changes and Maintaining Data Integrity and Uniformity:

- Updating Models Using Entity Change Management
- Standardizing Account Data Using Global Assumptions
- Applying Account Changes Using Assumption Change Management
In This Chapter

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Using ECM in Smart View

About Entity Change Manager

Subtopics

● Requirements
● Accessing ECM Documents
● Creating ECM Documents
● Selecting Base Entities

Entity Change Manager (ECM) ensures uniformity among entities by controlling bulk metadata changes through one entity. Use ECM to manage:

● accounts
● account groups
● time periods
● scenarios
● reports

Changes you make in ECM documents are, when run, applied to target entities that you define. To use ECM:

● Create an ECM document in which you:
  ○ Select a base entity, and multiple target entities
  ○ Make structural changes to subaccounts or time periods in the base entity
● Run Entity Change Manager to copy your changes to the target entities
**Requirements**

To use ECM, you must:

- Be connected to the Strategic Finance server
- From the Strategic Finance Administrator, enable ECM on the Strategic Finance server.

**Accessing ECM Documents**

➢ To access ECM:

1. In the **Smart View** and **Share Connections** frame, expand **HSF Server**.
2. Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3. Perform a task:
   - Click **Create** to define a new ECM document.
   - Select an existing ECM document, and perform any task:
     - **Check Out**—Checkout and reserve documents. You can also open documents as copies by, in **Smart View** and **Share Connections**, expanding **Entity Structures**, right-clicking, and then selecting **Open - Checkout**.
     - **Open As Copy**—Open copies of locked documents. You can also open documents as copies by, in **Smart View** and **Share Connections**, expanding **Entity Structures**, right-clicking, and then selecting **Open As Copy**.
     - **Release Lock**—Unlock documents that you locked.
     - **Delete**—Delete documents.
4. Click **Close**.

**Creating ECM Documents**

➢ To create ECM documents:

1. In **Smart View** and **Share Connections**, expand **HSF Server**.
2. Right-click **Entity Structures**, select **Manage Changes**, and then click **Create**.
3. In **New ECM Document Name**, enter a unique name for the document.
4. Select one:
   - **Default (empty)**—Create an empty document.
   - **Copy of ECM Document**—Define the document using another document. All attributes are copied except logs, last run date, and owner.
5. Click **OK**.
**Selecting Base Entities**

To run Entity Change Manager on an ECM document, select a base entity. Although you can run ECM to create target lists, update links, and export to databases, you must identify a base entity to manage changes to accounts, account groups, time periods, scenarios, or reports.

To select base entities:

1. In the **Smart View and Share Connections** frame, expand **HSF Server**.
2. Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3. Open an ECM document.
4. Select **Edit**, and then **Choose Base Entity**.
5. Enter or browse to identify the entity.
6. To deactivate the tree display, select **Show entities flat**.
7. Click **OK**.

**Managing Target Entities**

Subtopics

- Viewing Target Entities
- Selecting Target Entities

**Viewing Target Entities**

To view target entities belonging to ECM documents:

1. In the **Smart View and Share Connections** frame, expand **HSF Server**.
2. Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3. Open an ECM document and check it out.
4. Select **Target Files**, and sort files using:
   - **Target Category**—Individual entities, templates, and entity groups.
   - **Name**—Names of entities, templates, and entity groups.
   - **Apply to Children**—If changes apply to all children.
5. Click **Close**.
Selecting Target Entities

To add target entities to ECM documents:

1. In the Smart View and Share Connections frame, expand HSF Server.
2. Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3. Open and check out an ECM document.
4. Select Target Files.
5. Select Edit, and then Add Target Entities.
6. From Selection Method choose how to display and select entities as follows, and then click Add:
   - Exclude Entities by Name—Exclude specific entities that you select. For example, you could use this option to filter the list and manage changes to entities based on a template, but exclude several individual entities from that group. Excluded entities are listed on Target Entities.
   - Select Entities by Source Template—Display only entities associated with a template that you select.
   - Select Entities by Entity Group—Display only entities associated with a group that you identify.
7. Select Show Entities Flat to deactivate the tree display.
8. Select Apply to Children to copy ECM document changes to children of target entities.
9. Click Close.

Managing Account Changes

Subtopics

- Copying Subaccounts
- Copying Account Attributes
- Renumbering Subaccounts
- Deleting Subaccounts
- Deleting Account Changes
- Viewing Accounts Changes
- Copying Account Groups
- Deleting Target Entities
- Deleting Account Groups
- Viewing Account Group Changes

Copying Subaccounts

When you copy subaccounts, all base entity attributes are added to the target entities.
To copy subaccounts:

1. In the Smart View and Share Connections frame, expand HSF Server.
2. Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3. Open an ECM document.
4. Select Accounts.
5. Select Edit, then Add Account Change, and then Copy Subaccounts.
6. Under Available Accounts, select a subaccount. Use the Shift and Ctrl keys to select multiple accounts.
   - Optional: Select an option in Filter Accounts to narrow the accounts that are displayed. For example, to display only input and calc accounts, select All Input or Calc Accounts.
7. Click Add.
8. If the subaccount exists in the target but you wish to overwrite it with new attributes, select Overwrite attributes if account exists.
9. Click OK.

Copying Account Attributes

To copy account attributes:

1. Open an ECM document.
2. Select Accounts.
3. Select Edit, then Add Account Change, and then Change Account Attributes.
   - Optional: In Available Accounts, select an option in Filter Accounts to filter the accounts that are displayed, such as just exchange rate accounts or input accounts.
5. Click Add.
6. In Selected Accounts, select accounts and, under Scenario, select a scenario.
7. From Account Change Options indicate how and what to copy to the target entities:
   - Match Required Element State—Copy the required element state.
   - Rename Accounts—Rename subaccounts in the target entity to match those in the base entity.
   - Forecast Method—Copy the forecast method.
   - Subtotal Method—Copy the subtotal method.
   - Account Note—Copy account notes.
8. Select User-defined Account Change Options, and then specify to copy to target entities:
   - Calculation Method—Copy calculation methods for user-defined accounts. See “UDA Attributes” on page 70.
- **Aggregation Method**—Copy just aggregation methods.
- **Output Type**—Copy the output type for currency, items, ratios, and percents.
- **Output Units**—Copy output units for ones, millions, etc.

9  **Optional:** Click **Select All Attributes** to copy all subaccount attributes.

10  Click **OK**.

**Renumbering Subaccounts**

To renumber subaccounts:

1  In the **Smart View** and **Share Connections** frame, expand **HSF Server**.

2  Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.

3  Open an ECM document.

4  Select **Accounts**.

5  Select **Edit**, then **Add Account Change**, and then select **Renumber Subaccounts**.

6  **Under Available Accounts**, select an account.

   For selecting multiple accounts:

   - Press Shift to select a range.
   - Press Ctrl to select multiple, nonconsecutive items.

   **Optional:** In **Available Accounts**, select an option in **Filter Accounts** to filter the accounts displayed. For example to display only input: and calc accounts, select **All Input or Calc Accounts**.

7  Click **Add**.

   **Note:** If you incorrectly added an account, select it under **Selected Accounts**, and then click **Remove**.

8  In **Selected Accounts**, **under Renumber Last 3 Digits from**, enter a number from 1-999.

   Strategic Finance adds the preceding zeros if you do not enter three digits. For example, if you enter “1”, the entry becomes “001”.

9  Click **OK**.

**Deleting Subaccounts**

To delete subaccounts:

1  In the **Smart View** and **Share Connections** frame, expand **HSF Server**.

2  Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3 Open an ECM document.
4 Select Accounts.
5 Select Edit, then Add Account Change, and then select Delete Subaccounts.
6 Under Available Accounts, select an account. Use the Shift and Ctrl keys to select multiple accounts.
   Optional: In Available Accounts, select an option in Filter Accounts to limit the accounts displayed.
7 Optional: In Or Type Account Number, enter an account number and click Add.
8 Click OK.

Deleting Account Changes

➢ To delete account changes:
1 In the Smart View and Shared Connections frame, expand HSF Server.
2 Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3 Open an ECM document.
4 Select Accounts.
5 Under Account Changes, select an account change.
6 Select Edit, and then Delete.

Viewing Accounts Changes

To access a list of all changes made to accounts, open an ECM document, and then select Accounts.

Copying Account Groups

➢ To copy account groups:
1 Open an ECM document.
2 Select Account Groups.
3 Select Edit, then Add Account Group Change, and then select Copy Account Group.
4 From Available Account Groups, select a group. To select multiple groups, press Shift to select a range of groups, or Ctrl to select nonconsecutive groups.
5 Click Add.

Note: To remove a group that you incorrectly selected, select it in Selected Account Groups, and then click Remove.
In **Selected Account Groups**, select a group.

**Optional:** Select **Overwrite if already exists in Target Entity** to overwrite account groups of the same name in the target entity.

**Optional:** In **Place new account groups**, specify where to place copied groups, such as at the bottom of the list, or below an account group that you select.

Click **OK**.

### Deleting Target Entities

To delete target entities:

1. In the **Smart View** and **Shared Connections** frame, expand **HSF Server**.
2. Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3. Open an ECM document.
4. Select **Target Files**, then **Edit**, and then select **Delete**.

### Deleting Account Groups

To delete account groups:

1. In the **Smart View** and **Shared Connections** frame, expand **HSF Server**.
2. Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3. Open an ECM document.
4. Select **Account Groups**.
5. Select **Edit**, then **Add Account Group Change**, and then select **Delete Account Group**.
6. Under **Available Account Groups**, select a group. Press Shift to select multiple consecutive groups, or press Ctrl to select nonconsecutive groups.
7. Click **Add**.
8. Click **OK**.

### Viewing Account Group Changes

To view the account group changes:

1. Open an ECM document.
2. Select **Account Groups** for a list of recent changes and information about each change.
Managing Time Period Changes

Subtopics

- Changing Time Structures
- Changing Last Actual Period
- Viewing Time Period Changes

Use the Time tab to bulk manage time period changes.

**Changing Time Structures**

You can use Entity Change Manager to change the level of time detail in target entities, add or remove years, and set the Base Period and Last Historical Period.

To change time structures:

1. In the Smart View and Shared Connections frame, expand HSF Server.
2. Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3. Open an ECM document.
4. Select Time.
5. Select Edit, then Add Time Change, and then select Change Time Structure.
6. In Required Years, select the years to include.
7. Select the years to include.
8. Select Level of Time Detail in Target options:
   - Keep Target's Time Detail—If the target includes this year, maintain the same time detail.
   - Get Time Detail from Base Entity—Apply the base entity's time details such as level (quarters or weeks e.g.), sub-periods, and aggregate periods to the target entity.
   - Choose Time Detail below—Select to specify the time period level in the base entity.
9. From Calculate Inputs select an option:
   - All Scenarios—Recalculate data for all scenarios given the time detail and structure changes.
   - Current Scenario—Reculate data for the current scenario given the time detail and structure changes.
   - None—Do not recalculate.
10. Optional: Specify any of the following:
    - Set Base Period—Use the same base period in the target and base entities.
    - Set Last Historical Period—Make the last historical period in the target entity the same as that in the base entity.
Add Required Years to Targets if not present—If the target do not contain all of the Required Years, use to add the selected level of time detail for each year

Delete Years Earlier than Start Year—Remove years in the target that occur before the Start Year.

Click OK.

Changing Last Actual Period

You can use Entity Change Management to move the Last Actual Period.

To change last actual time periods:

1. In the Smart View and Shared Connections frame, expand HSF Server.
2. Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3. Open an ECM document.
4. Select Time.
5. Select Edit, then Add Time Change, and then select Move Actual Boundary.
6. Select Use current scenario's data when adjusting actual periods to use data from a scenario and, in the base entity, select a scenario.
7. Click OK.

Viewing Time Period Changes

To view changes that have been made to time periods in ECM documents, open an ECM document, and then select Time.

Managing Scenario and Combined Scenario Changes

Subtopics

- Copying Scenarios and Combined Scenarios
- Deleting Scenarios and Combined Scenarios
- Copying Scenarios Output

Use the Scenarios tab to perform and manage bulk scenario changes:

Copying Scenarios and Combined Scenarios

To copy scenarios or combined scenarios:

1. In the Smart View and Shared Connections frame, expand HSF Server.
Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.

Open an ECM document.

Select **Scenarios**.

Select **Edit**, then **Add Scenario Change**, and then **Copy Scenario**.

In **Available Scenarios**, select a scenario or combined scenario and then click **Add**.

Optional: Select **Overwrite if already exists in the Target Entity** to overwrite scenarios of matching names in the target entities.

Click **OK**.

### Deleting Scenarios and Combined Scenarios

To delete scenarios or combined scenarios:

1. Open an ECM document.
2. Select **Scenarios**.
3. Select **Edit**, then **Add Scenario Change**, and then select **Delete Scenario**.
4. In **Available Scenarios**, select scenarios or combined scenarios and then click **Add**.
5. Click **OK**.

### Copying Scenarios Output

To copy scenarios outputs:

1. In the **Smart View** and **Shared Connections** frame, expand **HSF Server**.
2. Right-click **Entity Structures**, and then select **Manage Changes** or click **Manage Changes** below the frame.
3. Open an ECM document.
4. Select **Scenarios**.
5. Select **Edits**, then **Add Scenario Change**, and then select **Outputs**.
6. Select an option:
   - **Add All Outputs**—Copy outputs.
   - **Remove All Outputs**—Delete outputs.
   - **Copy Outputs from Base Entity**—Copy outputs from the base to all target entities.
7. Click **OK**.
Managing Report Changes

Subtopics

- Copying Reports
- Deleting Reports

Entity Change Manager enables you to manage reports among entities.

Copying Reports

To copy reports:

1. In the Smart View and Shared Connections frame, expand HSF Server.
2. Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3. Open an ECM document.
4. Select Reports.
5. Select Edit, then Add Report Change, and then select Copy Report.
6. Under Available Reports, select a report. Use the Shift and Ctrl keys to select multiple reports.
7. Click Add.

**Note:** If you added a report incorrectly, select it under Selected Reports, and then click Remove.
8. If the report exists in the current target and the base entity version of the report contains new information, select Overwrite if already exists in the target.
9. Optional: Under Place new Report, specify where to place the report in the target:
   - As the First Report—The first, left-most report tab
   - After this Report—After a selected report
   - As the Last Report—The last, right-most tab
10. Click OK.

Deleting Reports

To delete reports:

1. Open an ECM document.
2. Select Reports.
3. Select Edit, then Add Report Change, and then select Delete Report
4. Under Available Reports, select the report.
5. Click Add, and then OK.

**Previewing and Running Entity Change Management Documents**

To preview, refresh, and run ECM documents:

1. In the Smart View and Shared Connections frame, expand HSF Server.
2. Right-click Entity Structures, and then select Manage Changes or click Manage Changes below the frame.
3. Open an ECM document.
4. Select Run.
5. This run information is displayed:
   - Target Entities—Target entities processed by the latest run.
   - Checked Out By—ID of users who have checked out entities
   - Exclude—Entities not included in the run.
   - Status—The progress of the run such as processing or completed. This column is empty before the first run is performed.
6. Click Entity Change, and then select any option:
   - Preview ECM Targets—List the targets that will be run.
   - Run—Execute the run.
   - Refresh—Update the progress of the run to reflect changes.
   - Stop ECM Run—Cancel the run.

**Changing Entity Change Management Run Options**

To change run options:

1. Open an ECM document.
2. Select Run, then Entity Change, and then select Options.
3. Select Update HSF Links on Run to update all Strategic Finance links for each target entity.

**Note:** Do not include the base entity as a target.

4. Select Export to export configured entities to the relational database.
5. Select Suppress funds flow message in log to exclude funds flow messages from the log.
6. Click OK.
Standardizing Account Data
Using Global Assumptions

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- Using Server-Side Global Assumptions ............................................. 254

About Local Global Assumptions

Subtopics

- Using Local Global Assumptions
- Assigning Global Assumptions to Files
- Setting Global Assumptions for Groups
- Setting Global Assumptions for Accounts
- Setting Global Assumptions Options

Global assumptions standardize account information for local files by making changes in a source file and copying them to target files. Before updating target files, Global Assumptions calculates them. Any errors write to \texttt{logs} in the current directory or \texttt{windows\temp}.

\textbf{Note}: Global User Preferences are for locally-stored Strategic Finance files.

Using Local Global Assumptions

- To use Global Assumptions:
  1. Select \texttt{Analysis}, then \texttt{Global Assumptions}.
  2. Define target files, password, and scenario information.
     See “Assigning Global Assumptions to Files” on page 252.
  3. Define groups of target files.
     See “Setting Global Assumptions for Groups” on page 252.
  4. Define assumptions accounts.
     See “Setting Global Assumptions for Accounts” on page 253.
Assigning Global Assumptions to Files

To set global assumptions:
   See “Using Local Global Assumptions” on page 251.
2. Select Files.
3. In Target Files, select the files and enter the required information:
   - File Name
     Click a cell to select files in the default directory. Click Browse to search another directory.
   - Password
     For target files with passwords, enter the password.
   - Scenario
     Enter a scenario to update. Not case-sensitive.
   - Last Updated
     The date the target file was last updated.
   - Update
     Select this option to update the file. Use this option to select specific files when rerunning.
4. To re-order files click Up and Down.
5. Click Update All.

Setting Global Assumptions for Groups

To set global assumptions for groups:
   See “Using Local Global Assumptions” on page 251.
2. Select Group.
3. In Group Name, select a group and click Add.
4 In Target Files, add files to the group:
   • File Name
     Click a cell to select files in the default directory. Click Browse to search another
directory.
   • Password
     For target files with passwords, enter the password.
   • Scenario
     Enter a scenario. The current scenario is the default. Not case-sensitive

Setting Global Assumptions for Accounts

➤ To set global assumptions for accounts:
1 Access Global Assumptions .
   See “Using Local Global Assumptions ” on page 251.
2 Select Accounts.
3 Optional: In Account(s) to export, select accounts.
4 Optional: Select a Transfer Type:
5 Optional: Select an Order By option and click Refresh:
6 Optional: Click Find Accounts to search.

Setting Global Assumptions Options

➤ To set global assumptions options:
1 Access Global Assumptions .
   See “Using Local Global Assumptions ” on page 251.
2 Select Options.
3 Optional: To add subaccounts, select Add subaccounts to target file and an option:
   • User-defined accounts — Export all account attributes and aggregation rules
   • All current other subaccounts and main accounts — Export input and calculated data,
historical data, forecast methods, free-form formulas, and account notes.
     o Group and funding option settings are not exported.
     o Main accounts are not added to target files—they must already exist.
     o Account versions in global files are exported.
If a target file main account has data, the data moves to the first subaccount and is not additive.

4 Optional: Use any of these options:
   - Append export status information to existing log to write export status to the log.
   - Calc target file before saving to calculate all target files.
   - Include in log file accounts not found in target file to log accounts that are in the main file, but not in target files
   - Essbase-related export options.

5 Perform an action:
   - Click OK to save the settings.
   - Click Run to export and save the assumptions settings.

Using Server-Side Global Assumptions

Subtopics
- About Importing and Exporting Global Assumptions
- Using Server-Side Global Assumptions in Smart View to Link Entities

About Importing and Exporting Global Assumptions

Subtopics
- Exported Data
- Target Files
- Time Periods
- Importing Global Assumptions

Exported Data

Exported data includes:
- Input and calculated values
- Historical data—see “Historical Period Data” on page 255
- Forecast Methods—see “Forecast Data” on page 255
- Account notes for main accounts and subaccounts

Exported data for User Defined Accounts includes:
- All account attributes—output type, output units, aggregation rules
- Subaccounts
- Account notes
Exported data overrides:
Hotlinks—“Hotlinked Data” on page 255

**Forecast Data**

Strategic Finance does not ensure that accounts used in forecast methods exist in target files. Missing accounts cause errors.

**Hotlinked Data**

For hotlinked data in target files, Strategic Finance overrides the links for updated accounts, changing the cell color from blue to red and logging the broken link.

**Historical Period Data**

If you select the Export historical data option on the Global Assumptions Options tab, historical period data is exported.

**Target Files**

Strategic Finance stores, in each target file, the file name, password (displayed as asterisks, '*'), and date/time stamp of the source global assumptions file.

You can export global assumptions labelled under different versions or editions. Global Assumptions exports information to the same account numbers even if they have different names.

Strategic Finance logs warnings when exporting assumptions across editions.

**Time Periods**

Global Assumptions handles the global and target file time periods as follows:

- If the highest level of detail used in the global file is months, target files can be in months, quarters, or years.
- If the highest level of detail used in the source file is quarters, target files can be in quarters or years. When the global file has more detail than target files, the yearly amounts in the global file are calculated aggregate amounts. Global Assumptions handles this:
  - If the global file is calculated, Global Assumptions exports output values as currency overrides, because the global file contains no inputs corresponding to target file time periods. This ensures the correct output.
  - If the global file is not calculated, Strategic Finance logs an error.
- If the highest level of detail in the source file is years, target files can only be in years.
- The fiscal year end of the target and source files must match.
- Number of days in the subperiods of the target and source files must match.
The historical/forecast boundary of the target and source files must match.

If the source file has more periods than the target file, the extra periods in the source file are ignored.

**Importing Global Assumptions**

Strategic Finance imports global assumptions data if:

- The source data changed since the last global assumptions update.
- The source file has a more recent date/time stamp than the target file.

**Note:** The import process synchronizes source and target files if the export process fails. For example, if the network is down during an export, the database is not updated, and the import process imports global assumptions.

**Using Server-Side Global Assumptions in Smart View to Link Entities**

To use server-side global assumptions to link data

1. In **Smart View** and **Shared Connections**, connect to **Oracle Hyperion Strategic Planning**.
2. Select **HSFServer**, and then select **Entity Structures**
3. Right-click the entity to use, and either check it out, or open a copy.
4. Select **Strategic Planning** on the toolbar.
5. Click 

6. Specify the following:

- **Source entity**—Entity from which to pull data
- **Put source data in**—Target scenario to populate with pulled data
- **Input\Output Settings**—If you want to use input or output settings
- **Historical Forecast Settings**—If you want to pull and link only historical data, or both historical and forecast data

7. To specify another entity from which to pull data, click **Add** and then select the entity.
8. Select **Accounts**.
9. Although it should already be populated, ensure the correct source entity is selected in **Source File**.
10. In **Accounts**, select the source accounts from which to pull data. If the desired accounts are not displayed, click **Find Accounts** to search for accounts by name.
11. Click **OK**.
Applying Account Changes
Using Assumption Change Management

In This Chapter
Using ACM in Smart View ........................................... 257

Using ACM in Smart View

Subtopics
- About Assumptions Change Manager
- Accessing ACM Documents
- Creating ACM Documents
- Selecting Base Entities
- Viewing, Selecting, and Deleting Target Entities
- Managing Account Attribute Changes
- Running ACM Documents
- Changing ACM Run Options

About Assumptions Change Manager
Assumptions Change Manager maintains account information. You select one base entity as the source for all account information, and you select multiple target entities that receive copies of that account information. This is particularly useful to help you ensure uniformity between financial models.

Create Assumptions Change Manager (ACM) documents to define a base entity, or the source of the changes, and the target entities, which receive the changes—and to define the account attribute changes copied from the source to the targets. ACM documents store this information for future use. Unlike Entity Change Manager, you run Assumptions Change Manager only one time per change.

Accessing ACM Documents

To access ACM documents:
1. In Smart View and Shared Connections, expand HSFServer.
2 Select **Entity Structures**, then right-click and then select **Manage Assumptions**, or select **Manage Assumptions** at the bottom of the frame.

Basic information about all available ACM documents are displayed, such as when actions were taken and by which user, and also information about your implementation, such as the Strategic Finance server and database.

3 Perform any task:
   - To define new ACM documents, click **Create**.
   - To open ACM documents for editing or running, select a document, and then click **Check Out**.
   - To open a copy of an ACM document that is currently checked out, select it and then click **Open as Copy**.
   - To enable an ACM document that is checked out, select it, and then click **Release Lock**.
   - To delete an ACM document, select it, and then click **Delete**.

4 Click **Close**.

## Creating ACM Documents

1. In **Smart View** and **Shared Connections**, expand **HSFServer**.
2. Select **Entity Structures**, right-click, and then select **Manage Assumptions**.
3. Click **Create**.
4. In **New ACM Name**, enter a name that is unique among the documents associated with the current server and database.
5. Select an option:
   - Default (empty) — Create an empty ACM document.
   - **Copy of ACM Document** — Create the ACM document based on an existing document that you select from the drop-down list.
6. Click **OK**.

You can now check out the ACM document.

## Selecting Base Entities

A base entity is the source for all account changes. Changes to base entities are copied to target entities when ACM documents are run.

1. In **Smart View** and **Shared Connections**, expand **HSFServer**.
Select Entity Structures, right-click, and then select Manage Assumptions.

Open or checkout an ACM document.

Select Edit, and then select Choose Base Entity.

In Base Entity, enter or browse to the entity.

Click OK.

Viewing, Selecting, and Deleting Target Entities

Subtopics

- Viewing Target Entities
- Selecting Target Entities
- Deleting Target Entities

Run ACM documents to propagate changes to base entities to target entities.

Viewing Target Entities

To view target entities:

1. In Smart View and Shared Connections, expand HSFServer.
2. Select Entity Structures, right-click, and then select Manage Assumptions.
3. Open or checkout an ACM document.
4. Select Target Files. This information about each target is displayed:
   - Name of the associated entity or entity group
   - If changes are applied to selected child entities

Selecting Target Entities

Perform these steps to identify the target entities to update with changes from the base entity.

To select target entities:

1. In Smart View and Shared Connections, expand HSFServer.
2. Select Entity Structures, right-click, and then select Manage Assumptions.
3. Open or checkout an ACM document.
4. Select Target Files, then Edit, and then select Add Target Entity.
5. Under Selection Method, select an option:
   - Select Entities by Name—Display all entities.
   - Exclude Entities by Name—Target all entities except those shown here.
Select Entities by Source Template—List and select all entities that use the selected template.

Select Entities by Entity Group—List and select entities in a particular group.

6 Select the target entities, and then click Add. Use the Shift and Ctrl keys to select multiple items.
7 Optional: Select Apply to Children if children of the selected entities should also be targets.
8 Click Close.

Deleting Target Entities

To delete target entities:
1 In Smart View and Shared Connections, expand HSFServer.
2 Select Entity Structures, right-click, and then select Manage Assumptions.
3 Open or checkout an ACM document.
4 Select Target Files, and then select an entity.
5 Select Edit, and then Delete.

Managing Account Attribute Changes

Subtopics

- Adding Assumptions Account Attributes
- Editing Account Attributes

Use Assumptions Change Manager to copy account attributes between entities.

Adding Assumptions Account Attributes

To add assumptions account attributes:
1 In Smart View and Shared Connections, expand HSFServer.
2 Select Entity Structures, right-click, and then select Manage Assumptions.
3 Open or checkout an ACM document.
4 Select Edit, and then Add Assumptions Account.
5 Optional: To filter the accounts displayed by group, use Filter Accounts.
6 In Available Accounts, select an account. Use the Shift and Ctrl keys to select multiple items.
7 Click Add.

Note: To remove an account added incorrectly, select it in Selected Accounts and then click Remove.
Optional: Select source scenarios under Scenario and Account.
Use Scenario to specify source and target scenarios.

Under Transfer Type, specify what values to copy.

Under Cell Text, select which cell notes to copy. For example, to copy cell notes for output values, select Output Values.

Under Time Periods for Assumptions, select the time periods to copy, such as historical periods.

Click OK.

Editing Account Attributes

To edit account attributes:

1. In Smart View and Shared Connections, expand HSFServer.
2. Select Entity Structures, right-click, and then select Manage Assumptions.
3. Open or checkout an ACM document.
4. Select Accounts, and then select the appropriate account. Use the Shift and Ctrl keys to select multiple accounts.
5. Select Edit twice.
6. Under Transfer Type, select the value type to copy, such as input values:
7. Under Time Periods for Assumptions, select the time period types to copy, such as forecast.
8. Click OK.

Running ACM Documents

To run ACM documents:

1. In Smart View and Shared Connections, expand HSFServer.
2. Select Entity Structures, right-click, and then select Manage Assumptions.
3. Open or checkout a document.
4. Select Run. This information is displayed:
   - Target Entities—Entities included in the ACM document.
   - Checked Out by—Users who have checked out ACM documents. You cannot run these documents.
   - Status—The current run status of each entity.

5. Optional: Perform any task:
   - To not include a particular entity in the run, select Exclude within a target entity row.
   - To preview runs, select Assumptions Change, and then Preview ACM Targets.
6. Select Assumptions Change, and then Run ACM.
Changing ACM Run Options

To change run options:

1. In **Smart View** and **Shared Connections**, expand **HSFSserver**.
2. Select **Entity Structures**, right-click, and then select **Manage Assumptions**.
3. Open or checkout an ACM document.
4. Select **Run**, then **Assumptions Change**, and then select **Options**.
5. Select any of the following:
   - **Run only failed targets**—Rerun entities that failed in previous runs.
   - **Export**—After the run, export flagged entities to a relational database.
   - **Suppress funds flow message in log** (Recommended)—Do not write funds flow messages to the log.
6. Click **OK**.
Part III
Displaying Financial Data Using Reports and Graphs

In Displaying Financial Data Using Reports and Graphs:

- Using Provided and Freestyle Reports
- Working with Graphs
About Reporting

You evaluate financial models using standard reports like income statements, balance sheets, and funds flow statements. You can create custom reports to meet other needs. Reports display through different tabs on the workspace, or through the menu bar.

Strategic Finance provides these report categories:

- Financial and Valuation reports on financial data
- The Notes Report for annotating analyses
- 5 custom reports
- Freestyle Reports for more flexible custom reports
- The Linked and Embedded Objects report for embedding graphics

On standard reports, you can display reports in different formats, review account notes, use Analyze to review account values, and change input assumptions to see how it changes your analysis. You change the report display by inserting or deleting accounts or rows and columns, and changing stylistic elements like fonts and number formats. There are features adding flexibility when printing reports.
Reviewing Reports

Subtopics

- Accessing Reports
- Changing Report Formats
- Modifying Report Properties
- Changing the Display Options for Reports

By default, reports display account values as currencies—but, you can select alternative value formats. When reviewing reports, you can annotate an analysis, for example, to note how account values are calculated. Or, use Analyze to see how a value is calculated from constituent accounts, and how each affects the input data. You can change input assumptions on reports.

Accessing Reports

➢ To access reports:

1. From the Report grouping label, click Report List.

2. Select a report:

- **Income Statement**—Displays period results.
- **Balance Sheet**—Reports the financial condition at the end of a period.
- **Funds Flow**—Compares total sources of funds to total uses of funds.
- **Cash Flow**—Displays the difference between operating and non-operating balances.
- **Indirect Cash Flow**—Displays operating, investing, and financing cash flow in an indirect format.
- **Ratios**—Displays corporate Profit Performance Ratios, Leverage Ratios, Activity Ratios, Liquidity Ratios, Per-Share Data, Valuation Ratios and Custom Ratios.
- **Debt**—Summarizes and details analysis of capital structure and capital cost accounts.
- **FAS95**—Provides a direct cash flow statement compliant with FAS 95 guidelines.
- **Executive Summary Report**—Summarizes key income statement, balance sheet, cash flow and financial ratio accounts.
- **Statement of Retained Earnings**—Reconciles the period-to-period activity in the Retained Earnings account.
- **SVA**—Displays period-by-period discounted cash flow and Residual Value used to compute Corporate Value and Shareholder Value.
- **DDM**—Displays the same information as the Cash Flows and Shareholder Value report, but uses the discounted equity cash flow method.
- **Economic Profit Report**—Displays the discounted value of economic profit and residual value.
- **Custom 1–5**—Enables you to design your own reports by inserting or pasting accounts, account notes and text rows and columns.
- Freestyle Reports enable you to design all report characteristics.
- **Notes**—Displays all account notes in an analysis.
- **OLE**—Enables you to link or embed objects such as graphics.

## Changing Report Formats

**Note:** This procedure does not apply to freestyle reports.

▶ To change report formats:

1. **Select a Report.** See "Accessing Reports" on page 266
2. From the **Report** grouping label, click **Report Formats**.
3. On **Alternate Formats**, select formats:
   - **None**
     Default—Displays values in currency format.
   - **Currency and Growth Rate**
     Displays values in growth rates from the prior period. Growth rates for periods under a year are based on the same time period length from the prior period, even if the prior period is a year. For example, if 2004 is modeled in quarters and 2003 as a year, the growth rate for 1st quarter 2004 is based on 4th quarter 2003. The value for 4th quarter 2003 is based on actual number of days.
   - **Currency and Common Size**
     Displays values in a common-size (percentage) format. This alternative format is only available for the Income Statement, Balance Sheet and Cash Flow Statement. Common-size values are calculated for the Income Statement and Cash Flow Statement based on Sales (v1000) and the Balance Sheet based on Total Assets (v2490).
   - **Currency and Growth Rate Over Same Period One Year Ago**
     Displays values in growth rates from the same period in the prior year. Growth rates for periods under a year are based on the same time period length from the same period in the prior year. For example, if 2004 is modeled in quarters and 2003 as a year, the growth rate for 1st quarter 2004 is calculated based on the 1st quarter 2003. The value for 1st quarter 2003 is based on actual number of days.
   - **Current and Named Scenario**
     Displays values for the current scenario and a second scenario select in the **Scenarios** list. You have options for displaying variances between the two scenarios:
     - **Currency**
       The currency difference.
- **Percent**
  The percentage difference.
- **Both Currency and Percent**
  The difference in both currency and percent.
- **None**
  Displays accounts only—no variance columns.

4. **On Cell text information, select the following:**
   - **Optional:** Select **Show Cell Text on Report** to retrieve the textual content.
   - **Optional:** Select **Show Account Cell Text** to retrieve account information.
   - **Optional:** Select **Show Input Cell Text** to retrieve input information.
   - **Optional:** Select **Show Output Cell Text** to retrieve output information.

5. **Optional:** Select **Suppress Zero Values** to display only accounts containing non-zero values.
   Default—reports hide accounts with zero values.

6. **Optional:** Select **Apply Format to All Reports** to apply the format to all reports.
   Without this option, only the currently selected report is modified.

7. **Click OK.**

### Modifying Report Properties

- To review or change report properties:
  1. Select a **Report**. See “Accessing Reports” on page 266.
  2. From the **Report** grouping label, click **Properties**.
  3. **Optional:** In **Report Name**, enter a name.
     Maximum: 20 characters
  4. **Optional:** In **Tab Short-name**, enter a short name for the report tab.
  5. **Optional:** In **Common Size Variable**, select an account.
     Displays all accounts as percentages of this account. You must set the report to display using the **Currency and Common Size** format.

    **Note:** Does not apply to Freestyle Reports.

    Click **Find Account** to browse.

6. **Click OK.**
Changing the Display Options for Reports

To review or change report display options:

1. Select a Report. See “Accessing Reports” on page 266.
2. Select an account, from the Report spreadsheet.
3. From the Report grouping label, click Display Options.
4. Optional: Select Expand Subaccounts to include all subaccounts when inserting main account.
5. Optional: Select Expand Dimensions to include all dimensions when inserting dimensional accounts.
6. Optional: Select Change Sign to reverse the +/- sign of accounts.

Customizing Reports

There are global and individual settings for reports. For individual reports, you can insert or delete accounts, rows, or columns. You can change number formats, fonts, rows, and column settings and alignment.

Customizing Standard and Freestyle Report Formats

You can customize report to mirror financial statements. You can hide, reveal, or delete columns and rows. You can insert accounts, account notes, and text, and make cosmetic changes to fonts, borders, and other report elements—see Chapter 21, “Formatting.”.

Using Freestyle Reports

Freestyle Reporting is flexible reporting tool for financial statements and variance analyses, offering these benefits:

- Creating calculations directly on the Freestyle Report.
- Building fully customized reports, including specialized layouts for time structure or table creation.
- Dynamic reporting through the use of the base period feature.
- Automatic linking of data from the Account spreadsheet.
- Fully functional Analyze trail.
Building Freestyle Reports

Subtopics

- Creating Blank Freestyle Reports
- Inputting Data
- Creating Formulas in Cells

To build a Freestyle Report, you create a blank one first.
See “Creating Blank Freestyle Reports” on page 270.

With blank Freestyle Reports, there are three ways to enter data:

- Entering data directly by typing or pasting the data from another source. See “Inputting Data” on page 270.
- Creating formulas referencing other cells in the report or other reports. See “Creating Formulas in Cells” on page 270.
- Linking accounts by assigning cell attributes.
  See “Linking Data to Freestyle Reports by Assigning Cell Attributes” on page 271.

Creating Blank Freestyle Reports

There are two ways to create an empty Freestyle Report.

➢ To create Freestyle Reports:

1. From the Report grouping label, click Insert, and then Sheet.
   New freestyle report – a blank worksheet is displayed.
2. From the Freestyle report, click Assign Cell Attributes. See “Linking Data to Freestyle Reports by Assigning Cell Attributes” on page 271

Inputting Data

To input data into a Freestyle Report, click a cell and enter a value. To paste data from another source, highlight the cell or range of cells in the report, select Edit, and then Paste.

Creating Formulas in Cells

You create formulas in cells. Formulas are stored until deleted from cells. To reference cells in calculations, click a cell following a mathematical operator (for example, +).
Linking Data to Freestyle Reports by Assigning Cell Attributes

To create links between the Freestyle Reports and the financial model accounts, highlight a cell or range of cells (individual cell, row, or column) and assign cell attributes. Each cell must be assigned all five available attributes for information to appear:

- Entity
- Data Object
- Account Attributes
- Time
- Scenario

When attributes conflict in overlapping rows and columns, Strategic Finance follows the levels of influence to determine which attribute to use.

**Note:** Columns and rows must intersect before the information displays. For example, if you assign columns for the years 2003, 2004, and 2005, no information appears until you assign a row of accounts below those columns.

To assign cell attributes:

1. **Select a Freestyle Report.**
2. **Highlight a cell, row, or column. From the Reports grouping label, click Assign Cell Attributes.**
3. **Under Entity, select a data source:**
   - None—Paste in copied data, or enter data.
   - Current—Retrieve data from the current financial model.
   - Alias—Link data from another entity or file (.alc). The source file or entity must have an alias. See “Using Alias Manager” on page 273

   **Note:** When linking calculated data through Alias, you can use Analyze to view the analyze trail from the source. See “Using Analyze” on page 72.

4. **Under Data Object, define the object from the source to display in the cell:**
   - In Account, select an account.

      The available accounts are from the source in Entity. You must select an option in Other.

      - Click **Find Accounts** to browse.
      - For Debt Scheduler items, in **Account**, select one of the debt accounts:
        - New Senior Notes (v2652)
- New Senior Subordinated Notes (v2654)
- Total Long Term Debt (v2660)

- In Other, select elements to display as report titles, column and row headings, default currency and units, or scenario descriptions:

5 Under Account Attributes, select the account data to display:

- Input
  Displays input values or forecast assumptions accounts.

- Output
  Displays output values.

- Label
  Displays account names.

- Note
  Displays account notes.

- None
  Default—Displays nothing.

- Change Sign
  Displays opposite values from the account data.

6 Under Time, enter the time periods to retrieve:

- Interpret relative time references based on
  Specify the source financial model for time information:
  - Current
    From the current entity.
  - Alias
    From a linked entity. Requires an alias—see “Using Alias Manager” on page 273

- In Time Period, enter a time period or formula.
  Click Build to enter a time formula—see “Building Time Formulas” on page 282.

- In Options, select a roll-up time period:
  - <None>
  - YTD
    Year to Date
  - HTD
    Half to Date
  - QTD
    Quarter to Date
7 Optional: Under Scenario, select a scenario.

Note: To activate this feature, access Scenario Manager - Account Scenarios and, in Accounts select the account—see “Maintaining Scenarios” on page 222.

8 Click Apply.

Creating Charts

After populating Freestyle Reports with data, you can create charts with that information. You can customize charts—see Chapter 19, “Working with Graphs”.

To create charts:
1 In a report, select the a range of cells, rows, and columns—include headings.
2 From Excel Insert menu, and then select Chart.

Using Alias Manager

Use Alias Manager to create aliases for entities, used when linking external entities to Freestyle Reports.

To create aliases using Alias Manager:
1 From the Reports grouping label, select Freestyle Reports, and then select Alias Manager.
2 Specify the location:
   - Use Entity from Server (“Entity”)  
     For server entities.
   - Use local file (“Filename”)  
     For local files.
3 Review aliases information:
   Alias Manager lists:
   - Alias: The alias name.
   - File Name/Entity  
     A multimode column listing alias sources:
     - File Name  
       For local files, this lists the filepath and referenced file.
     - Entity  
       For server implementations, this lists the referenced entity.
   - Password / Archive
A multimode column:

- **Password**
  For password-protected files, enter the password.

- **Archive**
  For aliases referencing archived entities, this lists the archive.

- **Count**
  The number of times the alias is currently cited in all Freestyle Reports.

- **Calc**
  The current status of the referenced entity or file:
  - **Calc**
    Values need recalculating.
  - **Ready**
    Values are calculated.

- **Status**
  The current description of the entity or file:
  - **Open**
    Someone is accessing the entity.
  - **Changed**
    The entity needs recalculating.
  - **Current**
    The entity is calculated and closed.

- **Label**
  If an entity is in a labelled consolidation, this lists the label.

4  **Optional:** To create aliases, click New.

5  Click OK.

---

### Creating Aliases

- To create aliases:
  1. **On Alias Manager**, click New.
  2. In Alias, enter a name for the alias.
  3. **Optional:** Alias a server entity:
     - In **Entity**, enter an entity.
     - **Optional:** To alias currency-translated entity versions, select **Translation**.
Optional: To alias an archive of the entity, in Archive, enter an archive name.

4 Optional: To create aliases to local files:

- In File Name, enter the filepath and filename.
- Optional: In Password (for local file), enter the password if the file is password protected
  Optional: To store passwords and avoid prompting when aliases are used, select Save password in alias.

5 Click OK.
Creating Graphs From Freestyle Reports

You can create graphs from freestyle report data.

To create graphs from freestyle reports:

1. Within a freestyle report, select a range of cells, including the row and column headings.
2. From Excel Insert menu, and then select Chart.

Strategic Finance produces a graph based on the data.
Overview

Subtopics

- Values
- Mathematical and Boolean Operators
- Functions Referencing Account Time Periods

Use the Formula Builder to create freeform formulas to calculate the historical and/or forecast values of input accounts.

Formulas contain:

- Values, that are constants or account numbers
- Mathematical Operators
- Boolean Operators, such as =,=,< >,#OR#
- Account References and Functions to reference periods, account values or percentages

Formulas calculate from left to right. To calculate expressions first, enclose them in parentheses.

Values

To enter a number, enter the number. For example, enter “10” is literally 10.

To enter an account, enter a “v” with the account number immediately following. Case-insensitive. For example, “V1040.00.000” and “v1040.00.000” refer to the same account.
Mathematical and Boolean Operators

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>Adds</td>
</tr>
<tr>
<td>-</td>
<td>Subtracts</td>
</tr>
<tr>
<td>*</td>
<td>Multiplies</td>
</tr>
<tr>
<td>/</td>
<td>Divides</td>
</tr>
<tr>
<td>^</td>
<td>Exponentiation</td>
</tr>
</tbody>
</table>

Use after IF statements:

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;</td>
<td>Greater than</td>
</tr>
<tr>
<td>&lt;</td>
<td>Less than</td>
</tr>
<tr>
<td>&gt;=</td>
<td>Greater than or equal to</td>
</tr>
<tr>
<td>&lt;=</td>
<td>Less than or equal to</td>
</tr>
<tr>
<td>=</td>
<td>Equal</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Not equal</td>
</tr>
</tbody>
</table>

#AND#  Bitwise and
#OR#   Bitwise or

Functions Referencing Account Time Periods

Use the following to reference account time periods:

- `vXXXX(argument)` —Retrieves account values from another time period. Use absolute or relative period references.

- Absolute periods by specifying the account and then a period in quotes, or a function in brackets. Examples:

<table>
<thead>
<tr>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1030 (Jan 03)</td>
<td>Sales in January 2003</td>
</tr>
<tr>
<td>v1030 (@firstpd)</td>
<td>Sales in the first period</td>
</tr>
</tbody>
</table>

- Relative periods using lead and lag periods. Lead periods follow the current period; lag period precede the current period. Unspecified period types become the current period. Examples:

<table>
<thead>
<tr>
<th>Example</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>v1030(-1M)</td>
<td>Lag one month of Sales</td>
</tr>
<tr>
<td>Example</td>
<td>Meaning</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>v1030( +3M )</td>
<td>Lead three months of Sales</td>
</tr>
<tr>
<td>v1030( -4Q )</td>
<td>Lag four quarters of Sales</td>
</tr>
<tr>
<td>v1030( +2Q )</td>
<td>Lead two quarters of Sales</td>
</tr>
<tr>
<td>v1030( -1Y )</td>
<td>Lag one year of Sales</td>
</tr>
<tr>
<td>v1030( +3Y )</td>
<td>Lag three years of Sales</td>
</tr>
<tr>
<td>v1030( -1 )</td>
<td>Lag one of the current period type of Sales</td>
</tr>
<tr>
<td>v1030(+2M)</td>
<td>Lead two months of Sales</td>
</tr>
</tbody>
</table>

**Functions For Relative Time Period References**

These functions convert time levels. Conversion occurs before other operations:

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
<th>Returns</th>
<th>Syntax</th>
</tr>
</thead>
<tbody>
<tr>
<td>@week</td>
<td>Converts to a week</td>
<td>Week</td>
<td>v350.0.001 (-2(@week))</td>
</tr>
<tr>
<td>@month</td>
<td>Converts to a month</td>
<td>Month</td>
<td>-v350.0.21 (+2q(@month)) - @input</td>
</tr>
<tr>
<td>@qtr</td>
<td>Converts to a quarter</td>
<td>Quarter</td>
<td>v350.000.05(-4y(@qtr))</td>
</tr>
<tr>
<td>@half</td>
<td>Six months</td>
<td>Half year</td>
<td>v350.0.001 (-3(@half))</td>
</tr>
<tr>
<td>@year</td>
<td>Year</td>
<td>Year</td>
<td>v350.0.18(-18m(@year))</td>
</tr>
</tbody>
</table>

**Building Formulas**

- “Adding Accounts” on page 282
- “Inserting Functions” on page 282
- “Building Time Formulas” on page 282

**Creating Formulas Using Formula Builder**

- To use Formula Builder:
  1. From any view, click **Forecast Method**.
  2. Select **Freeform**, and then click **Build**.
  3. In Formula, add accounts and functions, and insert operations. See:
     - “Adding Accounts” on page 282
Click Apply, and then OK.

Adding Accounts

To enter accounts:

1. From any view, click Forecast Method.
2. Select Freeform, and then click Build.
4. In Formulas, enter accounts.
   - Filter by account group by selecting a group from Filter.
   - Specify a Match Type option:
     - Contains—Filter accounts by name
     - Starts with—Filter accounts by first letter of name
5. Double click to select accounts.
6. Click OK.

Inserting Functions

To build functions into formulas:

1. From any view, click Forecast Method.
2. Select Freeform, and then click Build.
3. In Names, select a function.
   - See “Functions Used in Formulas” on page 283.
4. In Names, double-click a function.
5. In Examples, double-click an example to build your formula using the sample syntax.
6. Click Formula to enter functions.
7. Click OK.

Building Time Formulas

Use Build Time Formula to define formulas to reference time periods. For example, to reference data for the current and next year, use @basepd:

@basepd(+1(@year))
Note: Use Time Period to change the base period. See “Defining, Deleting, and Displaying Time Periods” on page 101.

To build time formulas:
1 From a freestyle report, access Build Time Formula.
2 In Formula, create time formulas by inserting operators and double-clicking functions. See:
   - “@firstpd” on page 289.
   - “@lasthist, vXXXX(@lasthist)” on page 290.
   - “@isfirstfore” on page 296
   - “@lastfore, vXXXX(@lastfore)” on page 289
   - “@closing” on page 288
   - “@deal” on page 288.
   - “@opening” on page 290.
   - “@basepd” on page 288.
3 Optional: Select Show User Labels to display user-defined time periods.
4 Click OK.

Functions Used in Formulas

Subtopics
- Functions That Retrieve Values
- Functions That Reference Specific Time Periods
- Functions That Retrieve Time Period Information
- Functions That Modify the Retrieval of an Account Value
- Functions That Operate on Expressions
- Special Functions

Functions That Retrieve Values

These functions have no arguments:
- “@na” on page 284
- “@numbermonths” on page 285
- “@numberweeks” on page 285
- “@LIKEPD ” on page 286
- “@dimexact(vXXXX,”dimension member”)” on page 286
- “@scalar” on page 286
- “@calc( PROCESS, Vxxx )” on page 287
@na

**Definition**

Not a number.

For use as a general fill value or for non-logical results.

**Returns**

N/A

**Example**

If a ratio is relevant only in forecasted periods due, use @na for other periods. For example:

```
@if(@ishist, @na, v1400/ v2890)
```

where Total Interest Expense is v1400 and Total Liabilities is v2890.

**Note:** N/A* X= N/A and N/A+ X= X

---

@log

**Definition**

Computes the base-10 logarithm of the argument. This enables you to represent very high values using a smaller frame of reference. For example, LOG is used to assess seismic activity such as earthquakes.

**Example**

```
LOG(value, base))
```

For example, `LOG(4, 100,000)) = 0.12`

For example, `LOG10(86)=1.93449`

---

@ln

**Definition**

Computes the natural logarithm of the argument
@nummonths

Definition
Number of months in a period

Returns
- The number of months in a time period.
- N/A for time structures based on weeks.

Example
- In a quarter, this returns the number of months in the quarter.
- In a half year, this returns 6.
- In a year, this returns 12.

@numweeks

Definition
Number of weeks in a period

Returns
The number of weeks in a period.

Example
- In a month, this returns the number of weeks in the month, or a value of 4 or 5.
- In a quarter, this returns 12 or 13.
- In a half year, this returns 26 or 27.
- In a year, this returns 52 or 53.
- In a half year, this returns 26 or 27.
- In a year, this returns 52 or 53.

@LIKEPD

**Definition**
Use to specify a lead or lag time to a period-to-date of the same type. This function enables you to create formulas where you want the period-to-date periods to lag a full period instead of using the value from the previous period.

**Example**
Assume you define a formula using Oct09:YTD in which the value (V1000) from the previous year, 2008, is used V1000(-1). To use a value other than the 2008 period-to-date result, use V1000(@likepd(-1)).

@dimexact(vXXXX,"dimension member")

**Definition**
References dimensional account instances from accounts that do not share the same dimensions as the account with the formula, enabling you to reference dimensions not currently assigned to the account with the function.

**Returns**
Returns a dimensional instance.

**Example**
If Sales has the dimension Region but not Product, and Cost of Goods sold has the dimension Product but not Region, the Cost of Goods Sold account can use this formula:

@dimexact(v1000,"North")*.1

to retrieve the instance for Sales/North and multiply it by 10%.

@scalar

**Caution!** Do not use arguments to retrieve values from other accounts with @scalar. This functionality may be deprecated in a future release.

**Definition**
Returns a scalar value from the forecast method.
If you use @scalar in a Freeform Formula forecast method, the account accepts one scalar input value in all forecast periods.

Returns
Returns the value of the single forecast input for a variable when that forecast method is in use.

@calc( PROCESS, Vxxx )

Definition
A general method of calling a complex calculation routine.

Returns

- True—if the calculation succeeds.
- False—if the calculation fails.

@ipvalue( PROCESS, Vxxx )

An instruction to the calculation engine indicating there are intra-period values stored for this account, by some process, that should be retrieved and, in the case of Flows, summed to return the reporting value for the account for the period.

@debt( Vxxx, TOKEN_NAME )

Returns values directly from the debt schedule for use in formulas and reporting. Other than trivial internal calculations, this performs no calculations.

@sub(Vxxx.xx)

Similar to @dim in that, using no arguments, it references the same subaccount number as the variable being calculated. Useful when calculating subaccounted formulas, as with some Debt Scheduler variables.

Functions That Reference Specific Time Periods

These functions return time period information into the current time period from different periods. None of these functions have arguments.

- “@basepd” on page 288
- “@closing” on page 288
- “@deal” on page 288
- “@firstfore” on page 289
- “@firstpd” on page 289
@basepd

Definition
Base period

Returns
A relative time reference that returns the value for an account in the base period—see “Defining, Deleting, and Displaying Time Periods” on page 101.

Example
If 2007 is the base period, this equation: v1000(@basepd)
returns the value of Sales (v1000) for 2007.

@closing

Definition
Closing period

Returns
A relative time reference that returns the value for the closing period of an account.

Example
This formula: v1000(@closing)
returns the closing period value for Sales (v1000).

@deal

Definition
Deal period

Returns
A relative time reference that returns the value for the deal period of an account.
Example
This formula: v2005(@deal)
returns the deal period value for Cash Used in Transaction (v2005).

@firstfore
Definition
First forecasted period
A relative time reference that returns the first forecasted time period value for an account—see “Defining, Deleting, and Displaying Time Periods” on page 101.

Example
To return the first forecasted period output value for Sales, if the last historical value (e.g. 1999) of sales is 10 and a 10% growth rate in all following periods:
v1000(@firstfore)
The value returned is 11 (10* 1.1) or 2000’s sales.

@firstpd
Definition
First period

Returns
A relative time reference that returns the first period in the model's value for an account.

Example
If 2007 is the first period in the model, the formula:
v1000(@firstpd)
return the value for 2007 Sales (v1000). If 2007 is in quarters, Strategic Finance returns the first quarter for 2007 Sales (v1000).

@lastfore, vXXX(@lastfore)
Definition
References the last forecasted value of an account.

Returns
- The value of an account in the last forecasted period.
N/A for other periods.

Example

For this formula and values:

\[ v1000(\text{@lastfore}) \]

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>10</td>
<td>15</td>
<td>16.5</td>
<td>18.15</td>
<td>19.965</td>
<td>21.962</td>
<td>24.158</td>
</tr>
</tbody>
</table>

The formula returns 24.158 in 2004 and N/A in other periods.

@lasthist, vXXX(@lasthist)

Definition

References the value of an account that is in the last historical period.

Returns

- The value in the last historical period.
- N/A for all periods up to the last historical period.

Example

For this formula and values:

\[ v1000(\text{@lasthist}) \]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<td>18.15</td>
<td>19.965</td>
<td>21.962</td>
<td>24.158</td>
</tr>
</tbody>
</table>

The formula returns N/A in 1998, a 15.000 in 1999 and remaining periods.

@opening

Definition

Opening period

Returns

A relative time reference that retrieves the value for an account in the opening period. The opening period is the aggregate of the closing and deal periods. For example, for a deal period in Mar99, Strategic Finance creates the accounts Mar99:Closing and Mar99:Deal, which aggregate to Mar99. Mar99 is the opening period.
Example
The formula: v2000(@opening)
returns the opening period value of Cash (v2000).

@lastactual

Definition
Last actual value.

Returns
A reference to the last actual period.

@lastpd

Definition
Last time period.

Returns
A reference to the last time period.

Functions That Retrieve Time Period Information

These functions accept optional arguments to specify absolute or relative period references. Without arguments, they return the value for the current period.

- “@halfnum” on page 292
- “@inputpd([Time period reference])” on page 293
- “@isagg” on page 294
- “@isclosing” on page 294
- “@isdeal” on page 295
- “@iseoy” on page 295
- “@isfirstpd” on page 295
- “@isfirstfore” on page 296
- “@isfore” on page 297
- “@ishalf” on page 297
- “@ishist” on page 298
- “@isinput” on page 298
- “@islastfore” on page 299
@halfnum

Definition
Half period number
Used to trigger @if statements by making the condition equal to the first or second part of the year.

Returns

- 1—first half
- 2—second half

Example

If a company accumulates taxes for the first half of the year and pays taxes second half, this formula could be entered in a Taxes Payable account:

\[ \text{@if(@halfnum=1, @sum(v1690,.ytd), 0)} \]

with Total Taxes (v1690).

@inputpd( [Time period reference])

Definition

Input period

This function is useful when using an optional time period reference, usually a lead or lag, although absolute period references are possible.

Returns

Returns the input period driving the value for the period being calculated. This may be the period that is being calculated, if it is an input period.

Example

For example:

\[ \text{@inputpd(-1)} \]

You can reference the preceding input period, even if that period is a different type from the current period, which enables returning some types of lagged data.

This formula:

\[ \text{@Vxxxx(-1)} \]

returns the value of Vxxxx from the previous period of the same type.

This formula:

\[ \text{@Vxxxx(@inputpd(-1))} \]

returns the value of Vxxxx from the preceding input period.
@isagg

Definition
Is an aggregate period
A relative reference in @if statements. Used with memo accounts, ratio accounts, and covenant accounts in time period structures that yield aggregate periods.
For example, if a model is in quarterly detail a year end aggregate period is created. The same applies to months, half years, and subperiods. Used in @if statements, different calculations can be performed in these aggregate periods.

Returns
- True—if the period is an aggregate period
- False—if not

Example
If a model is in quarters and the year end is an aggregate period, this formula:
@if(@isagg, 1, 2)
returns 2 in each of the four quarters and 1 in the year end aggregate.

Note: This function only works when one of the User Defined Accounts is a calculated (CALC) field and the None option is selected.

@isclosing

Definition
Is the closing period in the model
A relative reference in @if statements.

Returns
- True—if the period is the closing period in the model
- False—if not

Example
This formula:
@if(@isclosing, 1, 2)
returns 1 in the closing period, 2 for other periods.
@isdeal

Definition

Is the deal period

A relative reference in @if statements.

Returns

- True—if the period is the closing period in the model
- False—if not

Example

This formula:

@if(@isdeal, 1, 2)

returns 1 in the closing period, and 2 for other periods.

@iseoy

Definition

Is the end of the year

A relative reference in @if statements used for models in months, quarters, or half years. This function models year end payments of accrued liabilities. Causes no problems in yearly detail.

Returns

- True—if the period is at the end of the fiscal year
- False—if not

Example

If the model is in quarters and December is the fiscal year end, this formula:

@if(@iseoy, 1, 2)

returns 2 in the first three quarters and 1 in the fourth quarter.

@isfirstpd

Definition

Is first period

A relative reference in @if statements.
Returns

- True—if the period is the first period in the model
- False—if not

Example 1

If the first quarter of 1998 is the first period in the model, this formula:
\[ @\text{if}(\text{@isfirstpd}, 1, 2) \]
returns 1 for 1Q98, and 2 for other periods.

Example 2

If you delete 1998, the formula in the previous example returns 1 in the first period of 1999, and 2 in subsequent periods.

@isfirstfore

Definition

Is the first forecasted period in the model

A relative reference in \@if statements, enabling you to change the historical/forecast boundary and maintain the integrity of the formula. Forecast periods are determined by the historical/forecast boundary set in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns

- True—if the period is the first forecasted period in the model
- False—if not

Example 1

If a model is in years and the historical/forecast boundary is 2007/2008, with 2008 as the forecast period, this formula:
\[ @\text{if}(\text{@isfirstfore}, 1, 2) \]
returns 1 for 2000, and 2 for other periods.

Example 2

The same formula in the previous example, but with a model in quarters with the first quarter of 2008 as the first forecast period, returns 1 for the first quarter of 2008, and 2 for other periods.
@isfore

Definition
Is a forecasted period.
A relative reference in @if statements.
Forecast periods are determined by the historical/forecast boundary set in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns
● True—if the period is a forecasted period
● False—if not

Example
If a model contains 6 years starting in 2006, with the first year historical, then the remaining years, 2007–2011, are forecast. This formula:
@if(@isfore, 1, 2)
returns 1 for 2006, and 2 for the other years.

@isfirstforeyr

Definition
Is first forecast year.
Accepts a time period reference as an argument.

Returns
● True—If this period is contained in the first forecast year, or the first year is, even partially, in the forecast period.
● False—If not.

@ishalf

Definition
Is a half year
A relative reference in @if statements.
You can divide a year into quarters, enabling aggregate half year periods, or divide a year into halves, which would not make these aggregate periods. Time period detail is determined in “Defining, Deleting, and Displaying Time Periods” on page 101.
Returns

- True—if the period is a half-year period whether or not it is an aggregate period
- False—if not

Example

If a model has 2006 in years and 2007 in half years, this formula:

@if(@ishalf, 1, 2)


@ishist

Definition

A historical period

A relative reference in @if statements.

Historical periods are determined by the historical/forecast boundary set in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns

- True—if the period is a historical
- False—if not

Example

If a model contains 6 years starting in 2006 and the first year if historical, then 2007–2012 are forecast. This formula:

@if(@ishist, 1, 2)

returns 1 in the 2006, and 2 in the other years.

@isinput

Definition

Is an input period

A relative reference in @if statements.

Use in time period structures containing aggregate or year-end periods: months, quarters, halves.

Use this function with accounts convertible into calculated accounts: memo accounts, ratio accounts, and covenant accounts.

Returns

- True—if the period is an input period
False—if not

Example
If 2006 is in quarters with an aggregate year end, this formula:
@if(@isinput, 1, 2)
returns 1 for each quarter of 2006, and 2 in the year end 2006.

@islastfore

Definition
Is the last forecast period
A relative reference in @if statements.

Returns
- True—if the period is the last forecasted period in the model
- False—if not

Example
If a model contains 6 years ending in 2011, and 2007–2011 are forecast, this formula:
@if(@islastfore, 1, 2)
returns 1 in 2011 (the last forecasted period), and a 2 in the other years.

@islasthist

Definition
Is the last historical period
A relative reference in @if statements.
Forecast periods are determined by the historical/forecast boundary set in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns
- True—if the period is the last historical period in the model
- False—if not

Example
If a model contains 6 years starting in 2005, with 2006 as the last historical period, then the 2007–2010 are forecast. This formula:
@if(@islasthist, 1, 2)
@ismonth

Definition
Is a monthly period
A relative reference in @if statements.
Time period detail is set in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns
- True—if the period is in months
- False—if not

Example
If 2006 is in years and 2007 is in months, this formula:
@if(@ismonth, 1, 2)

@isopening

Definition
Is the opening period in the model
A relative reference in @if statements.
The opening period is the aggregate of the closing and deal periods.
For example, if you create a deal period in Mar08, Strategic Finance creates the accounts Mar08:Closing and Mar08:Deal, which aggregate to Mar08. Mar08 is the opening period.

Returns
- True—if the period is the opening period in the model
- False—if not

@isqtr

Definition
Is a quarter
A relative reference in @if statements.
Returns

- True—if the period is in quarters
- False—if not

Example

If 2007 is in years and 2008 is in quarters, this formula:
\[ @if(@isqtr, 1, 2) \]
returns 2 in 2007, and a 1 for each quarter in 2008.

@issub

Definition

Is a subperiod

A relative time reference in \@if\ statements.

The opening period is the aggregate of the closing and deal periods.

Returns

- True—if the period is subperiod with zero days
- False—if not

Example

If 2007 is in years and 2008 is comprised of two subperiods, one of 365 days and another of zero days, this formula:
\[ @if(@issub, 1, 2) \]
returns 2 for 2007, and, for 2008, 1 for the 365 day and 1 in the restatement or zero-day period.

@isweek

Definition

Is a week

A relative time reference in \@if\ statements.

Time period detail is set in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns

- True—if the period is in weekly detail
- False—if not
Example

If 2007 is in months and 2008 is in weeks, this formula:

@if(@isweek, 1, 2)


@isyear

Definition

Is a year

A relative time reference in @if statements.

Returns

- True—if the period is a year or yearend
- False—if not

Example

If 2007 is in years and 2008 is in quarters, this formula:

@if(@isyear, 1, 2)

returns 1 in 2007, and 2 for each quarter in 2008.

@monthnum

Definition

The month fiscal number

Use @monthnum in @if statements to model one-time-a-year occurrences. Strategic Finance numbers months from 1 to 12 beginning with the first month of the fiscal year. For example, the function is used if a liability were paid out on a month.

Returns

The number of the month: between 1 and 12.

Example

If income Taxes Payable is v2530, Total Taxes is v1690, and September is month number 9, this formula:

@if(@monthnum= 9, v1690, v2530 (-1m)+v1690)

aggregates all taxes in v2530 until September, pays taxes by decreasing the balance to 0, and starts accumulating current-period taxes.
@period

Definition
Period number, starting from the first forecasted time period
This function counts the aggregates and input columns. The last historical time column is number 0, and each column number following increases by 1.

Returns
- True—if the period number equals a number input in @if
- False—if not

Example
This formula:
@if(@period= 2, 1, 2)
executes (result: 1) after the formula reaches the second forecasted time column.

@pdexists

Definition
Period exists
Executes commands if a period exists.

Returns
- True—if the period exists
- False—if not

Example
For the Sales (v1000) account:
@if(@pdexists(-3),V1000(-3),@na)
Embedded in a larger formula, this formula ensures that Sales from the 3 previous periods enters the equation. If there are no Sales figures for those periods, it returns N/A.

@pdlen

Definition
Period length
Time period detail is set in “Defining, Deleting, and Displaying Time Periods” on page 101.
Returns

Returns the number days in a period.

Example

This formula calculates interest expense:

\[ \frac{\text{pdlen}}{\text{yearlen}} \times v2520 \times 9\% \]

Where Notes Payable \((v2520)\) has a 9% annual rate. This takes the number of days in the period, divides by the number of days in the year, multiplies the debt balance, and multiplies by 9% to get to a periodic interest expense.

@pdnum

Definition

Period number, starting from the first time column

Totals the aggregates and inputs. The first time column is number 0.

Returns

The number of time columns in the model since the first period.

- True—if the period number equals the number enter in @if
- False—if not

Example

@if(@pdnum= 2, 1, 2)

This executes (result: 1) after the formula reaches the third time column in the model.

@qtrnum

Definition

Quarter number

Returns

A relative time reference in @if statements.

Example

@if(@qtrnum=3,v1080(-1Q),v1000*@input)

In the third quarter, this formula takes the value of second quarter Selling, General & Administration Expense \((v1080)\). In the first, second, and fourth quarters, the formula takes an input percentage \((@input)\) times Sales \((v1000)\).
@since(period reference), @after

Definition

Adds durations to functions such as @sum.

@since includes starting periods. Accepts absolute period references such as @firstfore or May03, but rejects relative period references such as -1Y.

@after does not include starting periods.

Example

@sum( Vyyyy, @since( @issuepd( Vxxxx )))

Sums all flows occurring after the debt was issued.

@weeknum

Definition

The week fiscal number

Used in @if statements to model one-time-a-year occurrences.

Strategic Finance numbers the weeks from 1 to 52 (or 53) beginning with the first week of the fiscal year. For example, use this function if a dividend were paid out in a week.

Returns

The fiscal week number, between 1 and 53.

Example

For Common Dividend (v1880) and Weighted Average Common Shares Outstanding (v3410):

@if(@weeknum=37,v3410*.65,0)

returns a Common Dividend corresponding to 65 cents per common share in the 37th week of each year and 0 in all other weeks.

@yearlen

Definition

Year Length

Returns

The number of days in the year, as defined in “Defining, Deleting, and Displaying Time Periods” on page 101.
Example
This formula returns the value of Sales (v1000) in annual periods:
@if(@isyear,v1000,v1000/@pdlen*@yearlen)

In non-year periods, it annualizes Sales by dividing by the period length and multiplying by the number of days in the year.

@yearnum

Definition
Year number
A relative time reference in @if statements.

Returns
The year number.

Example
@if(@yearnum=2001,v1080(-1y),v1000*@input)

In 2001, the formula returns the value of 2000 Selling, General & Administration Expense (v1080). In other forecast years, the formula return an input percentage (@input) times Sales (v1000).

@firstday

Definition
The first day of the time period

Returns
The day number for the first day of the period.

@lastday

Definition
The last day of the time period

Returns
The day number for the last day of the period. For calendar time, this is the number of days since December 30, 1899. For non-calendar time periods, the value is adjusted for the length of the year (360 or 364 days).
@iscalc

Definition
Is a calculated number

Returns
- True—if the time period contains calculated values
- False—if not

@isleaf

Definition
Is an entity with no child entities

Returns
- True—if the time period has no child periods
- False—if not

Example
In a year containing only months, the year returns false and months return true.

@isptd

Definition
Is period-to-date

Returns
- True—if the time period is a period-to-date
- False—if not

@istrailing

Definition
Is a trailing period

Returns
- True—if the time period is a trailing period
- False—if not
@islastactual

Definition
Is the last actual value

Returns
- True—if the time period is the last actual period
- False—if not

@islastperiod

Definition
Is the last time period

Returns
- True—if the time period is the last period
- False—if not

@blocknum

Definition
A block of time periods defined by month or week numbers

Returns
- For models in months, the month number in the year, 1 to 12.
- For models in weeks, the week number in the year, 1 to 53.

@issuepd( Vxxxx, [optional period reference])

Definition
Issue period

Returns
- If Vxxxx contains a debt schedule, returns the period in which the debt was issued.
- Otherwise, returns an invalid period reference.
@isissuelpd( Vxxxx, [optional period reference])

Definition
Is issue period

Returns
- True—if Vxxxx contains a debt schedule and the current period, or optional reference, is when the debt was issued
- False—if not

Use the optional period reference to change the test period. For example:
@isissuelpd( Vxxxx, -1 )
test if the prior period was the issue period.

@isinterm( Vxxxx, [optional period reference])

Definition
Is in the term—Debt Scheduler only

Use the optional period reference to check another period if the first is within the term. A period is within the term of the debt if the debt is issued, exists, or is extinguished during that period.

Returns
- True—If Vxxxx has a debt schedule and the current period is within the term.
- False—If Vxxxx has no debt schedule, or the current period is not within the term.
Functions That Modify the Retrieval of an Account Value

Subtopics

- @abs(vXXXX)
- @annualize(vXXXX)
- @avg(vXXXX, -t)
- @ceil(vXXXX)
- @chg(vXXXX,-t)
- @floor(vXXXX)
- @histavg or @histavg(vXXXX)
- @input or @input(vXXXX)
- @irr(vXXXX(t),vXXXX(t), [%])
- @normalize
- @prior(vXXXX)
- @sum(vXXXX, -t)
- @ytd

For these functions, the first argument is an account reference, unless otherwise indicated. Arguments in [] are optional.

@abs(vXXXX)

Definition
Absolute value

Returns
The absolute value of a specified account.

Example
@abs(v1750)

Where Net Income equals v1750 and is -10, this returns 10.

@annualize(vXXXX)

Definition
Annualize a value

Use when working in months, quarters, or half years. The calculation uses the number of days in the year and the number of days in that period to calculate an annualized value.

Returns
Returns the annualized value of the account.
Example

@annualize(v1150)

Where Operating Profit equals v1150 and is 15 in the third quarter of 2000. This calculates as:

\[ 15 \times \frac{\text{# of days in year}}{\text{# of days in period}} \]

or

\[ 15 \times \frac{366}{92} = 59.674. \]

@avg(vXXXX, -t)

Definition

Averages a value over “t” periods

The “t” variable can be a month, quarter, or half year. Strategic Finance calculates values for periods with insufficient detail.

Returns

Returns a rolling average of an account for the precious “t” periods.

Example

@avg(v1040, -3q)

Where Cost of Goods Sold (v1040) is:

<table>
<thead>
<tr>
<th>v1040</th>
<th>1998</th>
<th>1999</th>
<th>1Q00</th>
<th>2Q00</th>
<th>3Q00</th>
<th>4Q00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold</td>
<td>15</td>
<td>20</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

The calculation in 2Q00:

\[ \frac{5 + 4 + (20 \times \frac{\text{# of days in 4Q99}}{\text{# of days in 1999}})}{3} \]

The result: 5.68

The calculation in 3Q00:

\( (4 + 5 + 6) / 3 \) or 5.

@ceil(vXXXX)

Definition

Rounds a value up to the next integer number

Returns

Returns the next highest integer number (e.g. 2, 10, 65, 149...) based on the result of the parenthesized variable or equation.
Example

Where Inventory (v2040) is 233, this formula:

@ceil(v2040/100)

calculates the number of trucks necessary to haul the inventory, assuming each truck carries 100
worth of inventory in a period. This example equates to 2.33 and the function rounds result up
to 3.

@chg(vXXXX,-t)

Definition

Calculates the change

Returns

Returns the change in the variable over t periods.

Example

@chg(v1040, -1q)

Where Cost of Goods Sold (v1040) is:

<table>
<thead>
<tr>
<th>v1040</th>
<th>1998</th>
<th>1999</th>
<th>1Q00</th>
<th>2Q00</th>
<th>3Q00</th>
<th>4Q00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Goods Sold</td>
<td>15</td>
<td>20</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

In the second quarter of 2000 the equation returns:

1, (5- 4)

@floor(vXXXX)

Definition

Rounds a value down to the next integer number

Returns

Returns the next lower integer number (e.g. 2, 10, 65, 149...) based on the result of the
parenthesized variable or equation.

Example

If Sales are 20.23, 34.45:

@floor(v1000)

calculates the values 20 and 34.
@histavg or @histavg(vXXXX)

Definition
Historical forecasting average

If a Freeform Formula forecast method contains @histavg, no input is required in the forecast period. On the Accounts view, when the cursor is on the referenced account, the Hist. Avg. text box displays the historical average.

The years in the calculation of the historical average are defined in “Defining, Deleting, and Displaying Time Periods” on page 101.

Returns
The historical average based on the forecasting method used in the account.

Example 1
The basic formula:
@histavg

Example 2
If Sales (v1000) in 2006 and 2007 are 10 and 12, and the forecasting method of sales is as an actual dollar value, this formula:
@histavg(v1000)
returns 11.

Example 3
If example 2 uses a growth rate forecasting method, Strategic Finance calculates the historical average at 20%—the growth rate needed to get from 10 to 12.

@input or @input(vXXXX)

Caution! Do not use arguments to retrieve values from other accounts, as this option is deprecated.

Definition
Uses an input in the formula
Enables users to input a number and reference that input in a formula.

Returns
The input function works in conjunction with the Input as and Units text boxes.
Example 1
When calculating dividends, Net Income from the first forecasted time period can be used as a base. Net Income is multiplied by a percentage input in each period.

For example:
@input* v1750(@firstfore)

By default, the Input as is Currency. Change it to Percentage for this formula.

Example 2
For Cost of Goods Sold (v1040):
@input(v1040)

returns the input of v1040 regardless of the account containing the formula. If Cost of Goods Sold is 75% of Sales, Strategic Finance returns 75% instead of the Cost of Goods Sold output.

@irr(vXXX(t),vXXX(t), [%])

Definition
Internal Rate of Return (IRR)

- The first variable is the account in which the initial cash outlay exists at in a period.
- The second variable is the cash stream beginning in a period.
- The percentage is an optional guess at the IRR.

Returns
The internal rate of return of a stream of cash flows.

Example
A project with an initial invest in 2000 and a cash flow beginning in 2000, uses this formula:
@irr(v300(1999), v4100(2000))

if the initial investment exists in v300 of 1999. The cash stream comes from the cash flow of Operations (v4100) beginning in 2000.

@normalize

Definition
Normalize a value

Calculates a normalized value from the number of days in the current period and a prior period. For comparing consecutive time periods of various lengths.
Returns
The normalized value of an account across consecutive time periods.

Example
@normalize(v1150(-1))

If Operating Profit (v1150) is $8,515 in 2006, 2007 calculates as:
(v1150(-1)*# of days in current period)/(# of days in prior period) or (8515*366)/365 = 8538.

@prior(vXXXX)

Definition
Prior period account

Returns
References the prior period’s account balance.

Example
@prior(v1040)
references the prior period balance for Cost of Goods Sold (v1040).

@sum(vXXXX, -t)

Definition
Summation

Returns
This is a rolling summation function. You must enter an account number and the number of periods to sum.

Example
@sum(V1040, -3M)
sums Cost of Goods Sold (v1040) over the last three months.

@ytd

Definition
Year to Date
References year-to-date time periods.

**Returns**

A summation of values from the beginning of a year to the present.

**Example**

If a three-year model, 2004-2006, is in quarters:

```plaintext
@avg(v1040(-2Q), @ytd)
```

averages the year-to-date Cost of Goods Sold value from the prior two quarters. In the first quarter of 2006, the sums 1Q2000, 2Q2000, and 3Q2000, and divides by three.

### Functions That Operate on Expressions

These functions can take any expression as an argument:

- “@depr(vXXXX,“schedule”) or @depr(vXXXX,“schedule”, period retirement is in, % of initial investment retired)” on page 316
- “@if(T/F Test Condition, Execute if True, Execute if False)” on page 318
- “@isna(expression)” on page 320
- “@max(val.,val.)” on page 320
- “@min(val.,val.)” on page 321
- “@not(condition or formula)” on page 321

**@depr(vXXXX,“schedule”) or @depr(vXXXX,“schedule”, period retirement is in, % of initial investment retired)**

**Definition**

Depreciation

**Returns**

Calculates depreciation or removes retirements from depreciation expense.

Enables forecasting depreciation against a capital expenditures stream. The basic formula:

```plaintext
@depr (CAPX* stream, * schedule)
```

where **CAPX stream** is the depreciating capital expenditure account and **schedule** is the schedule name defined in the following section **Using Debt Scheduler**. Enter this formula in v2190.1 or a memo account and the function output is the depreciation for that period’s asset.

When depreciating CAPX streams, @depr lags backward. The depreciation in 2003 for a five-year asset is:

- 2003’s CAPX times the first year rate
• plus 2002’s CAPX times the second year rate
• plus 2001’s CAPX times the third year rate, etc.

If a year has no CAPX or the year does not exist, Strategic Finance multiplies zero by a rate.

Because Strategic Finance applies the same rate to all a variable’s CAPXs, each asset class should have a CAPX stream. For example, use separate subaccounts of v2170.1 for five-year and ten-year properties.

When depreciating assets for financial and tax reporting purposes, you can use the same CAPX stream, but different schedules and output accounts.

• “Interim Periods” on page 317
• “Retirements” on page 317
• “Purpose 1: Depreciation” on page 318
• “Purpose 2: Removing Retirements” on page 318

Interim Periods

If you enter assets per quarter, month, or half-year, @depr calculates the annual depreciation for the asset, displaying the amount in the quarter. To calculate each interim period likewise, create schedules.

In years after the year placed in service, Strategic Finance calculates annual depreciation for that asset and allocates to interim periods based on days.

Retirements

To record a retirement, this function records depreciation:

@DEPR(v2170.03, "schedule", 3, 50)

• v2170.3 (Gross Retirements) is the retirements on assets
• “schedule” is the schedule containing the depreciation rate (e.g. “5 year SL”)
• (3) is the current year in the schedule (in a half-year convention, five-year properties depreciate in six years). Must be a positive integer.
• (50) is the depreciation percentage not recognized in the retirement year. Must be between (0) and (100) and applies only in the retirement year. In years after the retirement year, Strategic Finance calculates depreciation no longer recognized. If a method recognizes no depreciation in the retirement year, enter 100.

Note: If modeling the asset sales, model accumulated depreciation on the retired assets.

Total depreciation is calculated by adding all depreciation accounts and subtracting retirements.
**Purpose 1: Depreciation**

@depr can depreciate capital investments streams using depreciation schedules. The formula should use the account forecasting capital investments (v2170.1.xxx). Enter the exact name of the schedule in quotations.

**Example 1:**

@depr(v2170.1.010, "Tax: 5 year")

With the 5 year MACRS depreciation schedule: 20%, 32%, 19.2%, 11.52%, 11.52%, 5.76%. There are six depreciation percentages due to the half-year convention.

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPEX</td>
<td>16</td>
<td>20</td>
<td>30</td>
<td>35</td>
<td>40</td>
<td>45</td>
</tr>
</tbody>
</table>

In the first forecast year, 2000, Strategic Finance takes 19.2% of 1998's investment (from the third period of the schedule), 32% of 1999's 20, 20% of 2000's 30 investment. The answer is 15.28.

**Purpose 2: Removing Retirements**

When removing assets from service before completely depreciating, remove the asset's portion of the depreciation expense, because Strategic Finance depreciates initial investments. Strategic Finance does not know retirements occur in the future and can not adjust accordingly.

@depr can remove the retired portion from the depreciation amount. In @depr, reference the account holding asset retirements (v2170.3.xxx).

Reference the schedule depreciating the assets, enter the number of periods back the retired asset started, and reference the % of the initial investment being removed from the depreciation expense.

**Example 2:**

@depr(v2170.3.010, "Tax: 5 year", 3, .75)

**@if(T/F Test Condition, Execute if True, Execute if False)**

**Definition**

Conditional logic statement

**Syntax:**

@if(test condition, execute if "true", execute if "false")

Executes one of two commands based on a condition. The condition can be a formula, string, list, or date, and must return true or false. You can nest @if statements.
Returns
Results of executed command.

Example 1
For Net Income (v1750), if the common dividend payout percentage is based on the company's net income growth over the previous year, and:

- If Net Income increases by at least 25%, the dividend is 20%
- If Net Income is below 25%, the dividend is 15%

The formula for Common Dividends is:

\[@\text{if}\left(\frac{v1750-v1750(-1\text{Y})}{v1750(-1\text{Y})}\geq 25\%, v1750*20\%, v1750*15\%\right)\]

Example 2
If the model in example 1 is in quarters, but dividends are paid once a year at the fiscal year beginning, based on the prior year's net income, use a nested @if to calculate payment in the first quarter only:

\[@\text{if}\left(\text{qtrnum}=1,\text{if}\left(\frac{v1750(-1q)-v1750(-5q)}{v1750(-5q)}\geq 25\%, v1750(-1q)*20\%, v1750(-1q)*15\%\right),0\right)\]

**Note:** In the analyze trail, Strategic Finance returns 1 if the answer is “true”, and a 0 if the answer is “false”.

- “Using strings” on page 319
- “Using lists” on page 319
- “Using Dates” on page 320

**Using strings**
Enter strings in quotes, for example: “Underwriting”. Strings are case-insensitive, and are used as function arguments only to test formulas—they cannot be used as results.

This is valid:

\[@\text{if}(v1.0.600="Underwriting", v300*v305, @na)\]

because you can use strings in tests.

This is invalid:

\[@\text{if}(v155=v160, 300, "Revenue")\]

because you cannot use string as results.

**Using lists**
Lists behave like strings. Lists can be time series or scalar.
For example, if an account “Processed?” (v150.00.0000) has these possible values: Yes, No, Not Available—this is valid:

@if(v150="Yes", 100, 200)

In enumerated number lists, numbers are handled as strings, and entered in quotes. For example:

@if(v176="8", 300, 400)

**Using Dates**

To enter dates, use the mm/dd/yyyy format within quotes, for example:

@if(v174="06/30/2003", 100, 300)

Dates are handled as strings.

@isna(expression)

**Definition**

Is not available

Can be used in @if statements.

**Returns**

- True—if the expression is undefined or not a number
- False—if not

**Example 1**

@isna(1/0)

The answer to the expression is undefined, so Strategic Finance returns true.

**Example 2**

@if(@isna(v2040/v1040), v2040/v1040, 0)

With Inventory (v2040) and Cost of Goods (v1040), this formula returns the inventory turnover when Cost of Goods Sold does not equal zero and 0 when Cost of Goods Sold does equal 0 or is N/A.

@max(val., val.)

**Definition**

Maximum

**Returns**

The greatest number in a range of values.
Example
@max(0, 1, 2)

Returns 2.

@min(val., val.)

Definition
Minimum
Returns the minimum of a value range. Formulas can be performed within function.

Example
@min(0, 1, 2)

Strategic Finance returns 0.

@not(condition or formula)

Definition
Not something
Used in @if statements to execute a command if a condition is not true.

Example 1
@if(@not(v1750>100000), 1, 2)

If v1750 (Net Income) is less than or equal 1 million, a 1 is returned, otherwise a 2 is returned.

Example 2
@if(@not(@isyear), 1, 2)

Strategic Finance returns 1 if the period is not a year (e.g. a month, quarter...), and a 2 upon other time structures.

Special Functions

Subtopics

- @debtex
- @pfdin_debt
- @xspfdtodebt

These functions are for specific use. Do not use them unless absolutely necessary.
@debtex
Used by Debt Scheduler for internal calculations.

@pfdindebt
Used by Funding Options for internal calculations.

@xspfdtodebt
Used by Funding Options for internal calculations.
Modify spreadsheets by adjusting row height and column width, inserting rows and columns, and adding page breaks.

**Inserting Rows**

To insert rows:

1. From the Report grouping label, and click **Insert**
2. From the drop down list, select **Text Row**.
3. On **Insert Text Row**, select an option:
   - **Blank Text Row**
     Create an empty row.
   - **Subtotal Line**
     Create a row with a line indicating a subtotal row following.
   - **Total Line**
     Create a row with double lines for indicating a total row following.
   - **User Defined**
     Create a custom row break. Select one or both of these:
     - **Text for Account Name Columns**
       Add a name to the row break, and enter the name in this field.
Text to Fill Data Columns

Add a row break across the row and enter a character in this field. The columns in the row display this character to indicate a break.

4 Click Insert.

Inserting Columns

➢ To insert columns:
  1 From the Report grouping label, and click Insert
  2 From the drop down list, select Text Column.
  3 Click OK.

Inserting Account

➢ To insert Accounts:
  1 From the Report grouping label, and click Insert
  2 From the drop down list, select Account.
  3 On Insert Accounts, select an accounts and click Add.
  4 Optional: Select Expand Subaccounts to include all subaccounts when inserting main account.
  5 Optional: Select Expand Dimensions to include all dimensions when inserting dimensional accounts.
  6 Optional: Select Change Sign to reverse the +/- sign of accounts.
      • If you insert a main or dimensional account and expand the account and select this option, the sign applies to the expanded block of data.
      • To revert to the default sign, deselect this option.
  7 Optional: In Accounts to Insert, reorder the accounts.

This defines the display order of accounts in reports. To change the order, select accounts and click Up.

To remove the account, select an account and click Remove

8 Click Insert.
## Account Definitions

### In This Appendix

<table>
<thead>
<tr>
<th>Account Range</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>(v3.00.220) Years of Loss Carryforward / (v3.00.240) Years of Loss Carryback</td>
<td>325</td>
</tr>
<tr>
<td>4.xx.xxx Accounts</td>
<td>326</td>
</tr>
<tr>
<td>5.xx.xxx Accounts</td>
<td>327</td>
</tr>
<tr>
<td>1000.xx.xxx to 1999.xx.xxx Accounts</td>
<td>330</td>
</tr>
<tr>
<td>2000.xx.xxx to 2999.xx.xxx Accounts</td>
<td>343</td>
</tr>
<tr>
<td>3000.xx.xxx to 3999.xx.xxx Accounts</td>
<td>369</td>
</tr>
<tr>
<td>4000.xx.xxx to 4999.xx.xxx Accounts</td>
<td>386</td>
</tr>
<tr>
<td>5000.xx.xxx to 5999.xx.xxx Accounts</td>
<td>399</td>
</tr>
<tr>
<td>6000.xx.xxx to 6999.xx.xxx Accounts</td>
<td>419</td>
</tr>
</tbody>
</table>

### (v3.00.220) Years of Loss Carryforward / (v3.00.240) Years of Loss Carryback

If Calculate Tax Effects Automatically is selected in Tax Effect of Losses, Strategic Finance automatically carries forward or carries back Net Operating Losses (NOLs). Years of Loss Carryforward (v3.00.220) defaults to a carryforward period of 15 years. Years of Loss Carryback (v3.00.240) defaults to a carryback period of 3 years. Both time periods can be adjusted.
4.xx.xxxx Accounts

Subtopics
- (v4.00.520) Perpetuity Growth Rate (%)
- (v4.00.540) Perpetuity Value Growth Duration (years)
- (v4.00.720) Perpetuity Growth Rate
- (v4.00.740) Perpetuity Value Growth Duration (years)
- (v4.00.760) Residual Value Target Leverage Ratio
- (v4.00.780) L-T Return on Book Equity

**(v4.00.520) Perpetuity Growth Rate (%)**

An input, when using the Growth in Perpetuity Method, to calculate residual value. It is the rate at which Taxable Operating Profit (v3210) increases or decreases in the residual period.

**(v4.00.540) Perpetuity Value Growth Duration (years)**

An input, when using the Value Growth Duration Method, to calculate residual value. It is the number of years at which Taxable Operating Profit (v3210) continues to grow beyond the forecast horizon.

**(v4.00.720) Perpetuity Growth Rate**

An input, when using the Growth in Perpetuity Method, to calculate residual value while using the Dividend Discount Method. It is the rate at which the Perpetuity Affordable Dividend (v5410) increases or decreases in the residual period.

**(v4.00.740) Perpetuity Value Growth Duration (years)**

An input, when using the Value Growth Duration Method, to calculate residual value. It is the number of years during which the Affordable Dividend (v5400) continues to grow beyond the forecast horizon.

**(v4.00.760) Residual Value Target Leverage Ratio**

Residual Value Target Leverage Ratio (%) (v4.00.760) is an input when using the Perpetuity, Growth in Perpetuity, and Value Growth Duration methods to calculate residual value. It is used to calculate both Affordable Dividend (v5400) and Perpetuity Affordable Dividend (v5410).
(v4.00.780) L-T Return on Book Equity

An input, when using the Dividend Discount Model, used to compute the Dividend Flow and the Perpetuity Affordable Dividend (v5410).

5.xx.xxxx Accounts

Subtopics

- (v5.00.200) Current Stock Price
- (v5.00.500) Market Value of Debt
- (v5.00.520) Underfunded Pension Liabilities
- (v5.00.560) Investments in Stocks and Bonds
- (v5.00.700) Market Value of Other Liabilities: DDM
- (v5.00.720) Market Value of Other Assets: DDM
- (v5.00.800) E.P. Residual Value Tax Rate
- (v5.00.820) Residual NOPAT Adjustment
- (v5.00.900) Valuation Adjustment for Cost and Equity Methods: SVA
- (v5.00.910) Valuation Adjustment for Cost and Equity Methods: EP
- (v5.00.920) Valuation Adjustment for Minority Interest: SVA
- (v5.00.930) Valuation Adjustment for Minority Interest: EP

(v5.00.200) Current Stock Price

Enter the current market price of the stock, if available. This value can be compared to the Shareholder Value per Share (v5080), Equity Value Per Share (v5380), and Economic Profit Shareholder Value per Share (v5795) to see if the market seems to be undervaluing or overvaluing the stock.

Custom Ratios #1 - #10 (v6400.00 - v6445.00)

These accounts can be used to create your own calculations.

In addition, Custom Ratios (v6400.00-v6445.00) can be subaccounted; you can create up to 999 ratios under each Custom Ratio (v6400.00-v6445.00).


(v5.00.500) Market Value of Debt

Calculated using the yield to maturity of all debt instruments in a company’s debt portfolio. The market value typically differs from the face value of debt when the coupon rate on a debt instrument differs from the rate of return currently required by investors on similar investments, because the market price increases or decreases to a level yielding their required return (the “yield to maturity”).

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(v5.00.520) Underfunded Pension Liabilities

Excess of vested benefits (“normal cost”) over the sum of pension fund assets and balance sheet accruals. For a more conservative estimate, include the unvested portion with vested benefits. Underfunded Pension Liabilities (v5.00.520) is an obligation that must be deducted from Corporate Value (v5060) or Economic Profit Corporate Value (v5785) to arrive at Shareholder Value (v5070) or Economic Profit Shareholder Value (v5795), respectively.

(v5.00.560) Investments in Stocks and Bonds

Market value of the company’s current portfolio of long-term investments in stocks and bonds. Include the market value of your Investments: Equity Method (v2420) and Investments: Cost Method (v2430).

Neither this account nor shorter-term investments, such as Marketable Securities (v2010), are accounted for in Cash Flow from Operations (v4100), but both increase the value of the company and are included in Corporate Value (v5060). See Underfunded Pension Liabilities (v5.00.520).

(v5.00.700) Market Value of Other Liabilities: DDM

Calculated using the yield to maturity of all debt instruments in a company’s debt portfolio. The market value is typically different from the face value of debt when the coupon rate on a debt instrument differs from the rate of return currently required by investors on similar investments, because the market price increases or decreases to a level yielding their required return “yield to maturity”).

(v5.00.720) Market Value of Other Assets: DDM

Market value of the company’s current portfolio of long-term investments in stocks and bonds. Include the market value of your Investments: Equity Method (v2420) and Investments: Cost Method (v2430).

Neither this account nor shorter-term investments, such as Marketable Securities (v2010), are accounted for in Cash Flow from Operations (v4100), but both increase the value of the company.

(v5.00.800) E.P. Residual Value Tax Rate

This tax rate is multiplied by Taxable Operating Profit (v3210) to calculate Residual NOPAT for Perpetuity (v5810) when analyzing Economic Profit.
(v5.00.820) Residual NOPAT Adjustment

Used to adjust Taxable Operating Profit (v3210) in the post-forecast period. Residual NOPAT Adjustment (v5.00.820) is added to Taxable Operating Profit (v3210) to calculate Residual NOPAT for Perpetuity (v5810).

(v5.00.900) Valuation Adjustment for Cost and Equity Methods: SVA

Dialog variable adjusts the SVA report for investments using the cost and equity consolidation methods. The product of the ownership percentage of the consolidating entities and their respective valuations using SVA increase this variable (v5070 Shareholder Value).

(v5.00.910) Valuation Adjustment for Cost and Equity Methods: EP

Dialog variable adjusts the SVA report for investments using the cost and equity consolidation methods. The product of the ownership percentage of the consolidating entities and their respective valuations using Economic Profit increase this variable (v5790 Economic Profit Shareholder Value).

(v5.00.920) Valuation Adjustment for Minority Interest: SVA

Dialog variable adjusts the SVA report for investments using the Minority Interest Method. The ownership percentage that is not owned by the consolidated company is multiplied by the target company’s shareholder value to arrive at the adjustment. This value subsequently is subtracted from the consolidated entities’ overall shareholder value (v5070 Shareholder Value).

(v5.00.930) Valuation Adjustment for Minority Interest: EP

Dialog variable adjusts the Economic Profit report for investments using the Minority Interest Method. The ownership percentage that is not owned by the consolidated company is multiplied by the target company’s shareholder value to arrive at the adjustment. This value is subsequently subtracted from the consolidated entities’ overall economic profit value (v5790 Economic Profit Shareholder Value).
Subtopics

- (v1000.00) Sales
- (v1020.00) Discounts & Returns
- (v1030.00) Sales (Net)
- (v1040.00) Cost of Goods Sold
- (v1070.00) Gross Profit
- (v1080.00) SG&A Expense
- (v1090.00) Other Operating Income/(Expense)
- (v1100.00) Earnings Before Int., Taxes, Depr., and Amort.
- (v1110.00) Depreciation Expense
- (v1115.00) Amortization Expense
- (v1150.00) Operating Profit
- (v1160.00) Other Revenues & Gains
- (v1170.00) Gain on Sale of Assets
- (v1180.00) Other Expenses & Losses
- (v1190.00) Dividends from Investments: Cost
- (v1200.00) Earnings Before Interest & Taxes
- (v1220.00) Other Interest Income
- (v1240.00) Total Interest Income
- (v1300.00) Total Short-Term Interest Expense
- (v1350.00) Total Interest on Long-Term Debt: Scheduled
- (v1360.00) Other Interest Expense
- (v1370.00) Total Long-Term Interest Expense
- (v1400.00) Interest Expense
- (v1410.00) Interest Capitalized
- (v1420.00) Total Interest Expense
- (v1600.00) Earnings Before Taxes
- (v1610.00): Trial Provision for Income Taxes
- (v1620.00) Unrealized Tax Benefit of Losses
- (v1630.00) Current Provision for Income Taxes (Excl. NOL)
- (v1635.00) Additional Tax Refund
- (v1640.00) Tax Refund
- (v1650.00) Current Provision for Income Taxes
- (v1660.00) Deferred Provision for Income Taxes
- (v1670.00) Provision for Income Taxes
- (v1680.00) Other Taxes
- (v1690.00) Total Taxes
- (v1700.00) Income After Taxes
- (v1720.00) Minority Interest
- (v1730.00) Extraordinary Items
- (v1750.00) Net Income
- (v1800.00) Preferred Dividends
- (v1850.00) Income Available for Common Shareholders
- (v1880.00) Common Dividends
- (v1890.00) Affordable Dividend
- (v1900.00) Total Common Dividends
Discounts & Returns (v1020). The dollar growth in sales over one or more periods is “incremental sales.” For example, if sales increased over the prior period from $100 to $120, the incremental sales is $20.

Although Sales (v1000.00) by default is forecast using the Growth Rate method, you also can express your projections for Sales (v1000.00) in terms of price and quantity by using the Freeform forecast method with Memo Accounts (v300-v345).

**(v1020.00) Discounts & Returns**
Account for sales adjustments such as discounts taken, allowances, and returns.

**(v1030.00) Sales (Net)**
Sales (Net) (v1030.00) represents Sales (v1000) after Discounts & Returns (v1020). It is calculated as:

\[
\text{(v1000.00) Sales} - \text{(v1020.00) Discounts & Returns} = \text{(v1030.00) Net Sales}
\]

**(v1040.00) Cost of Goods Sold**
Also called Cost of Sales, refers to the expensed cost of units sold. It is generally determined as follows:

\[
\text{Beginning Inventory} + \text{Cost of Goods Purchased or Manufactured} - \text{Ending Inventory} = \text{Cost of Goods Sold}
\]

Cost of Goods Sold (v1040.0) may contain direct and indirect costs. Examples of direct costs include raw materials, assembly components, and the labor costs directly associated with the manufacture of the products to be sold. Examples of indirect costs are the overhead expenses (utilities, taxes, and depreciation) associated with production and manufacturing.

**(v1070.00) Gross Profit**
This incomestatement account consists of Sales (v1030) less the Cost of Goods Sold (v1040):

\[
\text{(v1030.00) Sales (Net)} - \text{(v1040.00) Cost of Goods Sold}
\]
The Selling, General and Administrative Expenses (SG&A) appear on the company’s Income Statement.

Examples of Selling Expenses:
- Sales office salaries and sales commissions
- Travel and entertainment
- Advertising expenses
- Depreciation of sales equipment

Examples of General and Administrative Expenses:
- Officers’ salaries
- Clerical salaries and professional fees
- Utilities and insurance (not associated with manufacturing)
- Depreciation of office buildings and equipment

Income or expense items directly associated with the production and the administrative functions of the business that you think should not be classified as Sales (v1000). Enter income in this account as a positive number and expense as negative number.

You can change the account description, to be consistent with your income or expense item, in the Financial Accounts view.

This Income Statement item is calculated as:

\[
\begin{align*}
(v1070.00) & \quad \text{Gross Profit} \\
- & \quad (v1080.00) \quad \text{SG & A Expense} \\
+ & \quad (v1090.00) \quad \text{Other Operating Income / Expenses} \\
= & \quad (v1100.00) \quad \text{Earnings Before Int., Taxes, Depr., and Amort.}
\end{align*}
\]
(v1110.00) Depreciation Expense

An accounting convention designed to expense the historical cost of a tangible asset over its useful life. Depreciation expense does not necessarily reflect the decline in the market value of an asset.

Many companies show depreciation expense on the Income Statement, the Cash Flow Statement, and Funds Flow Statement. Other companies include depreciation expense in COGS (v1040) and/or SG&A Expense (v1080) and do not report depreciation expense on the Income Statement.

Because the depreciation expense on the Funds Flow Statement must equal all depreciation expenses in Net Income (v1750), Depreciation Expense (Funds) (v2190.01) must equal or exceed Depreciation Expenses (v1110.00) reported separately on the Income Statement.

To enter Depreciation Expense (v1110.00) for the Income Statement:

Depreciation Expense (v1110.00) uses a Freeform forecast method that calculates the Depreciation Expense (v1110.00) in forecast periods as equal to Depreciation Expense (Funds) (v2190.01). To allocate a portion of Depreciation Expense (Funds) (v2190.01) to other Income Statement items, change the forecast method to Percent of Another Account, using Depreciation Expense: (Funds) (v2190.01) as the Associated Account. Enter the unallocated percentage (0-99%) in Depreciation Expense (v1110.00). If the percentage entered in Depreciation Expense (v1110.00) is less than 100%, it is assumed that the remaining amount for Depreciation Expense (Funds) (v2190.01) have been included in other accounts on the Income Statement, such as SG&A Expense (v1080) or COGS (v1040).

To enter total Depreciation Expense (Funds) (v2190.01), see “(v5745.00) Economic Profit NOPAT” on page 414.

(v1115.00) Amortization Expense

Amortization expense is an accounting convention designed to expense the historical cost of an intangible asset over its useful life. Amortization expense does not necessarily reflect the decline in the market value of an asset.

Many companies show amortization expense as an item on the Income Statement, the Cash Flow Statement and Funds Flow Statement. Other companies include amortization expense in Cost of Goods Sold (COGS) (v1040) and/or Selling, General and Administrative (SG&A) Expense (v1080) and therefore do not report amortization expense as an item on the Income Statement.

Because the amortization expense on the Funds Flow Statement must equal all amortization expense included in Net Income (v1750), Amortization on Goodwill and Amortization for Other Intangibles must equal or exceed Amortization Expense (v1115.00) reported separately on the Income Statement.

To enter Amortization Expense (v1115.00) for the Income Statement:

Amortization Expense (v1115.00) uses a Freeform forecast method that calculates the Amortization Expense (v1115.00) in forecast periods as equal to Amortization of Other Intangibles (v2410.03) plus Amortization of Goodwill (v2400.03).
**Operating Profit**

The income generated by the ongoing production and administrative functions of the business. The entries that follow Operating Profit (v1150.00) (with the exception of income gains or losses from the sales of assets), should be restricted to income and expenses related to:

1. Unusual or nonrecurring transactions
2. Investments outside the company
3. Interest income and expense
4. Taxes

Operating Profit (v1150.00) is calculated as follows:

\[
(v1100.00) \ \text{Earnings Before Int., Taxes, Depr., and Amort.} \\
- (v1110.00) \ \text{Depreciation Expense} \\
- (v1115) \ \text{Amortization Expense}
\]

\[=(v1150.00) \ \text{Operating Profit}\]

**Other Revenues & Gains**

This account can be used to enter nonoperating items that do not fit into other categories on the Income Statement or that should be highlighted as an account. Enter expenses as negative numbers.

You can rename this account with a label that is more consistent with your income or expense item in the Financial Accounts view.

**Gain on Sale of Assets**

A gain is realized on the sale or retirement of assets when the proceeds received exceed the net book value of the assets sold. Similarly, a loss results when the proceeds are less than the net book value of the assets sold. Enter gains as a positive number and losses as a negative number. For historical periods, enter the before-tax gain or loss on the sale of assets as it should appear on the Income Statement. For forecast periods, enter the gain or (loss) on the sale of assets or use the default Freeform formula to enter the Proceeds from Sale of Assets.

Forecast Proceeds from Sale of Assets (Default Forecast Method)

Freeform formula:

\[
@\text{input} \ \text{Proceeds from Sale of Assets} \\
- (v2170.03) \ \text{Gross Retirements} \\
+ (v2190.03) \ \text{Accumulated Depreciation on Retirements}
\]
The sale or retirement of assets also affects the Balance Sheet and the Cash Flow Statement. The Balance Sheet reflects the reduction in Gross Fixed Assets (v2170) and Accumulated Depreciation (v2190) due to the sale of assets. The Cash Flow Statement contains Proceeds from Sale of Assets (v4000) with the tax on the gain of sale of assets included in Total Taxes on Operations (v3280).

The Funds Flow statement shows the Gain on Sale of Assets as a source of funds.

**Other Expenses & Losses**

Can be used to enter special nonoperating items that do not fit into the other categories on the Income Statement. This item is a subtraction, because such items are typically losses. Therefore, to represent a nonoperating gain or income, enter it as a negative number. Expenses or losses in this account are entered as positive number.

This account can be renamed in the Financial Accounts view with a description more consistent with the nature of your nonoperating items.

**Dividends from Investments: Cost**

This nonoperating income statement item refers to dividends received from long-term investments in companies over which the investing company lacks “significant influence,” presumably holding less than 20% of the stock and intending to hold it for years. These investments are reported on the Balance Sheet in Investments: Cost Method (v2430).

If the investment is in marketable equity securities, the investing company reports the investments based on acquisition cost or market value, whichever is less. If the investment is in the form of nonequity or nonmarketable securities, it is reported at acquisition cost. Dividends from these investments are treated as revenue.

**Earnings Before Interest & Taxes**

This Income Statement account is calculated as follows:

\[
= (v1170.00) \text{ Gain on Sale of Assets}
\]

\[
\text{Operating Profit} - (v1180.00) \text{ Other Expenses & Losses} + (v1170.00) \text{ Gain on Sale of Assets} + (v1160.00) \text{ Other Revenues & Gains} + (v1190.00) \text{ Dividends from Investments: Cost}
\]

\[
= (v1200.00) \text{ Earnings Before Interest & Taxes}
\]
**Other Interest Income**

Can be used to summarize the income, in history and forecast, the company receives from its Marketable Securities (v2010) and Excess Marketable Securities (v2015), and other interest income earned. You can forecast this account using the default forecast method, Default Currency, or based on a percent of current, prior, or average balances of one or more investment accounts.

You may also choose to forecast the detail of interest on Marketable Securities (v2010.05) and Excess Marketable Securities (v2015.5) in their respective accounts.

Interest Income is considered a nonoperating income item and therefore is not included in the calculation of Cash Flow from Operations (v4100), which is used in calculating shareholder value.

**Total Interest Income**

Calculated as:

- (v1220.00) Other Interest Income
- + (v2010.05) Interest on Marketable Securities
- + (v2015.05) Interest on Excess Mkt. Securities
- + (v2460.05) Interest on L-T Funding Asset

= (v1240.00) Total Interest Income

**Total Short-Term Interest Expense**

Nonoperating account that captures the total interest expense associated with interest-bearing obligations due within one year. This account, used only on the Funding Analysis Report, is calculated as follows:

- (v2510.05) Interest on Curr. Portion of L-T Debt
- + (v2520.05) Interest on Notes Payable

= (v1300.00) Total Short-Term Interest Expense

**Total Interest on Long-Term Debt: Scheduled**

The Total Interest on Long-Term Debt: Scheduled is calculated as follows:

- (v2660.05) Interest on Long-Term Debt: Scheduled
- + (v2660.03) Non-Cash Int on Long-Term Debt: Scheduled
(v1360.00) Other Interest Expense

Nonoperating item is input into historical and forecast periods. For more-detailed reporting, this account allows you to enter a summary interest expense amount or other interest expense. Interest expense detail typically is not displayed in historical periods on financial statements, but interest detail usually is forecast instead of the summary amount.

(v1370.00) Total Long-Term Interest Expense

Total Long-Term Interest Expense (v1370.00) due on long-term debt.

\[
\begin{align*}
(v1350.00) & \quad \text{Total Interest on Long-Term Debt: Scheduled} \\
+ (v2690.05) & \quad \text{Interest on Long-Term Debt: Excess} \\
+ (v1360.00) & \quad \text{Other Interest Expense} \\
= (v1370.00) & \quad \text{Total Long-Term Interest Expense}
\end{align*}
\]

(v1400.00) Interest Expense

The sum of various interest expense accounts, before accounting for Interest Capitalized (v1410).

\[
\begin{align*}
(v1300.00) & \quad \text{Total Short-Term Interest Expense} \\
+ (v1370.00) & \quad \text{Total Long-Term Interest Expense} \\
= (v1400.00) & \quad \text{Interest Expense}
\end{align*}
\]

(v1410.00) Interest Capitalized

Interest costs are “capitalized” in certain situations relating to financing the construction or acquisition of certain “qualified” fixed assets. For guidelines, see FASB Statement No. 34.

Interest Capitalized (v1410.00) represents the capitalized interest in each historical and forecast period. The period-by-period values you enter for Interest Capitalized (v1410.00) are subtracted from the total of all interest expense accounts to arrive at the Total Interest Expense (v1420) reported on the Income Statement.

Historical figures for Gross Fixed Assets (v2170) and Accumulated Depreciation (v2190) typically include capitalized interest. To forecast the change in Gross Fixed Assets (v2170) due to capitalized interest separately from other capital expenditures, create a subaccount of Gross Fixed Assets (v2170) to hold the accumulated balance of capitalized interest.
(v1420.00) Total Interest Expense
This account nets the sum of all interest expense accounts with Interest Capitalized (v1410).

(v1400.00) Interest Expense
- (v1410.00) Interest Capitalized

= (v1420.00) Total Interest Expense

(v1600.00) Earnings Before Taxes

(v1200.00) Earnings Before Interest and Taxes
- (v1420.00) Total Interest Expense
+ (v1240.00) Total Interest Income

= (v1600.00) Earnings Before Taxes

(v1610.00): Trial Provision for Income Taxes
Contains the cash taxes paid by a company excluding refunds due to net operating losses carried forward or backward. Income taxes consist of domestic and foreign federal (national), state, and local (including franchise) taxes based on income. In historical periods, enter the taxes paid. In the forecast periods, the default forecast method is as a Percent of Taxable Income (v3140.00). The statutory tax rate must be entered into the Trial Provision for Income Taxes (v1610.00) account. This formula can be modified to model different tax calculations types (such as for various countries) using a Freeform formula.

(v1620.00) Unrealized Tax Benefit of Losses
Input in history and calculated in forecast periods, the period-by-period offset to Trial Provision for Income Taxes (v1610) in case of a tax loss.

(v1630.00) Current Provision for Income Taxes (Excl. NOL)
Calculated account displays the output of Trial Provision for Income Taxes (v1610) plus Unrealized Tax Benefit of Losses (v1620). Because Trial Provision for Income Taxes (v1610) receives the tax rate input and calculates a tax amount, and Unrealized Tax Benefit of Losses (v1620) adjusts the tax amount for NOL-related carryforwards, this account shows the result of the tax rate and the tax benefit on the Income Statement.

(v1610.00) Trial Provision for Income Taxes
+ (v1620.00) Unrealized Tax Benefit of Losses
(v1635.00) Additional Tax Refund

Input tax refunds manually in this account. If calculating tax refunds, this account acts as an adjustment to the calculated Tax Refund (v1640). Use this account, for example, to enter a more refined estimate of your tax refund.

(v1640.00) Tax Refund

Tax refund associated with a loss carry forward or back. This account is automatically calculated if you select Calculate Tax Effects Automatically on the Tax Effect of Losses dialog. In the historical periods, the input for Additional Tax Refund (v1635) is used in this account. In the forecast periods, this account is calculated as:

\[
\text{Tax Refund} = (v1635.00) \text{ Additional Tax Refund} \\
+ (v3150.00) \text{ Tax Refund Due to Loss Carryforward} \\
+ (v3160.00) \text{ Tax Refund Due to Loss Carryback}
\]

= (v1640.00) Tax Refund

(v1650.00) Current Provision for Income Taxes

Cash taxes paid by a company in a given year, including tax refunds resulting from net operating loss (NOL) carryforwards and carrybacks. It is calculated as:

\[
\text{Current Provision for Income Taxes} = (v1630.00) \text{ Curr. Provision for Income Taxes (Excl. NOL)} - (v1640.00) \text{ Tax Refund}
\]

= (v1650.00) Current Provision for Income Taxes

(v1660.00) Deferred Provision for Income Taxes

Measures taxes owed in future periods due to timing differences. These events occurred in the current period but generate future tax liabilities (or assets). See “(v5070.00) Shareholder Value (PV)” on page 402.

One temporary difference results from accelerated depreciation schedules. Greater depreciation early in the life of an asset results in tax savings today (as compared to straight-line depreciation), but savings are offset in later years when book depreciation is greater than tax depreciation.

The default forecast method is as a Percent of Temporary Differences (v3120.00).
Deferred Provision for Income Taxes also can be calculated as the net change in deferred taxes, using the Freeform formula:

\[
\begin{align*}
(v2770.01) & \quad \text{Incr. in Deferred Income Taxes} \\
+ & \quad (v2580.01) \quad \text{Incr. in Current Deferred Tax Liability} \\
- & \quad (v2380.01) \quad \text{Incr. in Deferred Tax Asset} \\
- & \quad (v2080.01) \quad \text{Incr. in Current Deferred Tax Asset} \\
= & \quad (v1660.00) \quad \text{Deferred Provision for Income Taxes}
\end{align*}
\]

**(v1670.00) Provision for Income Taxes**

Company's net tax liability on all income regardless of when these taxes become payable. In most cases, this amount is less than the amount for which a company is liable using the statutory rate.

Calculated as follows:

\[
\begin{align*}
(v1650.00) & \quad \text{Current Provision for Income Taxes} \\
+ & \quad (v1660.00) \quad \text{Deferred Provision for Income Taxes} \\
= & \quad (v1670.00) \quad \text{Provision for Income Taxes}
\end{align*}
\]

**(v1680.00) Other Taxes**

Represents additional tax obligations not captured in other tax accounts.

**(v1690.00) Total Taxes**

Sums the Provision for Income Taxes (v1670) and Other Taxes (v1680):

\[
\begin{align*}
(v1670.00) & \quad \text{Provision for Income Taxes} \\
+ & \quad (v1680.00) \quad \text{Other Taxes} \\
= & \quad (v1690.00) \quad \text{Total Taxes}
\end{align*}
\]

**(v1700.00) Income After Taxes**

This Income Statement account consists of:

\[
\begin{align*}
(v1600.00) & \quad \text{Earnings Before Taxes} \\
- & \quad (v1690.00) \quad \text{Total Taxes} \\
= & \quad (v1700.00) \quad \text{Income After Taxes}
\end{align*}
\]
(v1720.00) Minority Interest

If the company you are analyzing (Company A) owns more than 50% but less than 100% of another company (Company B), it typically consolidates the financial statements of the two entities. To recognize that a portion of the combined company’s income and assets do not belong to the shareholders of Company A, the account Minority Interest (v1720, v2780) appears on both the Income Statement (as a deduction) and on the Balance Sheet (as equity). Enter Minority Interest (v1720.00) as an after-tax amount.

For example, assume Company A owns 60% of Company B, and Company A produces consolidated financial statements combining the two companies. All of Company B’s earnings ($20 million) and equity ($100 million) are included in Company A’s Income Statement and Balance Sheet. But because Company B’s other shareholders own 40% of the earnings and equity contributed by Company B, Minority Interest (v1720.00), is calculated and recorded as 40% of the $20 million of Company B’s earnings or $8 million.

(v1730.00) Extraordinary Items

These income statement items relate to transactions or events that are unusual and infrequent. Enter amounts as after-tax and add them to income after taxes. Enter an extraordinary loss as a negative number.

The company’s environment is key to deeming a loss extraordinary. For example, damage sustained by forest products companies after Mount St. Helens erupted is an Extraordinary Item (v1730.00), because the volcano had not erupted since logging began in Washington State. But frost damage to Florida citrus crops is not extraordinary, because freezing temperatures are anticipated every few years.

Exceptional items that do qualify for classification as extraordinary:

- Material gains and losses from early extinguishment of debt
- Tax benefits of loss carryforwards recognized in periods after the loss

(v1750.00) Net Income

After-tax Income Statement item is calculated as:

\[
\text{(v1700.00) Income After Taxes} + \text{(v2420.03) Earnings from Investments: Equity} - \text{(v1720.00) Minority Interest} + \text{(v1730.00) Extraordinary Items} = \text{(v1750.00) Net Income}
\]
(v1800.00) Preferred Dividends
Dividends (v1800.00), classified as a distribution of income, not as an expense, to be paid to holders of Preferred Stock (v2820).

(v1850.00) Income Available for Common Shareholders
Portion of Net Income (v1750) available to pay Common Dividends (v1900), calculated by Net Income (v1750) minus Preferred Dividends (v1800).

(v1880.00) Common Dividends
Cash dividends to be paid to holders of common stock. Using the default forecast method, enter this item in Absolute Currency amounts in historical periods and as a Percent of Net Income (v1750) in forecast periods.

(v1890.00) Affordable Dividend
Affordable dividend is a calculated account in all forecasted years. The calculation runs as a balancing account when using Target Capital Structure in Funding Options. This account is useful when a user must decrease their equity without selling shares.

(v1900.00) Total Common Dividends
Calculated account sums Common Dividends (v1880) and Affordable Dividends (v1890). This account does not allow for inputs or subaccounting. Total Asset Turnover (v6085.00)

Total Asset Turnover (v6085.00) is an activity ratio that shows how intensively the company’s assets are being used. The ratio is calculated as follows:
Sales (Net) (v1030.00)
2000.xx.xxxx to 2999.xx.xxx Accounts

Subtopics

- (v2000.00) Cash
- (v2005.00) Cash Used in Transaction
- (v2010.00) Marketable Securities
- (v2015.00) Excess Marketable Securities
- (v2017.00) Total Marketable Securities
- (v2020.00) Accounts Receivable
- (v2030.00) Allowance for Doubtful Accounts
- (v2035.00) Net Accounts Receivable
- (v2040.00) Inventory
- (v2050.00) Notes Receivable
- (v2060.00) Prepaid Expenses
- (v2070.00) Intercompany Current Assets
- (v2080.00) Current Deferred Tax Assets
- (v2090.00) Other Current Assets—Operating
- (v2095.00) Other Current Assets—Non-Operating
- (v2100.00) Total Current Assets
- (v2170.00) Gross Fixed Assets
- (v2190.00) Accumulated Depreciation
- (v2200.00) Net Fixed Assets
- (v2380.00) Deferred Tax Asset
- (v2390.00) Land
- (v2400.00) Goodwill
- (v2410.00) Other Intangibles
- (v2420.00) Investments: Equity Method
- (v2430.00) Investments: Cost Method
- (v2440.00) Other Assets
- (v2460.00) Long-Term Funding Asset
- (v2470.00) Non-Current Operating Asset
- (v2480.00) Total Non-Current Assets
- (v2490.00) Total Assets
- (v2490.00) Total Assets
- (v2500.00) Accounts Payable
- (v2510.00) Current Portion of Long-Term Debt
- (v2510.00) Current Portion of Long-Term Debt
- (v2520.00) Notes Payable
- (v2525.00) Accrued Interest
- (v2590.00) Other Current Liabilities—Operating
- (v2530.00) Income Taxes Payable
- (v2540.00) Intercompany Current Liabilities
- (v2580.00) Current Deferred Tax Liability
- (v2595.00) Other Current Liabilities—Non-Operating
- (v2600.00) Total Current Liabilities
- (v2660.00) Long-Term Debt: Scheduled
- (v2690.00) Long-Term Debt: Excess
- (v2690.09) Balance Correction Long-Term Debt: Excess
- (v2700.00) Total Long-Term Debt
- (v2760.00) Other Deferrals
- (v2770.00) Deferred Income Taxes
- (v2780.00) Minority Interest
Cash (v2000.00) includes these accounts recorded at their stated book value:

1. Currency and coins
2. Negotiable checks
3. Balances in bank accounts

For valuation purposes, enter in Cash (v2000.00) only the minimum balances necessary for normal operations; include excess cash in Marketable Securities (v2010). Minimum cash balances include such accounts as compensating balances required by loan agreements and the level of cash and bank balances necessary to fulfill daily transactions.

**(v2005.00) Cash Used in Transaction**

Cash used to finance an acquisition. It is related only to the acquisition and therefore is separate from the cash balance (v2000.00). This account is used to calculate the ending cash balance (v4630) on the Cash Flows report.

**(v2010.00) Marketable Securities**

(Increase in Marketable Securities (v2010.01))

Marketable Securities (v2010.00) are short-term investments intended to be held for no longer than one year, such as short-term certificates of deposit, Treasury bills, Treasury bonds, and cash not entered in Cash (v2000). Their value has generally been recorded at acquisition cost, although an increasing number of companies are stating these securities at the lower of acquisition cost or market value.

For valuation purposes, enter current market values, even if the resulting Balance Sheet does not tie to published financials.

**(v2010.05) Interest on Marketable Securities**

The pretax rate or dollar amount of interest you can expect to earn on Marketable Securities (v2010), such as government securities and certificates of deposit.

Interest on Marketable Securities (v2010.05) is input in history and forecast periods. The default forecast method for Interest on Marketable Securities (v2010.05) is as a Percent of Prior Period Marketable Securities (v2010). You can also use the Percent of Another Account or the Percent of Average Account forecast methods.

**(v2010.06) Minimum Marketable Securities**

This account allows you to specify a minimum balance to be maintained for Marketable Securities (v2010) in all periods. If Marketable Securities (v2010) is selected as a Cash Deficit account in Funding Options, and Specify minimum balance is selected in Advanced Options, Marketable Securities (v2010) does not fund below the specified minimum balance in this
account. If this setting in Advanced Options is not selected, amounts entered in this account
does not affect other calculations or accounts in your model.

**(v2010.07) Maximum Marketable Securities**

(Incr. in Maximum Marketable Securities (v2010.08))

Used to specify the maximum balance for Marketable Securities (v2010) to reach when Funding
Options is accumulating a Cash Surplus.

**(v2010.09) Balance Correction Marketable Securities**

This account, calculated in all periods, receives amounts, generated by the balancing routine in
Strategic Finance, that must make the funds flow balance (sources and uses of funds) in the
forecast period.

**(v2015.00) Excess Marketable Securities**

(Incr. in Excess Market. Securities (v2015.01))

Excess Marketable Securities (v2015.00), like Marketable Securities (v2010), are short-term
investments. When all funding instruments are reduced and funds remain, Excess Marketable
Securities (v2015.00) accumulates excess funds. This account is the first funding source in the
case of a Cash Deficit. Like Long-Term Debt: Excess (v2690), most attributes related to this
account are unchangeable. You cannot subaccount Excess Marketable Securities (v2015.00),
which has an unlimited maximum balance. A minimum balance cannot be specified, and the
Cash Surplus Account and Cash Deficit Account orders cannot be changed.

**(v2015.05) Interest on Excess Mkt. Securities**

Pretax rate or dollar amount of interest you can expect to earn on Excess Marketable Securities
(v2015), such as government securities and certificates of deposit.

Interest on Excess Marketable Securities (v2015.05) is input in history and forecast periods. The
default forecast method for Interest on Excess Marketable Securities (v2015.05) is as a Percent
of Prior Period Excess Marketable Securities (v2015). You can also use the Percent of Another
Account or the Percent of Average Account forecast methods.

**(v2015.09) Balance Correction Excess Market Securities**

This account, calculated in all periods, receives amounts, generated by the balancing routine in
Strategic Finance, that must make the funds flow balance (sources and uses of funds) in forecast
periods.
**Total Marketable Securities**

**Increase in Total Marketable Securities**

Balance Sheet account sums the two marketable securities accounts in:

- **Marketable Securities**
- **Excess Marketable Securities**

\[ (v2017.00) \text{ Total Marketable Securities} \]

**Accounts Receivable**

**Increase in Accounts Receivable**

Accounts Receivable are accounts that the company expects debtors to pay within one year. Factors determining Accounts Receivable: volume of Sales, proportion of sales made on account, company credit policy, and customers' financial health.

By entering the Increase in Accounts Receivable as a Percent of Change in Sales, the default forecast method, you can account for the fact that additional investments in this working capital account usually are necessary for sales growth.

**Allowance for Doubtful Accounts**

**Increase in Allowance for Doubtful Accounts**

This Balance Sheet account represents the estimated amount of Accounts Receivable that you cannot collect.

**Net Accounts Receivable**

**Increase in Net Accounts Receivable**

Balance Sheet account nets Accounts Receivable and uncollectable amounts. The formula:

\[ (v2020.00) \text{ Accounts Receivable} - (v2030.00) \text{ Allowance for Doubtful Accounts} = (v2035.00) \text{ Net Accounts Receivable} \]

**Inventory**

**Increase in Inventory**
This account on the Balance Sheet represents:

1. For manufacturing firms: the total of Raw Materials, Work in Progress, and Finished Goods, recorded at the lower of cost or market value. (Or, using the Financial Accounts view, you can define subaccounts for each category.)

2. For non-manufacturing firms: total purchases

By entering the Increase in Inventory (v2040.01) as a Percent of Change in Sales (v1000), the default forecast method, you can account for the fact that additional investments in working capital usually are necessary to support sales growth. If you prefer, select the alternative forecast method, Turns, and enter your forecast data as an inventory turnover rate. Or select the Days forecast method and enter the number of inventory days. In both cases, specify the Associated Account as Cost of Goods Sold (v1040), or a subaccount of this account denoting goods purchased.

**(v2050.00) Notes Receivable**

(Increase in Notes Receivable (v2050.01))

Face value of outstanding notes that the company expects to collect within one year. Notes Receivable (v2050.00) usually differs from trade accounts in two ways:

1. Notes Receivable (v2050.00) are evidenced by a formal promissory note, whereas Accounts Receivable (v2020) involve only an informal promise to pay.
2. Notes Receivable (v2050.00) often earn interest, whereas Accounts Receivable (v2020) usually do not.

Any interest income from Notes Receivable (v2050.00) can be entered into Other Interest Income (v1220).

**(v2060.00) Prepaid Expenses**

(Increase in Prepaid Expenses (v2060.01))

Advance payments for future services. Examples of Prepaid Expenses (v2060.00) include rent and insurance premiums paid in advance.

**(v2070.00) Intercompany Current Assets**

(Increase in Intercompany Current Assets (v2070.01))

Carrying accounts that often are maintained between companies within a consolidated group. Depending on funding policies of the parent company, the balance may consistently be in a net asset or net liability position. The position may be represented by using Intercompany Current Assets (v2070.00) or Intercompany Current Liabilities (v2540).
(v2080.00) Current Deferred Tax Assets

(Increase in Current Deferred Tax Asset (v2080.01))

Temporary differences may lead to recording a Deferred Tax Asset (v2350); that is, a future expected tax benefit. The portion of the tax benefit that reverses within a year is a current asset, recorded in the Current Deferred Tax Asset (v2080.00) account.

See “(v2510.05 Interest on Current Portion Long-Term Debt” on page 357.

(v2090.00) Other Current Assets—Operating

(Increase in Other Current Assets—Operating (v2090.01))

Balance Sheet account includes other assets, which you expect to turn into cash, sell, or exchange within the usual operating cycle of the company (typically one year), to exclude from the other current asset categories (v2000 through v2070).

To rename this account, go to the Financial Accounts view. If you rename this account, you should also rename the related funds flow account Increase in Other Current Assets (v2090.01).

(v2095.00) Other Current Assets—Non-Operating

(Increase in Other Current Assets—Non-Operating (v2095.01))

Nonoperating assets that you expect to turn into cash, sell, or exchange within the normal operating cycle (typically one year). Entries are not included in Cash Flow from Operations (v4100).

(v2100.00) Total Current Assets

(Increase in Total Current Assets (v2100.01))


(v2170.00) Gross Fixed Assets

For historical periods, enter the total Gross Fixed Assets in (v2170.00) as it appears on the Balance Sheet. In forecast periods, you can forecast Gross Fixed Assets (v2170.00) or Gross Retirements (v2170.03). Strategic Finance calculates Gross Fixed Assets (v2170.00) in forecast periods by default, where you are forecasting and entering Gross Retirements (v2170.03) as follows:

\[
\text{(v2170.00)} \quad \text{Gross Fixed Assets (prior period)} \\
+ \quad \text{(v2170.01)} \quad \text{Fixed Capital Investment} \\
- \quad \text{(v2170.03)} \quad \text{Gross Retirements}
\]
or you can forecast and enter the ending balance for Gross Fixed Assets (v2170.00) and Gross Retirements (v2170.03) is calculated:

\[
(v2170.00) \quad \text{Gross Fixed Assets (prior period)}
\]

\[
+ \quad (v2170.01) \quad \text{Fixed Capital Investment}
\]

\[
- \quad (v2170.00) \quad \text{Gross Fixed Assets (current period)}
\]

\[
= \quad (v2170.03) \quad \text{Gross Retirements}
\]

You must enter Fixed Capital Investment (v2170.01) and Gross Retirements (v2170.03) or Fixed Capital Investment (v2170.01) and Gross Fixed Assets (v2170.00). Strategic Finance calculates the remaining account.

**(v2170.01) Fixed Capital Investment**

This account represents total Fixed Capital Investment (v2170.01) for both new and replacement equipment included in Gross Fixed Assets (v2170). Use this account to enter all fixed capital investment (as listed in the Investing Cash Flow section of most FASB Cash Flow Statements).

**(v2170.03) Gross Retirements**

Reductions in Gross Fixed Assets (v2170) resulting from assets scrapped, retired, or sold. In cases in which assets were sold, you can enter the sale proceeds in Proceeds from Asset Sales (v4000) in the forecast periods.

**(v2190.00) Accumulated Depreciation**

For historical periods, enter the total Accumulated Depreciation as it appears on the Balance Sheet. In forecast periods, you can forecast Accumulated Depreciation (v2190.00) or Accumulated Depreciation on Retirements (v2190.03). Strategic Finance calculates Accumulated Depreciation (v2190.00) in forecast periods by default, where you are forecasting and entering Accumulated Depreciation on Retirements (v2190.03) as follows:

\[
(v2190.00) \quad \text{Accumulated Depreciation (prior period)}
\]

\[
+ \quad (v2190.01) \quad \text{Depreciation Expense}
\]

\[
- \quad (v2190.03) \quad \text{Accumulated Depreciation on Retirements}
\]

\[
= \quad (v2190.00) \quad \text{Accumulated Depreciation}
\]

or you can forecast and enter the ending balance for Accumulated Depreciation (v2190.00) and Accumulated Depreciation on Retirements (v2190.03) is calculated:

\[
(v2190.00) \quad \text{Accumulated Depreciation (prior period)}
\]
+ (v2190.01) Depreciation Expense
- (v2190.00) Accumulated Depreciation

= (v2190.03) Accumulated Depreciation on Retirements

You must enter Depreciation Expense (v2190.01) and Accumulated Depreciation on Retirements (v2190.03) or Depreciation Expense (v2190.01) and Accumulated Depreciation (v2190.00). Strategic Finance calculates the remaining account.

**(v2190.01) Depreciation Expense (Funds)**

The key depreciation account in Strategic Finance must be entered in historical and forecast periods. This account is used on the Balance Sheet to calculate Accumulated Depreciation (v2190.00) and also on the Cash Flow Statement as an adjustment to Net Income (v1750).

Any depreciation expense amount entered on the Income Statement into accounts such as Depreciation Expense (v1110), Cost of Goods Sold (v1040) or SG&A Expense (v1080), is used in calculations on the Income Statement only and is not included in calculations on the Cash Flow Statement.

The default forecast method for Depreciation Expense (Funds) (v2190.01) is as a Percent of Prior Period Gross Fixed Assets (v2170).

**(v2190.03) Accumulated Depreciation on Retirements**

This account represents the total accumulated depreciation for an asset that is being retired or sold. The default forecast method for this account is as a percent of Gross Retirements (v2170.03).

**(v2200.00) Net Fixed Assets**

(Increase in Net Fixed Assets (v2200.01))

Balance Sheet account deducts Accumulated Depreciation (v2190) from Gross Fixed Assets (v2170):

\[
(v2170.00) \quad \text{Gross Fixed Assets} \\
- (v2190.00) \quad \text{Accumulated Depreciation} \\
= (v2200.00) \quad \text{Net Fixed Assets}
\]

**(v2380.00) Deferred Tax Asset**

(Increase in Deferred Tax Asset (v2380.01))
Temporary differences may lead to the recording of a Deferred Tax Asset (v2380.00) which is a future expected tax benefit. The portion of the tax benefit that reverses after a year is a non-current asset, recorded in the Deferred Tax Asset (v2380.00) account.

See “(v1660.00) Deferred Provision for Income Taxes ” on page 339.

**(v2390.00) Land**

(Additions to Land (v2390.01))

The total acquisition cost of all Land (v2390.00) plus non-depreciable land improvements.

Additions to Land (v2390.01) are assumed to affect the ongoing productive capacity of the company, much like Fixed Capital Investment (v2170.01). As a result, Additions to Land (v2390.01) is included in the calculation of Cash Flow from Operations (v4100).

**(v2400.00) Goodwill**

Includes goodwill and other intangible assets for which amortization is not deductible for federal income tax purposes. All other intangible assets should be classified as Other Intangibles (v2410). These assets include mailing lists, organization costs, licenses, franchises, and permits (for exploration, import, export, and construction).

Using the default forecast method, enter only the annual additions to this account in the forecast period. Strategic Finance calculates the balance, after deducting amortization charges, which you enter in Amortization of Goodwill (v2400.03):

\[
(v2400.00) \text{ Goodwill (prior period)}
\]

\[
+ (v2400.01) \text{ Additions To Goodwill}
\]

\[
- (v2400.03) \text{ Amortization of Goodwill}
\]

\[
= (v2400.00) \text{ Goodwill}
\]

**(v2400.01) Additions to Goodwill**

This funds flow account represents additions to the Goodwill account (v2400) over the last year. Goodwill results from the purchase of identifiable assets at a cost exceeding the fair-market value. Additions to Goodwill (v2400.01) most commonly occur as a result of a merger or acquisition in which the purchase method of accounting is used. If the buyer pays a price that exceeds the fair value of the seller’s revalued assets, the excess must be recorded as Goodwill (v2400) on the Balance Sheet of the combined companies.

**(v2400.03) Amortization of Goodwill**

This Balance Sheet account is the period-by-period allocation of the cost of the intangible assets included in Goodwill (v2400). Goodwill must be amortized over a period no longer than 40
years. Because this amortization is deducted for computing Operating Profit (v1150), but is not deductible for federal income tax purposes, it is added back to Earnings Before Taxes (EBT) (v1600.00) to arrive at Taxable Income.

The amount of Amortization of Goodwill (v2400.03) entered into the forecast period decreases the Balance Sheet amount of Goodwill (v2400).

**(v2410.00) Other Intangibles**

Goodwill (v2400) includes goodwill and other intangible assets for which the amortization is not deductible for federal income tax purposes. Classify all other intangible assets—accounts such as mailing lists, organization costs, licenses, franchises, and permits (for exploration, import, export, and construction—as Other Intangibles (v2410.00).

Using the default forecast method, enter only the annual additions to this account in the forecast period. Strategic Finance calculates the balance after deducting amortization charges, which you enter in Amortization of Other Intangibles (v2410.03):

\[
\begin{align*}
(v2410.00) & \quad \text{Other Intangibles (prior period)} \\
+ & \quad (v2410.01) \quad \text{Additions to Other Intangibles} \\
- & \quad (v2410.03) \quad \text{Amortization of Other Intangibles} \\
\end{align*}
\]

\[
= (v2410.00) \quad \text{Other Intangibles}
\]

**(v2410.01) Additions to Other Intangibles**

This account represents the additions to the Other Intangibles account (v2410) from the prior period.

**(v2410.03) Amortization of Other Intangibles**

This account refers to the period-by-period allocation of the acquisition cost of intangibles other than Goodwill (v2400). Typically, these assets have a limited useful life, and their amortization is deductible for federal income tax purposes. Entry of Amortization of Other Intangibles (v2410.03) in the forecast period automatically reduces the amount of Other Intangibles (v2410) on the Balance Sheet.

Examples of intangibles:

- Copyrights, patents, and trademarks
- Organization costs
- Franchises
- Capitalized advertising costs
- Mailing lists
- Licenses
Permits (for exploration, import/export, construction)

Leases

(v2420.00) Investments: Equity Method

(Increase in Investments: Equity Method (v2420.01))

This balance sheet account represents investments in companies that are reported using the Equity Method (specified by APB 18). This method applies when the company:

1. Owns at least 20% but not more than 50% of the subsidiary’s stock; and,

2. Intends to hold the investment for years.

In the forecast periods, by default, Strategic Finance forecasts this account as the Increase in Investments: Equity Method (v2420.01):

\[
\begin{aligned}
(v2420.00) \text{ Investments: Equity Method (prior period)} + & (v2420.01) \text{ Increase in Investments: Equity} \\
+ & (v2420.03) \text{ Earnings from Investments: Equity} \\
- & (v2420.05) \text{ Dividends from Subsidiaries} \\
= & (v2420.00) \text{ Investments: Equity Method}
\end{aligned}
\]

(v2420.03) Earnings from Investments: Equity Method

Nonoperating Income Statement item accounts for the after-tax earnings from investments in unconsolidated subsidiaries in which the investing company holds at least 20% but less than 50% of the stock. Under the Equity Method, specified in APB 18, the investing company’s proportionate share of the subsidiary’s net income is included in the investing company’s Net Income (v1750). For reporting purposes, the Balance Sheet investment account, Investments: Equity Method (v2420), is increased by earnings recognized in income. Enter Earnings from Investments: Equity Method (v2420.03) as an after-tax amount.

Notice that a corporation that accounts for an investment using the Equity Method receives only a portion of its total earnings in cash (as dividends).

(v2420.05) Dividends from Subsidiaries

Cash dividends received from investments in companies for which the Equity Method of accounting is used.

Under this method, the company’s initial investment is recorded at acquisition cost. In each period, the account value increases automatically by the amount in Earnings from Investments: Equity (v2420.03) on the Balance Sheet, the account that recognizes the company’s proportionate share of the earnings of the stock-issuing company.
Dividends recorded in Dividends from Subsidiaries (v2420.05), reduce the balance in this investments account.

Further adjustment may be necessary to ensure that the account balance reflects the lower of historic cost or market value as required by APB 18.

**(v2430.00) Investments: Cost Method**

(Increase in Investments: Cost Method (v2430.01))

This Balance Sheet account represents long-term investments in companies that are reported using the Cost Method. This method applies when the investing company lacks “significant influence,” presumably holding less than 20% of the stock, and intends to hold the investment for years.

The investing company reports these investments based on acquisition cost or market value, whichever is lower. If the investment is in the form of non-equity or non-marketable securities, it is recorded at acquisition cost.

Any dividends from these investments can be entered in Dividends from Investments: Cost (v1190).

**(v2440.00) Other Assets**

(Increase in Other Assets (v2440.01))

Long-term assets to exclude from other long-term asset accounts (v2170 through v2430)

To rename this account, use the Financial Accounts view. If you rename this account, you should rename the related funds flow account Increase in Other Assets (v2440.01).

**(v2460.00) Long-Term Funding Asset**

(Increase in Long-Term Funding Asset (v2460.01))

Another funding asset account that appears as a non-current asset. Use this account to model intercompany funding or long-term assets that might be liquidated for funding purposes. Long-Term Funding Asset (v2460.00) can be selected as a Cash Surplus and/or Deficit account within Funding Options.

**(v2460.05) Interest on Long-Term Funding Asset**

Pretax rate or dollar amount of interest you can expect to earn on Long-Term Funding Asset (v2460).

Interest on Long-Term Funding Asset (v2460.05) is input in history and forecast periods. The default forecast method for Interest on Long-Term Funding Asset (v2460.05) is as a Percent of Prior Period Long-Term Funding Asset (v2460).
(v2460.06) Minimum Long-Term Funding Asset

This account allows you to specify a minimum balance to be maintained for Long-Term Funding Asset (v2460) in all periods. If Long-Term Funding Asset (v2460) is selected in Funding Options and Specify Minimum Balance is not selected in Advanced Options, amounts entered in this account do not affect other calculations or accounts in your model.

(v2460.07) Maximum Long-Term Funding Asset

(Increase in Maximum Long-Term Funding Asset (v2460.08))

Used to specify the maximum balance for the Long-Term Funding Asset to reach when Funding Options is accumulating a Cash Surplus.

(v2460.09) Balance Correction Long-Term Funding Asset

This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that are required to make the funds flow balance.

(v2470.00) Non-Current Operating Asset

(Increase in Non-Current Operating Asset (v2470.01))

This account, which can be used to represent operating long-term assets, is included in the Cash Flow from Operations (v4100) and as a result in the calculation of Shareholder Value (v5070).

(v2480.00) Total Non-Current Assets

(Increase in Total Non-Current Assets (v2480.01))

This account, which sums non-current assets, is calculated as:

(v2200.00) Net Fixed Assets
+ (v2380.00) Deferred Tax Asset
+ (v2390.00) Land
+ (v2400.00) Goodwill
+ (v2410.00) Other Intangibles
+ (v2420.00) Investments: Equity Method
+ (v2430.00) Investments: Cost Method
+ (v2440.00) Other Assets
+ (v2460.00) Long-Term Funding Asset
+ (v2470.00) Non-Current Operating Assets
(v2490.00) Total Assets

(Increase in Total Assets (v2490.01))

Balance Sheet account consists of the sum of all current and non-current assets:

\( (v2100.00) \) Total Current Assets

\( + \) (v2480.00) Total Non-Current Assets

\( = (v2490.00) \) Total Assets

Best evaluated by analyzing the changes in turnover rates of individual asset categories such as Fixed Asset Turnover (v6080), Inventory Turnover (v6075), and Days in Receivables (v6065). Total Assets (v2490) is based on historical costs and depreciation policy. A high Total Asset Turnover (v6085.00) ratio does not mean you could buy replacement assets today and achieve the same efficiency.

(v2500.00) Accounts Payable

(Increase in Accounts Payable (v2500.01))

Accounts Payable (v2500.00), also referred to as “Trade Accounts Payable,” are current liabilities. They represent debts that must be paid within the next year.

By entering the Increase in Accounts Payable (v2500.00) (a working capital account) as a Percent of the Change in Sales (v1000), you can account for the fact that the additional investments in working capital necessary to support sales growth usually can be partly financed with trade credit. You can select the alternative forecast method, Days, and enter your forecast data in terms of Days in Payables, where the Associated Account is Cost of Goods Sold (v1040), or a subaccount of Cost of Goods Sold (v1040) denoting purchases.

(v2510.00) Current Portion of Long-Term Debt

(Increase in Current Portion of Long-Term Debt (v2510.01))

Portion of bonds, mortgage notes, and other long-term scheduled debt that matures (that is, for which some principal must be repaid) during the next fiscal year. This account refers only to repayment of the principal (face value), not to interest.

If part of a long-term obligation matures within the next year (such as serial bonds repaid in annual installments), classify the maturing portions in this account and include the balance of the obligation under Long-Term Debt: Scheduled (v2660).
(v2510.05 Interest on Current Portion Long-Term Debt)
Interest expense you expect the company to pay on the Current Portion of Long-Term Debt (v2510).
Interest on Current Portion Long-Term Debt (v2510.05) is input in history and forecast periods. The default forecast method for Interest on Current Portion Long-Term Debt (v2510.05) is as a Percent of Prior Period Current Portion Long-Term Debt (v2510).

(v2520.00) Notes Payable
(Increase in Notes Payable (v2520.01))
Notes Payable (v2520) are current liabilities (payable within one year), including:
1. Trade Notes: Unpaid face amount of promissory notes for goods and services
2. Short-Term Loan Notes: Face amount of loans payable within one fiscal year
In historical periods, enter a currency amount. In forecast periods, enter the currency amount of Notes Payable (v2520.00) or choose another forecast method. For example, you can enter a Freeform formula to forecast the Maximum Notes Payable (v2520.07).

(v2520.05) Interest on Notes Payable
Interest expense you expect the company to pay on Notes Payable (v2520).
Interest on Notes Payable (v2520.05) is input in history and forecast periods. The default forecast method for Interest on Notes Payable (v2520.05) is as a Percent of Prior Period Notes Payable (v2520).

(v2520.06) Minimum Notes Payable
Allows you to specify a minimum balance to be maintained for Notes Payable (v2520) in all periods, if Notes Payable (v2520) is specified as a Revolver in Funding Options. If Notes Payable (v2520) is selected as a Cash Deficit account in Funding Options, and Specify minimum balance is selected in Advanced Options, Notes Payable (v2520) does not fund below the specified minimum balance in this account. If this setting in Advanced Options is not selected, and Notes Payable (v2520) is not specified as a Revolver in Funding Options, amounts entered in this account do not affect other calculations or accounts in your model.

(v2520.07) Maximum Notes Payable
(Increase in Maximum Notes Payable (v2520.08))
Used to specify the maximum balance for Notes Payable (v2520) to reach when Funding Options is accumulating a Cash Surplus and Notes Payable (v2520) is specified as a Revolver.
**Balance Correction Notes Payable**

This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that are required to make the funds flow balance (sources and uses of funds) in the forecast periods.

**Accrued Interest**

*Increase in Accrued Interest (v2525.01)*

The Increase in Accrued Interest (v2525.01) is included in Non-Operating Sources (v4110) on the Cash Flow Statement and in Cash bef. External Financing (v4440) on the Indirect Cash Flow Statement.

**Other Current Liabilities—Operating**

*Increase in Other Current Liabilities—Operating (v2590.01)*

Use this operating account to include current liabilities that you do not want to include in the other current liability accounts. This account can be useful for incorporating accounts such as:

- Accrued liabilities
- Payroll taxes payable
- Unremitted payroll withholding and sales taxes
- Advances from customers
- Rent received in advance

To rename this account, use the Financial Accounts view. If you do rename this account, you should also rename the related funds flow account Increase in Other Current Liabilities—Operating (v2590.01).

**Income Taxes Payable**

*Increase in Income Taxes Payable (v2530.01)*

The current portion of the company’s income tax provision that has not been remitted. It is an operating account.

**Intercompany Current Liabilities**

*Increase in Intercompany Current Liabilities (v2540.01)*

The carrying accounts often maintained between companies within a consolidated group. Depending on funding policies of the parent company, the balance may consistently be in a net asset or net liability position. The position may be represented by using Intercompany Current Assets (v2070) or Intercompany Current Liabilities (v2540.00).
(v2580.00) **Current Deferred Tax Liability**

(Increase in Current Deferred Tax Liability (v2580.01))

Portion of the tax benefit attributable to temporary differences that reverse within a year is a current liability, such as installment sales, recorded in Current Deferred Tax Liability (v2580.00).

See “(v1660.00) Deferred Provision for Income Taxes ” on page 339.

(v2595.00) **Other Current Liabilities—Non-Operating**

This account represents nonoperating liabilities you expect to owe within the normal operating cycle of the company (typically one year). Entries to this amount are not included in Cash Flow from Operations (v4100), and as a result the calculation of Shareholder Value (v5070).

(v2600.00) **Total Current Liabilities**

(Increase in Total Current Liabilities (v2600.01))

Balance Sheet account consists of the sum of Current Liabilities:

- (v2500.00) Accounts Payable
- + (v2510.00) Current Portion of Long-Term Debt
- + (v2520.00) Notes Payable
- + (v2525.00) Accrued Interest
- + (v2530.00) Income Taxes Payable
- + (v2540.00) Intercompany Current Liabilities
- + (v2580.00) Current Deferred Tax Liability
- + (v2590.00) Other Current Liabilities
- + (v2595.00) Other Current Liabilities - Non–Operating

= (v2600.00) Total Current Liabilities

(v2660.00) **Long-Term Debt: Scheduled**

(Increase in Long-Term Debt: Scheduled (v2660.01))

The face value of long-term obligations such as bonds, term debt, mortgages, and capitalized lease obligations. This account should not include long-term debt that matures during the current fiscal year; enter that portion in Current Portion Long-Term Debt (v2510).

In history, input your actual balances. In forecast periods, you can forecast the period-by-period outstanding balance or the increase in the balance of Long-Term Debt: Scheduled (v2660).
This account can be used as a term loan or revolving credit facility (Revolver) and can be adjusted in Funding Options.

**Non-Cash Interest on Long-Term Debt: Scheduled**

Non-operating account used to calculate the noncash portion of interest expense on scheduled debt account. Noncash interest typically takes the form of zero-coupon (deep-discount) debt or payments in kind (PIKs). Enter this account as a rate or as a currency amount, depending on the forecast method you choose.

Amounts entered into this account accrete to Long-Term Debt: Scheduled (v2660). For interest coverage ratio purposes, this account is ignored, because coverage ratios usually reflect cash-on-cash coverage, not accruals.

**Minimum Long-Term Debt: Scheduled**

Allows you to specify a minimum balance to be maintained for Long-Term Debt: Scheduled (v2660) in all periods, if Long-Term Debt: Scheduled (v2660) is specified as a Revolver in Funding Options. If Long-Term Debt: Scheduled (v2660) is selected as a Cash Deficit account in Funding Options, and Specify Minimum Balance is selected in Advanced Options, Long-Term Debt: Scheduled (v2660) does not fund below the specified minimum balance in this account. If this setting in Advanced Options is not selected, and Long-Term Debt: Scheduled (v2660) is not specified as a Revolver in Funding Options, amounts entered in this account do not affect other calculations or accounts in your model.

**Maximum Long-Term Debt: Scheduled**

(Decrease in Maximum Long-Term Debt: Scheduled (v2660))

Used to specify the maximum balance for Long-Term Debt: Scheduled (v2660) to reach when it is specified as a Revolver in Funding Options.

**Balance Correction Long-Term Debt: Scheduled**

This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that must make the funds flow balance (sources and uses of funds) in the forecast period.

**Long-Term Debt: Excess**

(Decrease in Long-Term Debt: Excess (v2690.01))

The last source of funds in the case of a cash deficit. When all sources of funding (such as revolvers and funding assets) are exhausted, Funding Options borrows from Long-Term Debt: Excess (v2690.01), a revolving account with an infinite ceiling. In the event of a cash surplus, this account is repaid first. Most attributes related to this account are unchangeable. Long-Term Debt: Excess (v2690.01) has an unlimited maximum; a minimum balance cannot be specified;
and the Cash Surplus Account and Cash Deficit Account orders cannot be changed within Funding Options.

**(v2690.09) Balance Correction Long-Term Debt: Excess**

This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that are required to make the funds flow balance (sources and uses of funds) in the forecast period.

**(v2700.00) Total Long-Term Debt**

**(Increase in Total Long-Term Debt (v2700.01))**

Summary Balance Sheet account represents the total face value of all long-term debt instruments (bonds, mortgages, long-term notes, etc.). Total Long-Term Debt excludes the Current Portion of Long-Term Debt (v2510). This is account is calculated as follows:

\[
\begin{align*}
(v2660.00) & \quad \text{Long-Term Debt: Scheduled} \\
+ & \quad (v2690.00) \quad \text{Long-Term Debt: Excess} \\
= & \quad (v2700.00) \quad \text{Total Long-Term Debt}
\end{align*}
\]

**(v2760.00) Other Deferrals**

**(Increase in Other Deferrals (v2760.01))**


**(v2770.00) Deferred Income Taxes**

**(Increase in Deferred Income Taxes (v2770.01))**

A deferred income tax liability results from timing differences in the recognition of some revenue and expense accounts for book and tax purposes.

As a result of these timing differences, the total tax expense reported on the Balance Sheet may not equal the income tax paid during the year. The difference between the accounts equals Deferred Income Taxes (v2770.00), which includes changes in current and non-current deferred tax assets and liabilities for that year.

**(v2780.00) Minority Interest**

**(Increase in Minority Interest (v2780.01))**
If the company you are analyzing (Company A) owns more than 50% but less than 100% of another company (Company B), it typically consolidates the financial statements of the two entities. To recognize that a portion of the combined company’s income and assets do not belong to the shareholders of Company A, Minority Interest accounts appear on both the Income Statement (v1720), as a deduction, and on the Balance Sheet (v2780.00), as an equity account. This account should be entered as an after-tax amount.

For example:

Assume Company A owns 60% of Company B, and Company A produces consolidated financial statements combining the two companies. All of Company B’s earnings ($20 million) and equity ($100 million) are included in Company A’s Income Statement and Balance Sheet. But because Company B’s other shareholders own 40% of the earnings and equity contributed by Company B, Minority Interest (v1720, v2780.00) must be recorded as follows:

Minority Interest (v1720):
40% * $20 million = $8 million

Minority Interest (v2780.00):
40% * $100 million = $40 million

**(v2785.00) Non-Current Operating Liability**

(Increase in Non-Current Operating Liability (v2785.01))

This account, which can be used to represent operating long-term liabilities, is included in the Cash Flow from Operations (v4100), and, as a result, in the calculation of Shareholder Value (v5070).

**(v2790.00) Other Liabilities**

(Increase in Other Liabilities (v2790.01))

You can use these nonoperating accounts to include additional long-term liabilities that you want to exclude from other long-term liability accounts.

To rename Other Liabilities (v2790.00), use the Customize Accounts option. If you rename the account, rename the related funds flow account Increase in Other Liabilities (v2790.01).

**(v2795.00) Total Non-Current Liabilities**

(Increase in Total Non-Current Liabilities (v2795.01))

Balance Sheet account is calculated as:

- (v2700.00) Total Long-Term Debt
- + (v2760.00) Other Deferrals
- + (v2770.00) Deferred Income Taxes
(v2785.00) Non-Current Operating Liability
+ (v2790.00) Other Liabilities

= (v2795.00) Total Non-Current Liabilities

(v2800.00) Total Liabilities

(Increase in Total Liabilities (v2800.01))
Calculated Balance Sheet account represents the sum of all Current and Long-Term Liabilities.

(v2600.00) Total Current Liabilities
+ (v2795.00) Total Non-Current Liabilities

= (v2800.00) Total Liabilities

(v2820.00) Preferred Stock
Total cash received for preferred shares, including:
1. The par value (“face” or “stated” value) before shares are issued
2. Any additional paid-in capital

For example, if a company issues 1,000 preferred shares with a par value of $20 per share and sells them at $25 per share, it would record the Preferred Stock at $25,000 ($20,000 par value plus $5,000 additional paid-in capital). Preferred Stock generally is treated as debt in Strategic Finance because, in the event of liquidation, holders of preferred stock, like holders of debt, are given priority over dividends and assets. Therefore, Preferred Stock (v2820.00) is:

1. Subtracted with other debt accounts from Corporate Value (v5060) to compute Shareholder Value (v5070); and
2. Included with debt accounts, in the Debt/Equity Ratio (v6040) and in calculating Unused Debt Capacity (v3560).

(v2820.01 Proceeds from the Sale of Preferred Stock
Total cash received from the issuance of additional Preferred Stock (v2820). The total cash received equals the par value of issued stock plus additional paid-in capital.

(v2820.06 Minimum Preferred Stock
Used for funding options. Enter a minimum, or lower-bound, value for preferred stock. To not calculate a number below this value, select Minimum on Common Tab of the Funding Options dialog.
(v2820.07 Maximum Preferred Stock)
A funding options account calculated in Strategic Finance in all forecasted periods. This account requires a maximum, or upper-bounded, value. The Maximum value can be entered in on the input sheet in the main account, otherwise known as the xxx.00.xxxx account. When calculated, the maximum value appears in this xxx.07.xxxx account. The Maximum Preferred Stock account displays the input entered in the xxx.00.xxxx account.

(v2820.09 Balance Correction Preferred Stock)
This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that must make the funds flow balance (sources and uses of funds) in the forecast periods.

(v2830.00) Common Stock (Par Value)
Par value of stock (also called “face value” or “stated value”), which is established before it is issued.

For example, if a company issues 2,000 shares of Common Stock with par value of $15 per share and sells them at $20, it would record Common Stock of $30,000 and Additional Paid-In Capital (v2832.00) of $10,000. You can use this account to forecast additions to and reductions of common equity in forecast periods.

(v2830.01 Proceeds from the Sale of Common Stock and Paid-in Capital)
Total cash received from the issuance of additional Common Stock and Paid-in Capital (v2830). The total cash received equals the par value of the issued stock plus additional paid-in capital.

(v2832.00) Additional Paid in Capital (Common Stock)
Additional Paid in Capital is the total value of common stock less the total par value of common stock. It is generally defined as the total market value of common stock that has appreciated beyond the face value of the stock.

(v2835.00) Total Common Stock
Total Common Stock is a calculated account that sums the Common Stock at Par value (v2830.00) with the Common Stock for Additional Paid in Capital (v2832.00).
(v2836.00) Treasury Stock
Par value of Common Stock that is issued simultaneously and has been repurchased by the company. This value has not been retired but is being held by the company. Similar to Common Stock, there is an Additional Paid in Capital due to Treasury Stock (v2838.00).

(v2840.00) Common Stock (Net of Treasury)
Calculated account in Strategic Finance. It indicates how much larger (smaller) the value of common stock is to treasury stock. The calculation:

\[
\text{Common Stock (at Par Value) (v2830.00)}
+ \text{Common Stock Additional Paid in Capital (v2832.00)}
- \text{Treasury Shares (Par Value) (v2836.00)}
+ \text{Treasury Shares Additional Paid in Capital (v2838.00)}
\]

= Common Stock (Net of Treasury) (v2840.00)

(v2850.00) Retained Earnings
(Increase in Retained Earnings (v2850.01))
This calculated equity account on the Balance Sheet represents the Net Income (v1750) accumulated over the life of a corporation, less cumulative dividends and adjustments. In history, Retained Earnings (v2850.00) is calculated as Total Assets (v2490) less the sum of all liabilities (v2800) and equities other than Retained Earnings (v2850.00).

In historical periods, this account is calculated as:

\[
\text{(v2490.00) Total Assets}
- \text{(v2800.00) Total Liabilities}
- \text{(v2780.00) Minority Interest}
- \text{(v2820.00) Preferred Stock}
- \text{(v2840.00) Common Stock (Net of Treasury)}
- \text{(v2870.00) Currency Translation Adjustments}
- \text{(v2880.00) Other Equity}
\]

= (v2850.00) Retained Earnings

In forecast periods, Retained Earnings (v2850.00) is calculated as:

\[
\text{(v2850.00) Retained Earnings (prior period)}
+ \text{(v1750.00) Net Income}
\]
These methods of determining Retained Earnings should yield the same result due to the
They may yield different results in historical periods if a transaction that affects equity but does
not flow through the Balance Sheet is reflected on the historical financials you are replicating.
If this occurs, a warning message is printed on your reports indicating an out-of-balance
condition. You will get this message if the out-of-balance condition in history is due to a data-
entry error.

**(v2865.00) Prior Retained Earnings**
The prior period Retained Earnings on the Statement of Retained Earnings.

**(v2867.00) Retained Earnings Variance**
Calculates variances in beginning and ending Retained Earnings (v2850) other than Net Income
(v1750), Dividends (v1800, v1900), and Funds Flow Adjustments (v3000, v3020). It appears on
the Statement of Retained Earnings. This account can be used for troubleshooting a Funds Flow
out-of-Balance error and is calculated as follows:

\[
(v2850.00) \quad \text{Retained Earnings (prior period)} \\
+ (v1750.00) \quad \text{Net Income} \\
- (v1800.00) \quad \text{Preferred Dividends} \\
- (v1900.00) \quad \text{Common Dividends} \\
+ (v3000.00) \quad \text{Funds Flow Adj: Source} \\
- (v3020.00) \quad \text{Funds Flow Adj: Use} \\
- (v2850.00) \quad \text{Retained Earnings} \\
= (v2870.00) \quad \text{Retained Earnings Variance}
\]

**(v2870.00) Currency Translation Adjustments**

(Increase in Currency Translation Adjustments (v2870.01))
Account for the effect of nonmonetary foreign currency translations using this account.
**(v2880.00) Other Equity**

*(Increase in Other Equity (v2880.01))*

This account can be used to account for other equity items such as: Treasury Stock and Pension Liability Adjustments.

To rename this account, use the Financial Accounts view. If you rename this account, you should also rename the related funds-flow account Increase in Other Equity (v2880.01).

**(v2890.00) Common Equity**

No. of Common Shares Year End (v3400.00)

Capital Charge (BV * RROC) (v5730.00)

The Capital Charge is the amount, calculated by multiplying Adjusted Book Value in the prior period (v5725) by RROC (v5700), that a firm is charged for its invested capital.

**(v2890.00) Common Equity**

*(Increase in Common Equity (v2890.01))*

This Balance Sheet account is calculated as:

\[
\begin{align*}
(v2830.00) & \quad \text{Common Stock and Paid in Capital} \\
+ (v2850.00) & \quad \text{Retained Earnings} \\
+ (v2870.00) & \quad \text{Currency Translation Adjustments} \\
+ (v2880.00) & \quad \text{Other Equity} \\
= (v2890.00) & \quad \text{Common Equity}
\end{align*}
\]

**(v2895.00) Total Equity**

*(Increase in Total Equity (v2895.01))*

Total Equity (v2895.01) is calculated as:

\[
\begin{align*}
(v2780.00) & \quad \text{Minority Interest} \\
+ (v2820.00) & \quad \text{Preferred Stock} \\
+ (v2890.00) & \quad \text{Common Equity} \\
= (v2895.00) & \quad \text{Total Equity}
\end{align*}
\]
(v2900.00) Total Liabilities and Equity

(Increase in Total Liabilities and Equity (v2900.01))

Calculated Balance Sheet account consists of the sum of all liability and equity accounts:

(v2800.00) Total Liabilities
+ (v2895.00) Total Equity
= (v2900.00) Total Liabilities and Equity
+ (v1240.00) Total Interest Income
= (v1600.00) Earnings Before Taxes
(v3000.00) Funds Flow Adjustment: Sources

3000.xx.xxx to 3999.xx.xxx Accounts

Subtopics

- (v3000.00) Funds Flow Adjustment: Sources
- (v3008.00) Debt Schedule Interest Currency Translation Adjustments
- (v3010.00) Total Sources of Funds
- (v3020.00) Funds Flow Adjustment: Uses
- (v3030.00) Total Uses of Funds
- (v3040.00) Net Funds Flow Source (Use)
- (v3100.00) Tax Depreciation
- (v3110.00) Other Temporary Differences
- (v3120.00) Temporary Differences
- (v3130.00) Permanent Differences
- (v3140.00) Taxable Income
- (v3150.00) Tax Refund Due to Loss Carryforward
- (v3160.00) Tax Refund Due to Loss Carryback
- (v3205.00) Additions to Taxable Operating Profit
- (v3210.00) Taxable Operating Profit
- (v3220.00) Interest Tax Shield
- (v3225.00) Non-Operating Profit
- (v3230.00) Tax on Non-Operating Profit
- (v3235.00) Additions to Operating Income Taxes
- (v3240.00) Income Taxes on Operations
- (v3242.00) Unrealized Benefit of Tax Loss
- (v3245.00) Current Provision for Operating Income Taxes Before NOLs
- (v3250.00) Operating Tax Refund Due to Loss Carryforward
- (v3260.00) Operating Tax Refund Due to Loss Carryback
- (v3265.00) Additional Operating Tax Refund
- (v3270.00) Total Operating Tax Refund
- (v3275.00) Current Provision for Operating Taxes
- (v3290.00) Current Non-Operating Taxes
- (v3400.00) Common Shares Outstanding: Year End
- (v3410.00) Common Shares Outstanding: Wtd. Avg.
- (v3430.00) Potentially Dilutive Securities
- (v3450.00) Diluted EPS Adj. to Net Income
- (v3460.00) Number of Common Shares Issued: Year End
- (v3470.00) Number of Treasury Shares: Year-End
- (v3490.00) Transaction price for Common Shares
- (v3500.00) Debt Due Within One Year
- (v3510.00) Total Debt and Preferred Stock
- (v3520.00) Total Capital
- (v3525.00) Total Debt
- (v3550.00) Target Debt Capacity
- (v3552.00) Target Preferred Capacity
- (v3560.00) Unused Debt Capacity (UDC)
- (v3562.00) Unused Preferred Capacity
- (v3580.00) Unused Debt Capacity plus Marketable Securities
- (v3590.00) Total Cash Interest Expense

(v3000.00) Funds Flow Adjustment: Sources
This account directly affects the Retained Earnings (v2850) account and could throw your Funds Flow Statement out of balance.

**(v3008.00) Debt Schedule Interest Currency Translation Adjustments**

When Currency Translator is used with a Debt Schedule, this account sums .54 and .64 accounts and subtracts the total in the formula for Total Sources of Funds (v3010).

**(v3010.00) Total Sources of Funds**

This funds flow account consists of all sources of accounting “funds” for any period. The formula:

\[
\begin{align*}
\text{(v1750.00) Net Income} \\
- \text{(v1170.00) Gain on Sale of Assets} \\
- \text{(v2420.03) Earnings from Investments: Equity} \\
+ \text{(v4000.00) Proceeds from Sale of Assets} \\
+ \text{(v2420.05) Dividends from Subsidiaries} \\
+ \text{(v2190.01) Depreciation Expense: Funds Flow} \\
+ \text{(v2400.03) Amortization of Goodwill} \\
+ \text{(v2410.03) Amortization of Other Intangibles} \\
+ \text{(v2780.01) Change in Minority Interest} \\
+ \text{(v2800.01) Increase in Total Liabilities} \\
+ \text{(v2820.01) Proceeds from Sales of Preferred Stock} \\
+ \text{(v2840.01) Chg. in Common Stock (Net of Treasury)} \\
+ \text{(v2880.01) Increase in Other Equity} \\
+ \text{(v2870.01) Increase in Currency Translation Adjustments} \\
+ \text{(v3000.00) Funds Flow Adjustment: Sources} \\
= \text{(v3010.00) Total Sources of Funds}
\end{align*}
\]

**(v3020.00) Funds Flow Adjustment: Uses**

Funds not captured by alternative funds flow accounts.

This account directly affects the Retained Earnings (v2850) account and could throw your Funds Flow Statement out of balance.
(v3030.00) Total Uses of Funds

This funds flow account represents all uses of accounting funds. Total Uses of Funds (v3030.00) is calculated as follows:

+ (v2000.01) Increase in Cash
+ (v2017.01) Increase in Total Marketable Securities
+ (v2035.01) Increase in Net Accounts Receivable
+ (v2040.01) Increase in Inventory
+ (v2050.01) Increase in Notes Receivable
+ (v2060.01) Increase in Prepaid Expenses
+ (v2070.01) Increase in Intercompany Current Assets
+ (v2080.01) Increase in Current Deferred Tax Asset
+ (v2090.01) Increase in Other Current Assets — Operating
+ (v2095.01) Incr. in Other Current Assets — Non–Operating
+ (v2170.01) Fixed Capital Investment
+ (v2380.01) Increase in Deferred Tax Asset
+ (v2390.01) Additions to Land
+ (v2400.01) Additions to Goodwill
+ (v2410.01) Additions to Other Intangibles
+ (v2420.01) Increase in Investments: Equity Method
+ (v2430.01) Increase in Investments: Cost Method
+ (v2470.01) Increase in Non-Current Operating Asset
+ (v2440.01) Increase in Other Assets
+ (v2460.01) Increase in L-T Funding Asset
+ (v1800.00) Preferred Dividends
+ (v1900.00) Common Dividends
+ (v3020.00) Funds Flow Adjustment: Uses

= (v3030.00) Total Uses of Funds

(v3040.00) Net Funds Flow Source (Use)

The difference between total sources of funds and uses of funds, helpful when troubleshooting a funds-flow out-of-balance error in historical periods.
(v3100.00) Tax Depreciation

This account contains depreciation expense for tax purposes. Tax Depreciation (v3100.00) uses a Freeform formula in both history and forecast equal to Depreciation Expense (Funds) (v2190.01). To be considered in the calculation of taxable income, the difference between this account and Depreciation Expense: Funds (v2190.01), should be included in Other Temporary Differences (v3110).

(v3110.00) Other Temporary Differences

Differences between GAAP income and taxable income that are expected to reverse in future periods. The account is an input in all periods and can be forecast using a Freeform forecast method to incorporate them into this account.

(v3120.00) Temporary Differences

In historical periods, the amount is calculated using a Freeform formula, which can be adjusted; in the forecast periods, it is a calculated account.

In historical periods, the amount is calculated using this Freeform formula:

\[(v1660.00) / @input\]

where:

\(v1660.00\) = Trial Provision for Income Taxes

@input = The input into Trial Provision for Income Taxes (v1660.00)

The calculated equation in the forecast periods is:

\[(v3100.00) - (v2190.01) + (v3110.00)\]

where:

\(v3100.00\) Tax Depreciation

\(v2190.01\) Depreciation Expense (Funds)

\(v3110.00\) Other Temporary Differences

(v3130.00) Permanent Differences

This holds permanent differences between GAAP income and taxable income. The default formula:

- \((v2400.03)\) Amortization of Goodwill

This assumes that anything deducted as Amortization of Goodwill (v2400.03) is a permanent difference. This may not be true, or you may have other permanent differences. Adjust the formula as needed.
**Taxable Income**

Taxable income is earnings before tax reduced by permanent and temporary differences.

Taxable Income (v3140.00) is calculated as follows:

\[
\text{(v1600.00) Earnings Before Taxes - (v3120.00) Temporary Differences - (v3130.00) Permanent Differences}
\]

= (v3140.00) Taxable Income

**Tax Refund Due to Loss Carryforward**

Based on NOL generated in prior periods that is used to offset current period taxable income, this account reduces the current provision before NOL to arrive at the proper current provision.

It is calculated as: \( \frac{\text{v1630.00}}{\text{v3140.00}} \times \text{v3150.02} \)

where:

\( \text{v1630.00} \) Current Provision for Income Taxes (Excl. NOL)
\( \text{v3140.00} \) Taxable Income
\( \text{v3150.02} \) Tax Gains Offset

**Maximum Carryforward**

Amount that can be applied against current year taxable income.

**Tax Gains Offset**

Amount actually applied against current-year taxable income. If taxable income is less than the maximum carryforward, this account is limited to taxable income. Unused carryforward may be used in subsequent years if it has not expired.

**Tax Loss Pool**

Current year loss reduced by amounts carried back. This forms the basis for future carryforwards.

**Tax Loss Pool Used**

During the carryforward period, the losses used by gains and thus unavailable for future carryforwards.
(v3160.00) Tax Refund Due to Loss Carryback
Refund generated for carrying back current year losses back to previous years.

(v3160.01) Maximum Carryback
At the beginning of a period, the largest loss that could be sustained in the current period and still be fully carried back, determined by adding the tax gains pool for each year during the carryback period and subtracting such gains previously used.

(v3160.02) Tax Losses Offset
In a period with a loss, the loss actually carried back. It is the lesser of the amount of the loss and the maximum carryback.

(v3160.03) Tax Gains Pool
Taxable income net of amounts carried forward into the current period. These gains are the basis for carrybacks, because future losses are carried back against them.

(v3160.04) Tax Gains Pool Used
During the carryback period, this represents the gains used by other losses.

(v3160.05) Tax Pool
Current provision for income taxes net of refunds due to loss carryforwards, similar to Tax Gains Pool (v3160.03), because this variable holds the taxes made refundable by carrybacks.

(v3205.00) Additions to Taxable Operating Profit
This account can be used to make adjustments to Taxable Operating Profit (v3210).

(v3210.00) Taxable Operating Profit
Used as the basis for computing the income tax attributable to the company’s basic operations.

(v3220.00) Interest Tax Shield
Tax savings a company realizes in conjunction with its interest cost. The input value for this account, the marginal tax rate, is the tax rate used for the interest tax shield. The output value is the actual interest tax shield.

It is calculated as follows:
Where:

- \( (v3220.00) \) Input marginal tax rate into Interest Tax Shield
- \( (v1420.00) \) Total Interest Expense

Note that this Total Interest Expense \( (v1420) \) is the net of Interest Capitalized \( (v1410) \). This does not mean that no tax benefits exist associated with Interest Capitalized. Rather, companies that capitalize a portion of their total interest expense defer the tax benefit to future periods, when their taxable income is reduced by greater depreciation charges.

**(v3225.00) Non-Operating Profit**

Represents the total profit generated from sources other than the direct operations of the business. This account is calculated as follows:

\[
(v3140.00) \text{ Taxable Income} - (v3210.00) \text{ Taxable Operating Profit} + (v1420.00) \text{ Total Interest Expense}
\]

\[
= (v3225.00) \text{ Non-Operating Profit}
\]

Because Non-Operating Profit \( (v3225.00) \) consists of income and expense accounts that are unrelated to the ongoing production and administrative functions of the business, they are not included in the discounted cash flows used in valuation.

Enter nonoperating income accounts as before-tax amounts. Taxes applicable to nonoperating income accounts are calculated as Tax on Non-Operating Profit \( (v3230) \).

**(v3230.00) Tax on Non-Operating Profit**

Income taxes applicable to Non-Operating Profit \( (v3225) \). The input value is the tax rate on nonoperating profit. The output value is the tax on nonoperating profit. The formula for Tax on Non-Operating Profit \( (v3230.00) \):

\[
(v3225.00) \times (v3230.00)
\]

where:

- \( (v3230.00) \) Input tax rate into Tax on Non-Operating Profit
- \( (v3225.00) \) Non-Operating Profit

**(v3235.00) Additions to Operating Income Taxes**

This is an input that allows the user to modify the system calculation of total taxes on operations.
(v3240.00) Income Taxes on Operations

The tax on taxable income adjusted by the interest tax shield, tax on nonoperating profit, and additions to operating income taxes.

\[ (v1610.00) \text{ Trial Provision for Income Taxes} \]
\[ + (v3220.00) \text{ Interest Tax Shield} \]
\[ - (v3230.00) \text{ Tax on Non-Operating Profit} \]
\[ + (v3235.00) \text{ Additions to Operating Income Taxes} \]
\[ = (v3240.00) \text{ Income Taxes on Operations} \]

(v3242.00) Unrealized Benefit of Tax Loss

Offsets negative income taxes on operations. You cannot get a tax benefit by losing money. You must be able to carry the loss back or forward. This functions like Unrealized Tax Benefit of Losses (v1620).

(v3245.00) Current Provision for Operating Income Taxes Before NOLs

\[ (v3240.00) \text{ Income Taxes on Operations} \]
\[ + (v3242.00) \text{ Unrealized Benefit of Tax Loss} \]
\[ = v3245.00 \text{ Current Provision for Operating Income Taxes Before NOLs} \]

Unrealized Benefit of TaxLoss (v3242) has a value only if Income Taxes on Operations (v3240) is negative. Thus, this equals Income Taxes on Operations (v3240) when Income Taxes on Operations (v3240) is positive and zero when Income Taxes on Operations (v3240) is negative.

(v3250.00) Operating Tax Refund Due to Loss Carryforward

Account, based on NOL generated in prior periods, used to offset current period operating profit. Not technically a refund, it reduces the current provision before NOL arrives at the correct current provision.

Calculated as: \( (v3245.00) / (v3210.00) * (v3250.02) \)

where:
- \( (v3245.00) \) Curr. Provision for Operating Inc. Taxes Before NOLs
- \( (v3210.00) \) Taxable Operating Profit
- \( (v3250.02) \) Tax Gains Offset
(v3250.01) **Maximum Carryforward**
Amount that can be applied against current year taxable operating profit.

(v3250.02) **Tax Gains Offset**
Amount actually applied against current year taxable operating profit. If taxable operating profit is less than the maximum carryforward, this account is limited to taxable operating profit. Unused carryforward may be used in subsequent years if it has not expired.

(v3250.03) **Tax Loss Pool**
Current year loss reduced by amounts carried back. This forms the basis for future carryforwards.

(v3250.04) **Tax Loss Pool Used**
During the carryforward period, losses used by gains and thus unavailable for future carryforwards.

(v3260.00) **Operating Tax Refund Due to Loss Carryback**
Refund generated for carrying back current year losses back to previous years.

(v3260.02) **Tax Losses Offset**
In a period with a loss, the loss actually carried back. It is the lesser of the amount of the loss and the maximum carryback.

(v3260.01) **Maximum Carryback**
At the beginning of a period, this is the largest loss that could be sustained in the current period and still be fully carried back, determined by adding the tax gains pool for each year during the carryback period and subtracting such gains previously used.

(v3260.03) **Tax Gains Pool**
Taxable operating profit net of amounts carried forward into the current period. These gains are the basis for carrybacks, because future losses are carried back against them.

(v3260.04) **Tax Gains Pool Used**
During the carryback period, the gains used by other losses.
(v3260.05) Tax Pool
Current provision for operating income taxes net of refunds due to loss carryforwards. This is similar to Tax Gains Pool (v3260.03), because this variable holds the taxes made refundable by carrybacks.

(v3265.00) Additional Operating Tax Refund
This account is often linked using a Freeform formula to Additional Tax Refund (v1635). The additional tax refund might not be operating. For cash-flow purposes, this account allows us to separate what is operating from what is not.

(v3270.00) Total Operating Tax Refund
Two variables are used to handle the tax refund, Additional Tax Refund (v1635) and Total Operating Tax Refund (v3270.00). Additional Tax Refund (v1635) is reused from regular taxable income. Its use here means Strategic Finance treats user-defined refunds as coming from operations. Total Operating Tax Refund (v3270.00) is calculated in all periods but is different in historical periods than in forecast periods.

In historical periods, it is:
(v1635.00) Additional Tax Refund

Because Additional Tax Refund (v1635) is an input, the tax refund is essentially an input in history.

In forecast periods, it is

\[
\begin{align*}
(v1635.00) & \quad \text{Additional Tax Refund} \\
+ & \quad (v3250.00) \quad \text{Oper. Tax Refund Due to Loss Carryforward} \\
+ & \quad (v3260.00) \quad \text{Operating Tax Refund Due to Loss Carryback} \\
= & \quad (v3270.00) \quad \text{Total Operating Tax Refund}
\end{align*}
\]

The refund due to NOL carryforwards and carrybacks are calculated only in the last period of a year and if Calculate Tax Effects Automatically is selected in Tax Effect of Losses dialog. If you do not check the box, the tax refund is an input.

Total Taxes on Operations (v3280.00)

\[
\begin{align*}
(v3275.00) & \quad \text{Current Provision for Operating Taxes} \\
+ & \quad (v1680.00) \quad \text{Other Taxes} \\
= & \quad (v3280.00) \quad \text{Total Taxes on Operations}
\end{align*}
\]

Strategic Finance assumes that anything entered in Total Taxes on Operations (v3280.00) relates to operations. If this is not true, use Additions to Operating Income Taxes (v3235) to adjust Income Taxes on Operations (v3240).
(v3275.00) Current Provision for Operating Taxes

Calculated as:

\[
\text{Curr. Prov. for Oper. Inc. Taxes Before NOLs} - \text{Total Operating Tax Refund} = \text{Current Provision for Operating Taxes}
\]

(v3290.00) Current Non-Operating Taxes

Portion of taxes payable in the current period that is a result of accounts that are not included in operations for the purpose of valuation, such as Non-Operating Income and Interest Expense.

Current Non-Operating Taxes can be calculated as:

\[
\text{Current Provision for Income Taxes} + \text{Other Taxes} - \text{Total Taxes on Operations} = \text{Current Non-Operating Taxes}
\]

(v3400.00) Common Shares Outstanding: Year End

Total common shares outstanding at the period end, calculated as the difference between the total common shares issued at period end and the total treasury shares held at period end.

(v3410.00) Common Shares Outstanding: Wtd. Avg.

Weighted-average number of common shares outstanding over the period, calculated by the difference between the weighted average of the total issued common shares over the current and prior periods and the weighted average of the total number of treasury shares held over the current and prior periods.

(v3430.00) Potentially Dilutive Securities

Number of common stock equivalents, or dilutive securities (as defined by APB No. 15 and amended by FASB 85), to be added to the Number of Common Shares: Weighted Average (v3410) for use in calculating Primary Earnings Per Share (v6130) or Fully Diluted Earnings Per Share (v6135).

“Common Stock Equivalents” for the Primary EPS calculation include such securities as:

- Convertible debt
● Convertible preferred stock
● Options
● Warrants
● Stock purchase contracts
● Stock subscription agreements
● Contingent issuance agreements

“Potentially Dilutive Securities” for the Fully Diluted EPS calculation include all common stock equivalents plus such securities as these:
● Shares assumed to be issued upon conversion of debentures
● Participating securities and two-class common

**(v3450.00) Diluted EPS Adj. to Net Income**

In computing Primary EPS and Fully Diluted EPS, convertible securities are treated as being converted at the beginning of the period (or when issued, if issued during the period). On the assumption that these securities were converted, the company would not pay interest charges or preferred dividends on them. So an adjustment must be added back to Income Available for Common Shareholders (v1850) for interest charges (net of tax) and preferred dividends related to the common stock equivalents (for Primary EPS) or all dilutive securities (for Fully Diluted EPS).

The number of Common Stock Equivalents or Potentially Dilutive Securities (v3420 or v3430) is added to the Number of Common Shares: Weighted Average (v3410) in calculating Primary EPS (v6130) or Fully Diluted EPS (v6135).

In general,

\[
\text{Adjusted Income} \\
\text{Primary or Fully Diluted EPS} = \frac{\text{Adjusted Income}}{\text{Adjusted Number of Shares}}
\]

Adjusted Income and Adjusted Number of Shares are calculated as follows:

\[
\text{Adjusted Income} = (v1850.00) + (v3450.00)
\]

where:

- (v1850.00) Income Available for Common Shareholders
- (v3450.00) Fully Diluted EPS Adj. to Net Income

\[
\text{Adjusted Number of Shares} = (v3410.00) + (v3420.00 \text{ or } v3430.00)
\]

where:

- (v3410.00) Number of Common Shares: Wtd. Avg.
- (v3420.00) Common Stock Equivalents
(v3460.00) Number of Common Shares Issued: Year End

(Balance account measures the number of common shares that a company has issued at year end. Enter the total shares issued for the corporation using the default currency units that you specified in Model Options. For example, if your data is in millions, enter 950,000 shares as .95. This account is used to calculate Number of Common Shares Outstanding: Year-End (v3400).

(v3460.05) Number of Common Shares Issued: Wtd. Avg.

(Weighted average number of shares issued accounts for the issuance of shares during a period. Common shares issued during the period are “weighted” (that is, multiplied by the fraction of the period for which they were outstanding), and the weighted number of these shares is added to the number of shares issued during the period. Enter the total shares for the corporation using the default currency units that you specified in Model Options. For example, if your financial data is in millions, enter 950,000 shares as .95. This account is used to calculate Number of Common Shares Outstanding: Wtd. Avg. (v3410).

(v3460.06) Minimum Common Shares Issued

(Allows you to specify a minimum balance to be maintained for Common Shares Issued (v3460) in all periods, if Common Shares Issued (v3460) is selected as a Cash Surplus account in Funding Options. If Common Shares Issued (v3460) is selected as a Cash Surplus account, and Specify Minimum Balance is selected on the Standard tab, funding options will not retire additional common shares once it has reached the minimum balance specified in this account.

(v3460.07) Maximum Common Shares Issued

(Used to specify the maximum balance for the Common Shares Issued to reach when Funding Options is funding a Cash Deficit.

(v3460.09) Balance Correction Common Shares Issued: Year-End

(This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that are required to make the funds flow balance.

(v3470.00) Number of Treasury Shares: Year-End

(Increase in Treasury Shares: Year-End (v3470.01))
Balance account measures the total treasury shares that a company has issued at year end.

Enter the total shares issued for the corporation using the default currency units that you specified in Model Options. For example, if your financial data is in millions, enter 950,000 shares as .95.

This account is used to calculate Number of Common Shares Outstanding: Year-End (v3400).

(v3470.05) Number of Treasury Shares: Wtd. Avg.

The weighted average number of treasury shares accounts for the issuance of shares during a period. Treasury shares issued during the period are “weighted” (that is, multiplied by the fraction of the period for which they were outstanding), and the weighted number of these shares is added to the number of shares issued during the period.

Enter the total shares for the corporation using the default currency units that you specified in Model Options. For example, if your financial data is in millions, enter 950,000 shares as .95.

This account is used to calculate Number of Common Shares Outstanding: Wtd. Avg. (v3410).

(v3470.06) Minimum Treasury Shares (Y-E)

Allows you to specify a minimum balance to be maintained for Treasury Shares (v3470) in all periods, if Treasury Shares (v3470) is selected as a Cash Deficit account in Funding Options. If Treasury Shares (v3470) is selected as a Cash Deficit account and Specify Minimum Balance is selected on the Standard tab, funding options will not re-issue additional treasury shares once it has reached the minimum balance specified in this account.

(v3470.07) Maximum Treasury Shares (Y-E)

(Increase in Maximum Treasury Shares Issued (Y-E) (v3470.08))

Used to specify the maximum balance for the Treasury Shares to reach when Funding Options is accumulating a Cash Surplus.

(v3470.09) Balance Correction Treasury Shares (Y-E)

This account, calculated in all periods, receives amounts, generated by the balancing routine in Strategic Finance, that are required to make the funds flow balance.

(v3490.00) Transaction price for Common Shares

Used to specify the transaction price applied when common or treasury shares are issued or purchased as a result of Strategic Finance’s funding options.
(v3500.00) Debt Due Within One Year

Nonoperating account represents the total of interest-bearing obligations due within one year. It is calculated as follows:

\[ \text{Notes Payable} + \text{Current Portion of L-T Debt} = \text{Debt Due Within One Year} \]

(v3510.00) Total Debt and Preferred Stock

Sums the Debt Due Within One Year (v3500.00), Total L-T Debt (v2700.00)v1680), and Preferred Stock (v2820.00):

\[ \text{Debt Due Within One Year} + \text{Total L-T Debt} + \text{Preferred Stock} = \text{Total Debt and Preferred Stock} \]

(v3520.00) Total Capital

Calculated account, found on the Balance Sheet, is the total of all sources of capital in the company: Debt, Preferred Stock, and Common Equity.

\[ \text{Minority Interest} + \text{Total Debt and Preferred Stock} + \text{Common Equity} = \text{Total Capital} \]

(v3525.00) Total Debt

Calculated as:

\[ \text{Debt Due within One year} + \text{Total Long-Term Debt} + \text{Preferred Securities} = \text{Total Debt} \]
This account differs from Total Debt and Preferred Stock (v3510.00) in that Preferred Stock is used in the calculation only if it is being allocated as debt in the Target Capital Structure tab of the Funding Options dialog and the Target Capital Structure method is being used for funding.

**(v3550.00) Target Debt Capacity**

Represents the dollar amount of debt (including preferred stock) a company will have in its capital structure over the long term. This is an input account that appears on the Funding Analysis Report.

**(v3552.00) Target Preferred Capacity**

Dollar amount of Preferred Stock that a company will have in its long-term capital structure. This input account, which appears on the Funding Analysis Report, is used to calculate Unused Preferred Capacity (v3554.00).

**(v3560.00) Unused Debt Capacity (UDC)**

(Increase in Unused Debt Capacity (v3570.00))

Additional debt a company can incur without exceeding the debt specified by the Target Debt Capacity (v3550). It is calculated as follows:

\[
\text{(v3550.00) Target Debt Capacity} - \text{(v3510.00) Total Debt and Preferred Stock} = \text{(v3560.00) Unused Debt Capacity}
\]

A positive amount in this account displayed on the Funding Analysis Report reflects excess debt capacity; a negative amount indicates that the company is exceeding its long-term debt target.

**(v3562.00) Unused Preferred Capacity**

Additional preferred stock a company can incur without exceeding the debt specified by the Target Preferred Capacity (v3552), calculated as follows:

\[
\text{(v3552.00) Target Debt Capacity} - \text{(v2820.00) Preferred Stock} = \text{(v3562.00) Unused Preferred Capacity}
\]

A positive amount in this account on the Funding Analysis Report reflects excess preferred capacity; a negative amount indicates that the company is exceeding its long-term preferred stock target.
(v3580.00) Unused Debt Capacity plus Marketable Securities

The sum of Unused Debt Capacity (v3560) and Marketable Securities (v2010), these are the additional resources available to the company that can be used without the company having to borrow funds in excess of its Target Debt Capacity (v3550).

(v3590.00) Total Cash Interest Expense

This nonoperating account appears on the Funding Analysis Report and represents the total cash interest expense paid in a period, including Other Interest Expense (v1360). The assumption made is that all short-term interest expense is cash. Specify long-term cash interest in Interest on L-T Debt: Scheduled (v2660.05) and Interest on L-T Debt: Excess (v2690.05). Enter the noncash portion of interest in Non-Cash Interest on L-T Debt: Scheduled (v2660.03).
4000.xx.xxx to 4999.xx.xxx Accounts

Subtopics

- (v4000.00) Proceeds from Sale of Assets
- (v4050.00) Funds from Operations Before Tax
- (v4060.00) Funds from Operations After Taxes
- (v4070.00) Incremental Working Capital Investment
- (v4080.00) Cash Flow Adjustment: Source
- (v4100.00) Cash Flow from Operations
- (v4110.00) Non-Operating Sources of Funds
- (v4150.00) Non-Operating Uses
- (v4180.00) Deferred Tax Reconciliation
- (v4200.00) Non-Operating Income (after tax)
- (v4250.00) Net Cash Provided
- (v4260.00) Funding Surplus/(Deficit)
- (v4320.00) Cash from Operating Cycle
- (v4420.00) Other Non-Cash Accounts
- (v4430.00) Cash bef. Fin. Cost & Ext. Fin.
- (v4440.00) Cash bef. External Financing
- (v4450.00) Other Operating Uses
- (v4460.00) Cash Available for Dividends
- (v4470.00) Cash Available for Investments
- (v4520.00) Non-Operating Sources (FAS 95)
- (v4540.00) Non-Operating Uses (FAS 95)
- (v4560.00) Net Cash from Operations
- (v4580.00) Net Cash Used in Investing
- (v4600.00) Net Cash Provided by Financing
- (v4610.00) Incr. in Cash & Cash Equiv.
- (v4620.00) Cash & Cash Equivalents (beginning)
- (v4630.00) Cash & Cash Equivalents (ending)
- (v4640.00) Change in Cash & Cash Equivalents
- (v4650.00) Operating Profit (After Interest)
- (v4660.00) Taxable Operating Profit (After Interest)
- (v4670.00) Operating Costs

(v4000.00) Proceeds from Sale of Assets

The cash received or the gross proceeds before taxes are deducted from the sale or retirement of assets. This account is automatically calculated as follows:

\[(v2170.03) \text{ Gross Retirements} - (v2190.03) \text{ Accumulated Depreciation on Retirements} + (v1170.00) \text{ Gain on Sale of Assets} + \]
Proceeds from Sale of Assets

In forecast periods, you can enter total proceeds from the sale of fixed or depreciable assets sold in the Gain on Sale of Assets (v1170.00) account. If you dispose of working capital accounts, enter only the gain portion of the sale.

The respective working capital accounts should be reduced by the book value of the working capital disposals.

**Funds from Operations Before Tax**

Before-tax cash flow generated by the company’s basic operations, calculated as follows:

\[
(v1150.00) \text{ Operating Profit} \\
+ (v2190.01) \text{ Depreciation Expense (Funds)} \\
+ (v2410.03) \text{ Amort. of Other Intangibles} \\
+ (v2400.03) \text{ Amortization of Goodwill} \\
+ (v2760.01) \text{ Increase in Other Deferrals} \\
\]

\[= (v4050.00) \text{ Funds from Operations Before Tax} \]

**Funds from Operations After Taxes**

Cash flow generated by the company’s basic operations after deducting Total Taxes on Operations (v3280), calculated as follows:

\[
(v4050.00) \text{ Funds from Operations Before Tax} \\
- (v3280.00) \text{ Total Taxes on Operations} \\
\]

\[= (v4060.00) \text{ Funds from Operations After Taxes} \]

**Incremental Working Capital Investment**

The Incremental Working Capital Investment (v4070.00) required for operations is defined as the increase in Total Current Assets (v2100) (excluding Marketable Securities (v2017)) minus the Increase in Total Current Liabilities (v2600) (excluding the Current Portion of Long-Term Debt (v2510) and Notes Payable (v2520)).

Incremental Working Capital Investment (v4070.00) excludes the increases in Marketable Securities (v2017), Current Portion of Long-Term Debt (v2510) and Notes Payable (v2520) because those accounts are financing issues and are not part of the cash required for operations.

The Incremental Working Capital Investment (v4070.00) represents the actual investment in receivables, inventory, and so on that is necessary to support sales growth. Because this investment is part of the company’s basic production and administrative function, it is included...
in the calculation of Cash Flow from Operations (v4100). Past year-to-year Balance Sheet data may not provide a good measure of the increase or decrease in funds required for the future. Past figures can be misleading for two reasons:

1. Year-end figures on the Balance Sheet may not reflect the average or usual needs of the business during that year.
2. Estimating the cost of increased inventory based on the difference between beginning and ending inventory balances may yield unreliable results.

**(v4080.00) Cash Flow Adjustment: Source**

If your Cash Flow from Operations (v4100) includes nonoperating or noncash accounts, you can use the adjustment account to exclude the effect of those accounts from the operating cash flows used for valuation.

An example of a noncash account is the portion of Fixed Capital Investment (v2170.01) that reflects a foreign-currency translation adjustment. A translation gain overstates Fixed Capital Investment (v2170.01) and therefore understates Cash Flow from Operations (v4100). Conversely, a translation loss understates Fixed Capital Investment (v2170.01) and overstates Cash Flow from Operations (v4100).

An example of a nonoperating account is the portion of Fixed Capital Investment (v2170.01) that represents the “Allowance for Funds Used During Construction” (AFUDC). This allowance is used by utility companies to reflect an imputed financing cost in their fixed assets. Including AFUDC overstates Fixed Capital Investment (v2170.01) and understates Cash Flow from Operations (v4100).

To correct an understatement of Cash Flow from Operations (v4100) (such as, from a translation gain or the effect of AFUDC), enter the amount of the noncash or nonoperating account as a positive number into Cash Flow Adjustment: Source (v4080).

To correct an overstatement of Cash Flow from Operations (v4100) (such as from a translation loss), enter the amount of the noncash account as a negative number into Cash Flow Adjustment: Source (v4080).

If the value entered in this account is a reclassification of accounts from operating to nonoperating or the converse, no further adjustment is required. If the value represents actual cash flow, enter it into Funds Flow Adj: Source (v3000) or Funds Flow Adj: uses (v3020) so that its impact is recognized in Retained Earnings (v2850).

**(v4100.00) Cash Flow from Operations**

Total cash generated by the company’s basic ongoing activities in each period. These future cash flows, when discounted at today’s currency amounts, become the Present Value of Cash Flow (v5010) and are added to the Present Value of Residual Value (v5220) to calculate Corporate Value (v5060).

Do not confuse Cash Flow from Operations (v4100.00) with total cash flow. Total cash flow also includes nonoperating accounts (those unrelated to basic business operations). Examples of
nonoperating accounts that are included in total cash flow but excluded from Cash Flow from Operations (v4100.00):

1. Financing-related accounts (sale of stock or interest expense)
2. Investments in bonds and stock
3. Extraordinary accounts

Nonoperating cash flow accounts are excluded from Cash Flow from Operations (v4100.00)—and therefore from the calculation of Shareholder Value (v5070)—because it is inappropriate to use the same cost of capital for nonoperating and operating cash flows, which may have different risk characteristics. Nonoperating investments do have a value to the company, which is why Marketable Securities (v2010) and Investments in Bonds and Stock (v5.00.560) are added to the Cum. PV of Cash Flows (v5020) and Residual Value (v5030) in calculating Corporate Value (v5060).

The rationale for distinguishing between operating and nonoperating cash flows for valuation purposes is based on a fundamental tenet of modern financial theory: The discount rate applied to a stream of cash flows should reflect the risk specific to those cash flows.

**(v4110.00) Non-Operating Sources of Funds**

Represents funds derived from sources other than operations, specifically:

- (v2525.01) Increase in Accrued Interest
- + (v2595.01) Incr. in Other Non-Operating Curr. Liab.
- + (v2790.01) Increase in Other Liabilities
- - (v2420.03) Earnings from Investments: Equity
- + (v2420.05) Dividends from Subsidiaries
- + (v2780.01) Increase in Minority Interest
- + (v2870.01) Incr. in Currency Translation Adjustments
- + (v3000.00) Funds Flow Adjustment: Sources
- + (v2880.01) Increase in Other Equity

=  (v4110.00) Non-Operating Sources of Funds

Because these funds-flow accounts are derived from sources other than the basic operations of the business, they are not included in the calculation of Cash Flow from Operations (v4100).

**(v4150.00) Non-Operating Uses**

Represents funds applied to Non-Operating activities:

- (v2095.01) Incr. in Other Curr. Assets - Non-Operating
Because these funds flow accounts result from uses for funds other than the basic operations of the business, they are not included in the calculation of Cash Flow from Operations (v4100).

**Deferred Tax Reconciliation**

Measures the difference between the deferred taxes as reflected on the Income Statement and those reflected on the balance sheet, calculated as follows:

(v1660.00) Deferred Provision for Income Taxes
- (v2580.01) Increase in Current Deferred Tax Liabilities
- (v2780.01) Increase in Deferred Income Taxes
+ (v2080.01) Increase in Current Deferred Tax Asset
+ (v2380.01) Increase in Deferred Tax Asset

= (v4180.00) Deferred Tax Reconciliation

**Non-Operating Income (after tax)**

Calculated as:

(v3225.00) Non-Operating Profit
- (v1720.00) Minority Interest
+ (v1730.00) Extraordinary Items
+ (v2420.03) Earnings from Investments: Equity

= (v4200.00) Non-Operating Income (after tax)

Derived from sources other than the basic operations of the business so they are not included in the calculation of Cash Flow from Operations (v4100).
(v4250.00) Net Cash Provided

This account on the Cash Flow Statement captures the Cash Surplus or Cash Deficit that is generated or required by operations in a given period. Depending on which Funding Options are selected, a Cash Surplus is used to pay dividends, repay debt, and/or invest in marketable securities.

Cash Deficits are funded by reducing marketable securities, issuing additional debt or relying on “negative dividends” (funding from a parent company).

Net Cash Provided is determined as follows:

\[
\begin{align*}
\text{(v4100.00)} & \quad \text{Cash Flow from Operations} \\
+ & \quad \text{(v4200.00)} \quad \text{Non-Operating Income} \\
- & \quad \text{(v1170.00)} \quad \text{Gain on Sales of Assets} \\
+ & \quad \text{(v4110.00)} \quad \text{Non-Operating Sources} \\
- & \quad \text{(v4150.00)} \quad \text{Non-Operating Uses} \\
- & \quad \text{(v4080.00)} \quad \text{Cash Flow Adjustment: Source} \\
- & \quad \text{(v1400.00)} \quad \text{Total Interest Expense} \\
- & \quad \text{(v3290.00)} \quad \text{Current Non-Operating Taxes} \\
- & \quad \text{(v1800.00)} \quad \text{Preferred Dividends} \\
+ & \quad \text{(v2830.01)} \quad \text{Proceeds from Sale of Common Stock} \\
\end{align*}
\]

\[
\begin{align*}
= & \quad \text{(v4250.00)} \quad \text{Net Cash Provided}
\end{align*}
\]

(v4260.00) Funding Surplus/(Deficit)

This account can help answer these questions:

1. Will the company generate sufficient funds from its operations to pay its dividends without borrowing?
2. Is the strategy “financially feasible,” or would it require unacceptable amounts of additional debt?
3. Is the strategy a cash generator or a cash drain in each period?

Funding Surplus/(Deficit) (v4260.00) is calculated as follows:

\[
\begin{align*}
\text{(v4250.00)} & \quad \text{Net Cash Provided} \\
- & \quad \text{(v1900.00)} \quad \text{Common Dividends} \\
\end{align*}
\]

\[
\begin{align*}
= & \quad \text{(v4260.00)} \quad \text{Funding Surplus/(Deficit)}
\end{align*}
\]
Depending on Funding Options selected, a Cash Surplus is used to repay debt and invest in marketable securities; Cash Deficits are funded by reducing marketable securities and/or issuing additional debt.

**Cash from Operating Cycle**

Enables you to identify whether the operations of the business are generating sufficient cash to cover required investments. If this account is not greater than the investments, the resulting cash flow from operations is negative, which may adversely affect value creation for that period.

If Cash from Operating Cycle (v4320.00) cannot pay for the investments, it could indicate that, for a year:

1. The business is investing in that period, using funds from other sources such as debt or equity; or
2. The business is not generating much operating profit, causing the Cash from Operating Cycle (v4320.00) to be less than the amount desired.

Cash from Operating Cycle (v4320.00) is calculated as follows:

\[
\text{Cash from Operating Cycle} = \text{Funds from Operations After Tax} - \text{Incr. Working Capital Investment}
\]

Change in Cash, Excess Mkt. Sec., and Mkt. Sec (v4490.00)

Appears on the Indirect Cash Flow Statement and is calculated as follows:

\[
\text{Change in Cash, Excess Mkt. Sec., and Mkt. Sec} = \text{Incr. in Cash} + \text{Incr. in Total Mkt. Securities}
\]

**Other Non-Cash Accounts**

Combines various noncash accounts that must be removed from Net Income (v1750) to determine Funds Available from Operations (v4430).

\[
\text{Other Non-Cash Items} = \text{Increase in Other Deferrals} + \text{Incr. in Minority Interest} + \text{Dividends from Subsidiaries} - \text{Earnings from Invest.: Equity}
\]
(v4430.00) Cash bef. Fin. Cost & Ext. Fin.

On the Indirect Cash Flow Statement, the cash flow generated by the company’s basic operations.

Cash bef. Fin. Cost & Ext. Fin. (v4430.00) is calculated as follows:

- (v4100.00) Cash Flow from Operations
- (v4150.00) Non-Operating Uses
- (v3290.00) Current Non-Operating Taxes
- (v4080.00) Cash Flow Adjustment: Source
+ (v4110.00) Nonoperating Sources
+ (v4200.00) Nonoperating Income
- (v4570.00) Acquired Assets
- (v4571.00) Acquired Cash
- (v4572.00) Assets created by Transaction
+ (v4575.00) Acquired Liabilities
- (v4577.00) Liabilities/Equity created by Transaction

= (v4430.00) Cash bef. Fin. Cost & Ext. Fin.

(v4440.00) Cash bef. External Financing

On the Indirect Cash Flow Statement, this account is calculated as follows:

- (v4430.00) Cash bef. Fin. Cost & Ext. Fin.
- (v1400.00) Interest Expense
- (v1800.00) Preferred Dividends
- (v1900.00) Total Common Dividends
+ (v1902.00) Payout to Shareholders

= (v4440.00) Cash bef. External Financing

(v4450.00) Other Operating Uses

This account, which appears on the Indirect Cash Flow Statement, is calculated as follows:

- (v2440.01) Incr. in Other Assets
+ (v3020.00) Funds Flow Adj: Uses
- (v2790.01) Incr. in Other Liabilities
(v4460.00) Cash Available for Dividends

This account, on the Indirect Cash Flow Statement is calculated as follows:

- (v4440.00) Cash bef. External Financing
- (v2170.01) Fixed Capital Investment
- (v2390.01) Additions to Land
- (v4450.00) Other Operating Uses
+ (v1410.00) Interest Capitalized

= (v4460.00) Cash Available for Dividends

(v4470.00) Cash Available for Investments

On the Indirect Cash Flow Statement, this account is calculated as follows:

- (v4460.00) Cash Avail. for Dividends
- (v1800.00) Preferred Dividends
- (v1900.00) Common Dividends

= (v4470.00) Cash Available for Investments

(v4520.00) Non-Operating Sources (FAS 95)

Represents funds derived from sources usually considered nonoperating. FAS 95 requires that these accounts be considered operating. For valuation purposes these accounts should not be included in Cash Flow from Operations (v4100).

+ (v2595.01) Incr. in Other Non-Oper Curr. Liab.
+ (v2785.01) Incr. in Non-Current Operating Liability
+ (v2790.01) Incr. in Other Liabilities
+ (v2420.05) Dividends from Subs.
+ (v3000.00) Funds Flow Adj: Sources
- (v4180.00) Deferred Tax Reconciliation
(v4540.00) Non-Operating Uses (FAS 95)

Account appears on the FAS 95 Cash Flow Statement and is for funds applied to uses normally considered nonoperating. Although FAS 95 considers these funds part of cash flow from operations, it is inappropriate to use this account in deriving cash flows for valuation purposes.

- (v2095.01) Incr. in Other Current Assets - Non-Operating
- + (v2470.01) Incr. in Non-Current Operating Asset
- + (v2440.01) Incr. in Other Assets
- + (v3020.00) Funds Flow Adj: Uses

= (v4540.00) Non-Oper. Uses (FAS 95)

(v4560.00) Net Cash from Operations

Appears on the FAS 95 Cash Flow Statement. Net Cash from Operations (v4560.00) is defined by FAS 95 as representing the cash flow from the basic operations of the company. From a valuation perspective, it incorrectly commingles Nonoperating expenses, including interest, with the basic operating cash flows of the company. It is inappropriate to use this cash flow in calculating a company's Corporate Value (v5060) or Shareholder Value (v5070).

(v4580.00) Net Cash Used in Investing

This appears on the FAS 95 Cash Flow Statement. It represents those accounts which, in compliance with FAS 95, must be considered investments. Net Cash Used in Investing (v4580.00) is calculated as follows:

- (v2170.01) Fixed Capital Investment
- + (v2390.01) Additions to Land
- + (v2050.01) Incr. in Notes Receivable
- + (v2420.01) Incr. in Invests: Equity Method
- + (v2430.01) Incr. in Invests: Cost Method
- + (v2400.01) Additions to Goodwill
- + (v2410.01) Additions to Other Intangibles
- - (v4000.00) Proceeds from Sale of Assets

= (v4580.00) Net Cash Used in Investing
(v4600.00) Net Cash Provided by Financing

Sum of the financing activity of a company as defined by FAS 95. Because FAS 95 categorizes interest as an operating activity, this account does not include all financing costs.

- (v2510.01) Incr. in Curr Port. L-T Debt
+ (v2520.01) Incr. in Notes Payable
+ (v2660.01) Increase in L-T Debt: Scheduled
+ (v2690.01) Increase in L-T Debt: Excess
- (v2460.01) Incr. In L-T Funding Asset
+ (v2780.01) Increase in Minority Interest
+ (v2820.01) Proceeds from Sales of Preferred Stock
+ (v2840.01) Chg. in Common Stock (Net of Treasury)
+ (v2870.01) Increase in Currency Translation Adjustments
+ (v2880.01) Increase in Other Equity
- (v1800.00) Preferred Dividends
- (v1900.00) Common Dividends

= (v4600.00) Net Cash Provided by Financing

(v4610.00) Incr. in Cash & Cash Equiv.

This account is calculated as follows:

- (v4560.00) Net Cash Provided by Financing
- (v4580.00) Net Cash Used in Investing
+ (v4600.00) Net Cash from Operations

= (v4610.00) Incr. in Cash & Cash Equiv.

(v4620.00) Cash & Cash Equivalents (beginning)

This calculated account, which appears on the FAS 95 Cash Flow Statement, is calculated as follows:

- (v2000.00) Cash (prior period)
+ (v2010.00) Marketable Securities (prior period)
+ (v2015.00) Excess Marketable Securities (prior period)
(v4630.00) Cash & Cash Equivalents (ending)

This account, on the FAS 95 Cash Flow Statement, is calculated as follows:

\( (v2000) \) Cash
+ \( (v2005) \) Cash Used in Transaction
+ \( (v2010) \) Marketable Securities
+ \( (v2015) \) Excess Marketable Securities

= \( (v4630) \) Cash & Cash Equivalents (ending)

(v4640.00) Change in Cash & Cash Equivalents

This calculated account appears on the FAS 95 Cash Flow statement and is calculated as follows:

\( (v2000.01) \) Incr. in Cash
+ \( (v2005.01) \) Increase in Cash Used in Transaction
+ \( (v2017.01) \) Change in Total Marketable Securities

= \( (v4640.00) \) Change in Cash & Cash Equivalents

(v4650.00) Operating Profit (After Interest)

Appears on the FAS 95 Cash Flow Statement and is a nonoperating account representing income generated by ongoing production and administrative functions of the business less Total Interest Expense \( (v1420) \). For valuation purposes, it incorrectly combines operating cash flows with financing cash flows; this treatment is required by FAS 95 requirements. It is calculated as follows:

\( (v1150.00) \) Operating Profit
- \( (v1420.00) \) Total Interest Expense

=(v4650.00) Operating Profit (After Interest)

(v4660.00) Taxable Operating Profit (After Interest)

Nonoperating account that appears on the FAS 95 Cash Flow Statement and is used to compute the income tax attributable to company operations. It differs from Taxable Operating Profit \( (v3210) \) because it is shown on an after-net interest basis.

(v4650.00) Operating Profit (After Interest)
+ (v2400.03)  Amortization of Goodwill

= (v4660.00)  Taxable Operating Profit (After Interest)

**(v4670.00) Operating Costs**

Calculated as follows:

(v1030.00)  Sales (Net)

-(v3210.00)  Taxable Operating Profit

=(v4670.00)  Operating Costs
5000.xx.xxx to 5999.xx.xxx Accounts

Subtopics

- (v5000.01) Discount Factor (Kw)
- (v5000.02) Future Value Factor (Kw)
- (v5000.03) Accumulation Factor (Kw)
- (v5000.05) Mid-Period Discount Factor (Kw)
- (v5000.06) Mid-Period Future Value Factor (Kw)
- (v5005.00) Long-Term Cost of Capital (%)
- (v5005.03) Accumulation Factor (LT Kw)
- (v5008.00) Cash Flow from Operations (SVA)
- (v5030.00) Cumulative Present Value of Cash Flows and Residual Value
- (v5010.00) Present Value of Cash Flow
- (v5060.00) Corporate Value
- (v5070.00) Shareholder Value (PV)
- (v5080.00) Shareholder Value per Share (PV)
- (v5090.00) Premium/Discount Over/Under Market Price
- (v5100.00) Perpetuity Operating Profit (after tax)
- (v5110.00) Normalized Operating Profit Adjustment
- (v5120.00) Market-to-Book Ratio
- (v5130.00) Price/Earnings Ratio
- (v5140.00) Normalized Earnings Adjustment
- (v5150.00) Debt Discount/(Premium)
- (v5160.00) Perpetuity Residual Value
- (v5170.00) Growing Perpetuity Residual Value
- (v5175.00) Value Growth Duration Perpetuity Value
- (v5180.00) Liquidation Residual Value
- (v5190.00) Market-to-Book Residual Value
- (v5200.00) Price/Earnings Residual Value
- (v5210.00) Future Value of Residual Value
- (v5220.00) Present Value of Residual Value
- (v5300.00) Cost of Equity (Ke)
- (v5305.00) Long-Term Cost of Equity (%)
- (v5305.03) Accumulation Factor (LT Ke)
- (v5308.00) Common Dividends DDM
- (v5310.00) Present Value of Dividend
- (v5320.00) Cum. PV of Dividends
- (v5330.00) Cum. PV of Dividends and Equity Residual Value
- (v5370.00) Estimated Equity Value
- (v5380.00) Equity Value Per Share
- (v5390.00) Premium/Discount Over/Under Market
- (v5400.00) Affordable Dividend
- (v5410.00) Perpetuity Affordable Dividend
- (v5420.00) Market-to-Book Equity Ratio
- (v5430.00) Price/Earnings Equity Ratio
- (v5440.00) Normalized Earnings Adjustment
- (v5460.00) Perpetuity Dividend Residual Value
- (v5470.00) Growing Dividend in Perpetuity Value
- (v5475.00) Value Growth Duration Perpetuity Value
- (v5480.00) Equity Liquidation Value
- (v5490.00) Market-to-Book Equity Residual Value
- (v5500.00) Price/Earnings Equity Residual Value
(in today’s dollars) of $1 acquired at the end of that year.

(v5000.02) Future Value Factor (Kw)
Not used in Strategic Finance in formulas but calculated and available for use in Freeform formulas. The Future Value Factor (Kw) can determine the future value of a stream of cash flows, based upon the weighted average cost of capital and the number of years into the future you want to value these cash flows.

(v5000.03) Accumulation Factor (Kw)
Used when calculating discount factors in nonaggregate periods such as months and quarters.

(v5000.05) Mid-Period Discount Factor (Kw)
Used instead of the Discount Factor (Kw) (v5000.01) when Mid-Period discounting is selected.

(v5000.06) Mid-Period Future Value Factor (Kw)
Used instead of the Future Value Factor (Kw) (v5000.02) when Mid-Period discounting is selected.

(v5005.00) Long-Term Cost of Capital (%)
The Cost of Capital (v5000), or discount rate, is the weighted average of the costs of debt and equity.
The Long-Term Cost of Capital (v5005.00) is used in the residual value period. Using a cost of capital to calculate residual value allows you to assign different required rates of return to the post-planning horizon period and forecast period, increasing your flexibility in modeling the forecast period and residual value of the company.
Forecasting different costs of capital rates for different periods is not recommended, unless you expect the company to 1.) operate in businesses with substantially different risk in the future, or 2.) go through a period when its capital structure is suboptimal.
Enter this input item as a percentage.

(v5005.03) Accumulation Factor (LT Kw)
Used when calculating discount factors in nonaggregate periods such as months and quarters.
(v5008.00) **Cash Flow from Operations (SVA)**

This account receives the operating cash flows as defined in Cash Flow from Operations (v4100).

(v5030.00) **Cumulative Present Value of Cash Flows and Residual Value**

This valuation item represents that portion of total Corporate Value (v5060) attributable to company operations and is the sum of these two accounts:

- v5020.00  Cumulative Present Value of Cash Flows
- + v5220.00  Present Value of Residual Value

= v5030.00  Present Value of Cash Flows and Residual Value

(v5010.00) **Present Value of Cash Flow**

Represents the value of each future period's cash flow expressed in today's dollars. It is calculated by multiplying the Discount Factor (Kw) (v5000.01) by Cash Flow from Operations (SVA) (v5008). If Mid-Period discounting is elected, the Mid-Period Discount Factor (Kw) (v5000.05) is used instead of the Discount Factor (Kw) (v5000.01).

(v5060.00) **Corporate Value**

Total economic value of the company, comprises four components:

1. Present value of forecasted Cash Flow from Operations (v4100) during the forecast period;
2. PV of Residual Value (v5220)—the value of the company’s operations beyond the forecast period; and
3. Investments, comprising Total Marketable Securities (v2017), Long-Term Funding Asset (v2460) and Investments in Bonds and Stocks (v5.00.560).
4. Valuation adjustments for investments accounted for using the Cost or Equity Method of consolidation.

Corporate Value (v5060.00) is calculated as:

- (v5030.00)  Cumulative PV of CF and Residual Value
- + (v2017.00)  Total Marketable Securities (Last Historical Pd.)
- + (v2460.00)  Long-Term Funding Asset (Last Historical Pd.)
- + (v5.00.560)  Investments in Stocks and Bonds
- + (v5.00.900)  Valuation Adj. for Cost and Equity Methods
(v5070.00) Shareholder Value (PV)

In simplest terms, the value of a company or business unit equals the combined values of debt plus equity. The total value of the company is called Corporate Value (v5060), and the value of the equity portion is Shareholder Value. Shareholder Value (v5070.00) is expressed in present value terms. In general:

Corporate Value = Debt (v5060.00) + Shareholder Value (v5070.00)

The debt portion of Corporate Value (v5060) refers to the current value of all the firm’s future obligations. These obligations are Market Value of Debt (v5.00.500), Underfunded Pension Liabilities (v5.00.520), and Market Value of Other Obligations (v5.00.540).

Additionally, an adjustment must be made for the minority interest value of a company or business unit that is consolidated into the total Corporate Value using the Minority Interest Method.

Shareholder Value (v5070.00) is calculated as:

\[
\text{Corporate Value}\ - \text{Market Value of Debt}\ - \text{Underfunded Pension Liability}\ - \text{Market Value of Other Obligations}\ - \text{Valuation Adj. for Min. Interest: SVA}
\]

= (v5070.00) Shareholder Value

(v5080.00) Shareholder Value per Share (PV)

A critical measure of the financial and operational health of a company that reflects the economic value of shareholder investment in expected future operations.

Calculated as:

\[
\text{Shareholder Value (v5070.00)} / \text{Number of Shares Outstanding: Year End (v3400.00)}
\]

(v5090.00) Premium/Discount Over/Under Market Price

When Shareholder Value per Share (v5080) differs from the Current Stock Price (v5.00.200), it implies that, according to your expectations for future performance, the market seems to be overvaluing or undervaluing the stock.
The Premium/Discount Over/Under Market Price (%) (v5090.00) of the stock offers you a comparison of the economic value of the stock (Shareholder Value per Share (v5080)) to the Current Stock Price (v5.00.200).

Premium/Discount Over/Under Market Price (%) (v5090.00) is calculated as:

\[(SV\ per\ Share\ (v5080.00) - (Curr.\ Stock\ Price (v5.00.200) \times 100))\]

Current Stock Price (v5.00.200)

**(v5100.00) Perpetuity Operating Profit (after tax)**

Calculated as:

\[((v1150.00) + (v5140.00)) \times (1 - (v4.00.560))\]

where:

- (v1150.00) Operating Profit
- (v5140.00) Normalized Earnings Adjustment
- (v4.00.560) Residual Value Income Tax Rate

**(v5110.00) Normalized Operating Profit Adjustment**

Use this item to change, or “normalize,” for valuation purposes, the period-by-period values for Taxable Operating Profit (v3210) that you consider abnormally high or low because of prevailing industry or economic conditions that are not expected to continue. Under most methods of calculating residual value, taxable operating profit forms the basis for calculating residual value in each period. An unusually high or low value for Taxable Operating Profit (v3210) correspondingly overstates or understates Residual Value (v5030) for that period.

This item is useful when valuing companies in industries having cyclical sales and profits or that are particularly affected by the general economy.

If you enter adjustments for periods, the amount is added to Taxable Operating Profit (v3210) for each period entered and is used in calculating Residual Value (v5030). While it affects the valuation, it will not change Operating Profit (v1150) as it appears on the Income Statement in Strategic Finance.

For example, if you believed that the third-period Taxable Operating Profit (v3210) figure of $1,000 was abnormally high and should be normalized to $700, you would enter an adjustment of -300 in the third period.

Note: This adjustment is appropriate only if you are using a residual value method that uses a perpetuity cash flow in its calculation: Perpetuity Method, Growth in Perpetuity, and Value Growth Duration.

**(v5120.00) Market-to-Book Ratio**

Your estimate of the market-to-book ratio prevalent for this business in each forecast period.
Market-to-Book Ratio (v5120.00) is determined as follows:

\[
\text{Estimated Market Value of Business / Common Equity} \quad (v2890.00)
\]

Common Equity (v2890.00)

The Residual Value (v5030) is calculated by multiplying the Estimated Market Value of Business by Common Equity (v2890), (which represents the book value of the company’s equity), adding the book value of debt in the last period.

Adding debt to the estimated market value of the equity to arrive at the total value of the company is recommended, because the value is being discounted by the cost of capital (costs of debt and equity) rather than solely the cost of equity.

This total must be discounted by the Discount Factor (v5000.01) to express it in present value terms. It is used in the Market-to-Book Ratio Residual Value (v5190).

**(v5130.00) Price/Earnings Ratio**

This item represents your estimate of the Price/Earnings Ratio prevalent for this business in each forecast period. A Price/Earnings Ratio is calculated as follows:

\[
\text{Estimated Stock Price} / \text{Earnings Per Share} \quad (v6125.00)
\]

where Earnings Per Share (v6125) is calculated as:

\[
\text{Income Available for Common Shareholders} \quad (v1850.00)
\]

No. of Common Shares: Wtd. Avg. (v3410.00)

The Residual Value is calculated by multiplying this number by adjusted Income Available for Common Shareholders (v1850). It is used in the Price/Earnings Residual Value method (v5200).

Adding debt to the estimated market value of the equity to arrive at the total value of the company is recommended, because the value is being discounted by the cost of capital (cost of debt and equity).

**(v5140.00) Normalized Earnings Adjustment**

Use this item to change, or “normalize,” for valuation purposes, period-by-period values for Income Available for Common Shareholders (v1850) that are considered abnormally high or low because of prevailing industry or economic conditions in that year that are not expected to continue. Under the Price/Earnings Residual Value (v5200) method of calculating residual value, Income Available for Common Shareholders (v1850) forms the basis for calculating residual value in each period. Unusually high or low values for Income Available for Common Shareholders (v1850) correspondingly overstate or understate residual value.

If you enter adjustments, the amount is added to Income Available for Common Shareholders (v1850) and is used in calculating the Price/Earnings Residual Value (v5200) for valuation.
Because it appears on the Income Statement, it will not change Income Available for Common Shareholders (v1850).

For example, if you believed that a final-period amount for Income Available for Common Shareholders (v1850) of $2,000 was abnormally high and should be normalized to $1,200, you would enter an adjustment of -$800 in the final period. It is used in the Price/Earnings Residual Value (v5200) calculation.

**(v5150.00) Debt Discount/(Premium)**

Used in the calculation of the Market-To-Book Residual Value to adjust the book value of Debt and/or Preferred Stock to market values.

**(v5160.00) Perpetuity Residual Value**

Taxable Operating Profit in the last forecast period less taxes (NOPAT), divided by the Long-Term Cost of Capital. The Perpetuity Residual Value method assumes no additional growth from investments, thus discounts a steady stream of cash flows infinitely. If you think that your business will grow beyond the forecast period, we recommend that you use another perpetuity method to calculate the residual value.

**(5170.00) Growing Perpetuity Residual Value**

Similar to the Perpetuity Residual Value, except that you can forecast growth in the cash flows (profits) for all years beyond the forecast period. You may select this method from the Shareholder Value Model Options dialog and input your assumption for growth in profits throughout the perpetuity.

**(v5175.00) Value Growth Duration Perpetuity Value**

Similar to the Perpetuity Residual Value, except that you can forecast growth in the cash flows (profits) for years beyond the original forecast period. You may select this method from Shareholder Value Model Options and input assumptions for years of growth and percentage of growth in profits throughout that period. Use this method to forecast for several years although you believe that your opportunity to earn beyond your cost of capital (the value growth duration) is greater than the selected time frame. Thus, you may forecast growth in the Taxable Operating Profit beyond your forecast period, making up the rest of your assumed value growth duration.

**(v5180.00) Liquidation Residual Value**

Your estimate, in future value currency, of the “price tag” of the business in each year of the forecast period, based on your expectations of prevailing conditions in that period. You must
incorporate the costs of liquidation, including such items as transaction costs and recapture tax, in this value.

**(v5190.00) Market-to-Book Residual Value**

Calculated as:

\[
((v2890.00) \times (v5120.00)) + (v3510.00) - (v5150.00) = (v5190.00)
\]

where:

- \( (v2890.00) \) Common Equity
- \( (v5120.00) \) Market to Book Ratio
- \( (v3510.00) \) Total Debt and Preferred Stock
- \( (v5150.00) \) Debt Discount/(Premium)
- \( (v5190.00) \) Market to Book Residual Value

**(v5200.00) Price/Earnings Residual Value**

Calculated as:

\[
(((v1850.00) + (v5140.00)) \times (v5130.00)) + (v3510.00) - (v5150.00)
\]

where:

- \( (v1850.00) \) Income Available for Common Shareholders
- \( (v5140.00) \) Normalized Earnings Adjustment
- \( (v5130.00) \) Price/Earnings Ratio
- \( (v5150.00) \) Debt Discount/(Premium)
- \( (v3510.00) \) Total Debt and Preferred Stock

This variable is a future value discounted back to present value terms using the Discount Factor \( (v5000.01) \) to calculate Present Value of Residual Value \( (v5220) \).

**(v5210.00) Future Value of Residual Value**

Individual residual value figures for each period in the forecast. These values represent the residual value of the company at the end of each period, based on the method you use to calculate residual value.
(v5220.00) Present Value of Residual Value

Portion of total corporate value attributable to operations beyond the final year of the forecast period, expressed in today's currency. It is calculated by discounting the Future Value of Residual Value (v5210) by the Discount Factor (v5000.01).

The value of a company is determined by expectations of what will happen during and after the forecast period. The portion of Corporate Value (v5060) contributed by expectations about the post-forecast period is called the residual value, and, in present value terms, the Present Value of Residual Value (v5220.00).

(v5300.00) Cost of Equity (Ke)

Rate of return demanded by equity investors. The Cost of Equity, using the Capital Asset Pricing Model Approach equals:

Cost of Equity (Ke) = Risk Free Rate (Rf) + (Beta * Market Risk Premium)

Cumulative Present Value of Cash Flows (v5020.00)

The Cumulative Present Value of Cash Flows (v5020.00) represents that portion of total Corporate Value (v5060) attributable to cash flows generated during the forecast period. It is the sum of the present value of the individual forecasted cash flows.

Year 1 $10 $10
Year 2 $15 $25
Year 3 $25 $50

(v5300.01) Discount Factor (Ke)

Used to calculate the Present Value of Equity Residual Value (v5520).

(v5300.02) Future Value Factor (Ke)

Not used in Strategic Finance in formulas but calculated and available to use in Freeform formulas. The Future Value Factor (Ke) can determine the future value of a stream of dividends, based upon the cost of equity and the number of years into the future you want to value them.

(v5300.03) Accumulation Factor (Ke)

Used when calculating discount factors in nonaggregate periods such as months and quarters.

(v5300.05) Mid-Period Discount Factor (Ke)

Used instead of the Discount Factor (Ke) (v5300.01) when Mid-Period discounting is selected.
(v5300.06) Mid-Period Future Value Factor (Ke)
Used instead of the Future Value Factor (Ke) (v5300.02) when Mid-Period discounting is selected.

(v5305.00) Long-Term Cost of Equity (%)
Used to calculate the Residual Values for the Dividend Discounting Valuation Method in Strategic Finance. Using cost of equity to calculate residual value for the Dividend Discount Approach allows you to assign different required rates of return to the post-planning horizon period and forecast period. This feature increases your flexibility in modeling the forecast period and residual value of the company.

Forecasting different costs of equity for different periods is not recommended unless you expect the company to 1.) operate in businesses with substantially different risk in the future, or 2.) go through a period when its capital structure is suboptimal.

Enter the input as a percentage.

(v5305.03) Accumulation Factor (LT Ke)
Used when calculating discount factors in nonaggregate periods such as months and quarters.

(v5308.00) Common Dividends DDM
Receives common dividends as defined by Common Dividends (v1900).

(v5310.00) Present Value of Dividend
Calculated by multiplying Common Dividends (v1900) by the Discount Factor (Ke) (v5300.01) or the Mid-Period Discount Factor (Ke) (v5300.05), if Mid-Period discounting is selected.

(v5320.00) Cum. PV of Dividends
Incorporates the value of the Cum. PV of Dividends (v5320) and the Present Value of Equity Residual Value (v5520). Cum. PV of Dividends (v5320.00) is calculated as:

\[(v5320.00) \text{ Cum. PV of Dividends (prior period)} + (v5310.00) \text{ Present Value of Dividend} = (v5320.00) \text{ Cum. PV of Dividends}\]
(v5330.00) Cum. PV of Dividends and Equity Residual Value

(v5320.00) Cum. PV of Dividends

+ (v5520.00) Present Value of Equity Residual Value

= (v5330.00) Cum. PV of Divid. and Equity Residual Value

(v5370.00) Estimated Equity Value

Estimated Equity Residual Value (v5370.00) is calculated as follows:

(v5330.00) Cum. PV of Dividends and Equity Res. Value

+ (v5.00.720) Market Value of Other Assets

- (v5.00.700) Market Value of Other Liabilities

+ (v2015.00) Excess Marketable Securities

= (v5370.00) Estimated Equity Value

(v5380.00) Equity Value Per Share

Estimated Equity Value (v5370) divided by the Number of Common Share: Year End (v3400.00).

(v5390.00) Premium/Discount Over/Under Market

When the Equity Value Per Share (v5380), or “Share Value,” differs from the Current Stock Price (v5.00.200), it implies that, according to your expectations of the future performance of the company, the market seems to be overvaluing or undervaluing the stock.

The premium or discount of the stock offers you a comparison of the economic value of the stock (Shareholder Value per Share) to the Current Stock Price.

Premium/Discount Over/Under Market Price (%) is calculated as follows:

\[ \frac{(v5080.00) - (v5.00.200)}{v5.00.200} \times 100 \]

(v5.00.200)

where:

- (v5080.00) Equity Value Per Share
- (v5.00.200) Current Stock Price
**Affordable Dividend**

Affordable Dividend (v5400.00) is used with the Perpetuity Affordable Dividend (v5410) in the calculation of the Perpetuity Dividend Residual Value (v5460) and is calculated as:

\[ (v2015.00) + ((v4.00.760) * ((v2490.00) - (v2015.00) - (v3510.00))) \]

where:
- (v2015.00) Excess Marketable Securities
- (v4.00.760) Residual Value Target Leverage Ratio (%)
- (v2490.00) Total Assets
- (v3510.00) Total Debt and Preferred Stock

**Perpetuity Affordable Dividend**

Used with the Affordable Dividend (v5400.00) in calculating the Perpetuity Dividend Residual Value (v5460) using this formula:

\[ (v4.00.780) * ((v2490.00) - (v2015.00)) * (1 - (v4.00.760)) \]

where:
- (v4.00.780) Long-Term Return on Book Equity
- (v2490.00) Total Assets
- (v2015.00) Excess Marketable Securities
- (v4.00.760) Residual Value Target Leverage Ratio (%)

**Market-to-Book Equity Ratio**

Used in the calculation of Market-to-Book Equity Residual Value (v5490).

**Price/Earnings Equity Ratio**

Used in the calculation of Price/Earnings Equity Residual Value (v5500).

**Normalized Earnings Adjustment**

Use this item to change, or “normalize,” for valuation purposes, period-by-period values for Income Available for Common Shareholders (v1850) that you consider abnormally high or low because of prevailing industry or economic conditions in that year that are not expected to continue. Under the Price/Earnings Equity Residual Value (v5500) method of calculating residual value, Income Available for Common Shareholders (v1850) forms the basis for calculating residual value in each period. Unusually high or low values for Income Available for Common Shareholders (v1850) correspondingly overstate or understate residual value.
If you enter adjustment for periods, the amount is added to Income Available for Common Shareholders (v1850) in calculating Price/Earnings Equity Residual Value (v5500) for valuation. It will not change Income Available for Common Shareholders (v1850) as it appears on the Income Statement.

For example, if you believed that a final-period amount for Income Available for Common Shareholders (v1850) of $2,000 was abnormally high and should be normalized to $1,200, you would enter an adjustment of -$800 in the final period. It is used in the Price/Earnings Equity Residual Value (v5500) calculation.

**(v5460.00) Perpetuity Dividend Residual Value**

Calculated as:

Afford. Dividend (v5400.00) + Perp. Afford. Dividend (v5410.00)

Long-Term Cost of Equity (v5305.00)

Present Value of Equity Residual Value (v5520.00)

The Present Value of Equity Residual Value (v5520.00) is calculated by discounting the Future Value of Equity Residual Value (v5510) by the Discount Factor (Ke) (v5300.01).

**(v5470.00) Growing Dividend in Perpetuity Value**

Similar to the Perpetuity Dividend Residual Value, except that you can forecast growth in the dividends for all years beyond the forecast period. You may select this method from the Dividend Discount Model Options dialog and input your assumption for growth in dividends throughout the perpetuity.

**(v5475.00) Value Growth Duration Perpetuity Value**

Similar to the Perpetuity Dividend Residual Value, except that you can forecast growth in the dividend for years beyond the original forecast period. You may select this method from Dividend Discount Model Options and input your assumptions for how many years of growth and percentage of growth in dividends throughout that period. This method is commonly used to forecast for several years when dividends continue to grow beyond the selected time frame. Thus, you may forecast growth in the dividend beyond your forecast period, making up the rest of your assumed dividend discount value growth duration.
(v5480.00) Equity Liquidation Value
Your estimate, in future value currency, of the “price tag” of the business in each year of the forecast period, based on your expectations of prevailing conditions in that period. Incorporate the costs of liquidation, including transaction costs and recapture tax, in this value.

(v5490.00) Market-to-Book Equity Residual Value
Calculated by multiplying Common Equity (v2890) by the Market-to-Book Equity Ratio (v5420).

(v5500.00) Price/Earnings Equity Residual Value
Price/Earnings Equity Residual Value (v5500.00) is calculated as: \(((v1850.00) + (v5440.00)) \times (v5430.00)\)
where:
- (v1850.00) Income Available for Common Shareholders
- (v5440.00) Normalized Earnings Adjustment
- (v5430.00) Price/Earnings Equity Ratio

(v5510.00) Future Value of Equity Residual Value
The value of the residual in the nth period, (at the end of the forecast period). This value is discounted back to the beginning of the forecast (today) to determine the Net Present Value of all future dividend streams.

(v5700.00) Economic Profit Required Return on Capital (RROC)
Discount rate used to determine the discount factor used to calculate the present value of economic profit. Enter the rate as a percentage.

(v5700.01) Discount Factor (Economic Profit RROC)
Used to present value Economic Profit (v5753) and the Residual Perpetuity (v5765).

(v5700.02) Future Value Factor (Economic Profit RROC)
Used to determine the value that Economic Profit (v5700) grows to over some length of time at some given interest rate. It is the value, in the future, of economic profit that exists today.
(v5700.03) Accumulation Factor (Economic Profit RROC)
Used when calculating discount factors in nonaggregate periods such as months and quarters.

(v5700.05) Midperiod Discount Factor (Economic Profit RROC)
While the Discount Factor (v5700.01) assumes that the Economic Profit (v5700) of a firm is received at period end, the Mid-Period Discount Factor (v5700.05) assumes that this profit (on average) occurs midpoint in the period, a more realistic assumption, because transactions that create profits occur throughout a given period.

(v5700.06) Mid-Period Future Value Factor (Economic Profit RROC)
Used to determine the value that Economic Profit (v5700) grows to over some length of time at some given interest rate. It is the value in the future, of economic profit, that exists today. This value differs from Future Value Factor (Economic Profit RROC) because it uses mid-period discounting rather than end-of-period discounting.

(v5702.00) Economic Profit RROC %
By default, this calculated account appears on the standard ratios page. It backs into the input for Economic Profit (v5700), determined by the difference between the firm’s rate of return and its cost of capital. Enter the number as you would other percentages (“10” for 10%).

(v5705.00) Long-Term Required Return (%)
The rate, similar to the long-term cost of capital in the Shareholder Value model, used to discount the residual value of the economic profit.

(v5710.00) Book Value (Before Adjustments)
The value in this account, calculated by subtracting total operating liabilities from total operating assets, represents the net operating assets of the firm.

(v5715.00) Economic Profit Adjustment to Assets
Adjusts Book Value (v5710).

(v5720.00) Economic Profit Adjustment to Liabilities
Adjusts Book Value (v5710).
**Adjusted Book Value**

This account is calculated by adding the net effect of Economic Profit Adjustment to Assets (v5715) and Economic Profit Adjustment to Liabilities (v5720) to Book Value (v5710).

It is calculated as:

\[ \text{Book Value (Before Adjustments)} + \text{Economic Profit Adjustment to Assets} - \text{Economic Profit Adjustment to Liabilities} = \text{Adjusted Book Value} \]

**Net Operating Profit After Tax (NOPAT)**

Represents the after-tax operating profit of a firm. Used to determine the economic profit of the firm and calculated by subtracting Total Taxes on Operations (v3280) from Operating Profit (v1150).

\[ \text{Operating Profit} - \text{Total Taxes on Operations} = \text{NOPAT} \]

**Economic Profit Adjustment to NOPAT**

Used to make necessary adjustments to NOPAT (v5735).

**Economic Profit NOPAT**

Adjusted NOPAT, calculated by adding Economic Profit Adj. to NOPAT (v5740) to NOPAT (v5735).

\[ \text{NOPAT} + \text{Economic Profit Adj to NOPAT} = \text{Economic Profit NOPAT} \]
**Economic Profit**

After-tax operating profit less the charge on invested capital, is calculated:

\[
\text{Economic Profit NOPAT} - \text{Capital Charge} = \text{Economic Profit}
\]

**Economic Profit NOPAT (EP)**

Used when calculating the Present Value of Economic Profit. Economic Profit NOPAT (EP) differs from in that it occurs only in forecast periods.

**Present Value of Economic Profit**

Value of each future period’s economic profit in today’s dollars, calculated by multiplying the Discount Factor by the dollar value of the future economic profit.

**Cumulative Present Value of Economic Profit**

Represents that portion of total Economic Profit Corporate Value attributable to economic profit generated during the forecast period. It is the sum of the present value of the individual forecasted cash flows.

PV of Economic Profit (Cumulative PV of EP)

- Year 1 $10 $10
- Year 2 $15 $25
- Year 3 $20 $45

**Residual Perpetuity**

Valuation item represents the portion of total Economic Profit Corporate Value attributable to the residual value of economic profit. This is the period that generates economic profit beyond the forecast horizon. It is calculated as follows:

\[
((v5810.00) - (v5705.00) * (v5725.00))
\]

where:

- (Residual NOPAT for Perpetuity)
- (Long-Term Required Return (%)
(v5725.00) Adjusted Book Value

(v5770.00) Present Value of Residual Perpetuity
Residual value expressed in today’s dollars, calculated by multiplying the Residual Perpetuity (v5765) by the Discount Factor (Economic Profit RROC) (v5700.01).

(v5775.00) Total Present Value of Economic Profit
Portion of Total Economic Profit Corporate Value (v5785) attributable to the value of the company’s operation in the forecast horizon and the residual period, calculated as the sum of these two accounts:

(v5760.00) Cumulative PV of Economic Profit
+ (v5770.00) Present Value of Residual Perpetuity

= (v5775.00) Total PV of Economic Profit

(v5780.00) Beginning Book Value
This account represents the Adjusted Book Value (v5725) in the last historical period. If mid-period discounting is elected, Adjusted Book Value (v5725) is adjusted accordingly.

(v5785.00) Economic Profit Corporate Value
Total economic value of the firm, comprises:

• Present value of Economic Profits (v5760) generated during the forecast horizon
• Present value of Residual Perpetuity (v5770)
• Beginning Book Value (v5780)
• Investments, such as Total Marketable Securities (v2017), Long-Term Funding Asset (v2460), Investments in Stocks and Bonds (v5.00.560), and Investments consolidated using the Cost or Equity Method

Economic Profit Corporate Value (v5785.00) is calculated:

(v5775.00) Total PV of Economic Profit
+ (v5780.00) Beginning Book Value
+ (v2017.00) Total Marketable Securities (Last Hist. Pd)
+ (v2460.00) Long-Term Funding Asset (Last Historical Pd)
+ (v5.00.560) Investments in Stocks and Bonds
+ V5.00.910 Valuation Adj. for Cost and Equity Method: EP
Economic Profit Corporate Value

\[(v5785.00)\] Economic Profit Corporate Value

\(- (v5.00.500)\) Market Value of Debt

\(- (v5.00.520)\) Underfunded Pension Liabilities

\(- (v5.00.540)\) Market Value of Other Obligations

\(- (v5.00.930)\) Valuation Adj. for Minority Interest: EP

\[= (v5790.00)\] Economic Profit Shareholder Value

**Economic Profit Shareholder Value**

Value of the equity of a company. The value that belongs to its shareholders, calculated as follows:

\[= (v5790.00)\] Economic Profit Shareholder Value

\(- (v5.00.500)\) Market Value of Debt

\(- (v5.00.520)\) Underfunded Pension Liabilities

\(- (v5.00.540)\) Market Value of Other Obligations

\(- (v5.00.930)\) Valuation Adj. for Minority Interest: EP

\[= (v5790.00)\] Economic Profit Shareholder Value

**Economic Profit Shareholder Value per Share**

Shareholder value is a critical measure of the financial and operational health of a company and reflects the economic value of the shareholders’ investment in expected future operations, calculated as follows:

Economic Profit Shareholder Value \((v5790.00)\)

Number of Common Shares: Year End \((v3400.00)\)

**Premium/Discount Over/Under Current Stock Price**

When Economic Profit Shareholder Value per Share \((v5795)\) differs from the current stock price \((v5.00.200)\), it implies that, according to your expectations of the future performance of the company, the market seems to be overvaluing or undervaluing the stock. The premium or discount of the stock offers you a comparison of the economic value of the stock to the current stock price:

\[((v5799.00) - (v5.00.200))\]

\((v5.00.200)\)

where:

- \((v5799.00)\) Economic Profit Shareholder Value per Share
- \((v5.00.200)\) Current Stock Price
(v5810.00) Residual NOPAT for Perpetuity

Residual value of NOPAT (v5735), used in determining the Residual Perpetuity (v5765) of Economic Profit and calculated as follows:

\[ ((v3210) \times (1 - (v5.00.800))) + (v5.00.820) \]

where:

- (v3210.00) Taxable Operating Profit
- (v5.00.800) Economic Profit Residual Value Tax Rate
- (v5.00.820) Residual NOPAT Adjustment
(v6000.00) Gross Profit Margin

The profitability ratio tells you what proportion of Sales (Net) (v1030) is included in Gross Profit
Changes in the Gross Profit Margin can result from an increase or decrease in one or both of these factors:

- Sales (Net) (v1030.00)
- Cost of Goods Sold (v1040.00)

In evaluating which factors affect the Gross Profit Margin (v6000.00), determine which factors affect the future margin. For example, if the Gross Profit Margin (v6000.00) recently improved because of a Cost of Goods Sold (v1040) reduction, try to determine whether that margin can be sustained at even greater sales volumes. The drop in Cost of Goods Sold (v1040) may be due to a onetime change in depreciation policy or a switch from FIFO to LIFO.

**(v6005.00) Return on Sales**

Return on Sales (v6005.00) or Net Profit Margin is a profitability ratio that tells you what proportion of Sales (Net) (v1030) finds its way into Net Income (v1750).

\[
\text{Net Income (v1750.00)} / \text{Sales (Net) (v1030.00)}
\]

Accrual-based measures such as Net Income (v1750) and ROS (v6005.00) have limitations: they do not incorporate risk, the time value of money, or investment requirements, and they can be greatly affected by alternative accounting conventions.

**(v6010.00) Return on Equity**

Profitability ratio that calculates the accounting rate of return on stockholders’ investment (based on year-end equity). The ratio is calculated as follows:

\[
\text{Net Income (v1750.00)} / \text{Common Equity (v2890.00)}
\]

Accrual-based measures such as Net Income (v1750) and ROE (v6010.00) have limitations: they do not incorporate risk, the time value of money, or investment requirements, and they can be greatly affected by alternative accounting conventions.

A high return on equity does not necessarily imply positive cash flow. Unless cash flow is positive, the company may have difficulty sustaining its Common Dividends (v1900) despite a high ROE (v6100.00).
(v6015.00) Return on Assets/Inventory (ROA/ROI)

Profitability ratio, which measures the accounting rate of return on Total Assets (v2490), is calculated as: 
\[
\frac{(v1700.00) + (v1420.00)}{(v2490.00) - (v3220.00) + (v1410.00)}
\]

where:
- (v1700.00) Income After Taxes
- (v1420.00) Total Interest Expense
- (v3220.00) Interest Tax Shield
- (v1410.00) Interest Capitalized
- (v2490.00) Total Assets

These ratios have limitations: they are based on historical costs, do not incorporate risk or the time value of money, and can be greatly affected by alternative accounting conventions.

(v6020.00) Return on Net Assets

Profitability ratio that calculates the accounting rate of return on net assets, calculated as follows:
\[
\frac{(v1700.00) + (v1420.00)}{(v2490.00) - (v2600.00) + (v1410.00.00)}
\]

where:
- (v1700.00) Income After Taxes
- (v1420.00) Total Interest Expense
- (v3220.00) Interest Tax Shield
- (v1410.00) Interest Capitalized
- (v2490.00) Total Assets
- (v2660.00) Total Current Liabilities

The exclusion of Total Current Liabilities (v2600) means that RONA (v6020.00) represents the accounting return on longer-term investments.

This ratio has limitations: it is based on historical cost, does not incorporate risk or the time value of money, and can be greatly affected by alternative accounting conventions.

(v6025.00) Change in Net Income

Period-by-period percentage change in Net Income (v1750).
(v6040.00) Debt/Equity Ratio
Leverage ratio measures the capital structure of the company, calculated as follows:
Total Debt and Preferred Stock (v3510.00)
Common Equity (v2890.00)

(v6045.00) Debt/Total Capital Ratio
Leverage ratio measures the capital structure of the company, calculated as follows:
Total Debt and Preferred Stock (v3510.00)
Total Capital (v3520.00)

(v6050.00) Equity Ratio
A leverage measure that calculates what proportion of Total Assets (v2490) is financed by Common Equity (v2890). The ratio is calculated as follows:
Common Equity (v2890.00)
Total Assets (v2490.00)

(v6055.00) Times Interest Earned
Leverage ratio that indicates the extent to which interest is covered by accounting earnings before interest and tax. It is calculated as follows:
Earnings Before Taxes (v1600.00) + Total Interest Expense (v1420.00)
Total Interest Expense (v1420.00)

(v6065.00) Days in Receivables (avg.)
Activity ratio measures the average time the company takes to collect cash for credit sales. The average ratio is calculated as follows:
[((Beg. Accts Rec + End. Accts Rec) / 2) * No. Days in Period
Sales (Net) (v1030.00)
where Accounts Receivable is (v2020).
A low Days in Receivables (v6065.00) ratio does not reliably indicate an efficient collections department; a restrictive credit policy also would decrease this ratio. The longer the collection period, the greater the company's working capital investment.

**(v6070.00) Days in Payables (avg.)**

Estimates how long, on average, the company takes to pay its trade creditors. The average ratio is calculated as follows:

\[
\frac{((\text{Beg. Accts Pay} + \text{End. Accts Pay}) \times \text{No. of Days in Period}}{2}
\]

where Accounts Payable is (v2500).

A high ratio does not indicate effective working capital management. High levels also could reflect inadequate cash flow to cover the company's obligations on a timely basis, which potentially could threaten continued purchase of supplies for operations.

**(v6075.00) Inventory Turnover (avg.)**

Activity ratio measures the average rate at which Inventory (v2040) moves through and out of the enterprise. The average ratio is calculated as follows:

\[
\frac{(\text{COGS} \times ((\text{Beg. Inventory} + \text{End. Inventory}) \times \text{No. of Days in Period}}{2)
\]

where Inventory is (v2040).

A high Inventory Turnover (v6075.00) ratio does not indicate efficient control over inventories; a company that is living from “hand to mouth” would have a high ratio. The Inventory Turnover (v6075.00) ratio is not strongly affected by the choice of LIFO versus FIFO inventory accounting methods because the impact of the method influences the numerator and denominator.

**(v6080.00) Fixed Asset Turnover**

An activity ratio that shows how intensively the company's assets are being used. The ratio is calculated as follows:

\[
\frac{\text{Sales (Net)} \times \text{Net Fixed Assets}}{\text{Sales (Net)} \times \text{Net Fixed Assets}}
\]

where Net Fixed Assets is (v2200).

The Fixed Asset Turnover (v6080.00) is dependent on the fixed capital intensity of your industry. Net Fixed Assets (v2200) is based on historical costs and depreciation policy.

A high Fixed Asset Turnover (v6080.00) ratio does not mean you could buy replacement assets today and achieve the same efficiency. A better measure of fixed capital intensity is the...
Incremental Fixed Capital Investment (F) ratio (v6185), which measures the investment in fixed capital required to support a $1 increase in sales.

**(v6090.00) Days in Receivables**

Activity ratio that measures the average time the company takes to collect cash for credit sales. The ratio for Days in Receivables (v6090.00) is calculated as follows:

\[
\text{Accounts Receivable (v2020.00) * Number of Days in Period} \\
\text{Sales (Net) (v1030.00)}
\]

A low Days in Receivables (v6090.00) ratio does not reliably indicate an efficient collections department; a restrictive credit policy also would decrease this ratio. The longer the collection period, the greater the company’s working capital investment.

**(v6095.00) Days in Payables**

Estimates how long, on average, the company takes to pay trade creditors. The ratio for Days in Payables (v6095.00) is calculated as follows:

\[
\text{Accounts Payable (v2500.00) * Number of Days in Period} \\
\text{Cost of Goods Sold (v1040.00)}
\]

A high ratio does not indicate effective working capital management. High levels also could reflect inadequate cash flow to cover company obligations on a timely basis, which potentially could threaten continued purchase of supplies for operations.

**(v6100.00) Inventory Turnover**

Activity ratio measures the average rate at which inventories move through and out of the enterprise.

The ratio for Inventory Turnover (v6100.00) is calculated as follows:

\[
\text{Cost of Goods Sold (v1040.00)} \\
\text{Inventory (v2040.00)}
\]

A high Inventory Turnover (v6100.00) ratio does not indicate efficient control over inventories; a company that is living from “hand to mouth” would have a high ratio. The Inventory Turnover (v6100.00) ratio is not strongly affected by the choice of LIFO versus FIFO inventory accounting methods because the impact of the method influences the numerator and denominator.
(v6115.00) Current Ratio

Liquidity ratio measures the company's ability to cover short-term obligations with short-term assets. The ratio is calculated as follows:

Total Current Assets (v2100.00) / Total Current Liabilities (v2600.00)

A low Current Ratio (v6115.00) does not necessarily indicate that a company is in difficulty; this ratio ignores the company's reserve borrowing power.

(v6110.00) Quick Ratio

The Quick (or Acid) Ratio (v6110.00) is a liquidity ratio that measures the ability of the company to pay off short-term obligations from its most liquid assets. Calculated as follows:

(v2000.00) + (v2017.00) + (v2035.00) / (v2600.00)

where:
- (v2000.00) Cash
- (v2017.00) Total Marketable Securities
- (v2035.00) Net Account Receivables
- (v2600.00) Total Current Liabilities

A low Quick Ratio (v6110.00) does not necessarily indicate that a company is in difficulty. First, this ratio ignores the company's reserve borrowing power (such as lines of credit) that are not recorded but can be used to meet short-term obligations.

Second, rapid sales growth usually increases the required working capital investment and can distort the Quick Ratio (v6110.00). For example, a rapid increase in Inventory (v2040) (not included in the numerator) funded by Accounts Payable (v2520), which is included in the denominator, causes a sudden Quick Ratio (v6110.00) decline.

(v6120.00) Working Capital

Net amount of a company's liquid resources, it is the amount available to service the financial demands of the operating cycle, calculated as follows:

(v2100.00) Total Current Assets

- (v2600.00) Total Current Liabilities

(v6120.00) Working Capital

+ (v2520.00) Notes Payable

+ (v2595.00) Other Current Liabilities - Non-Operating
(v6122.00) Operating Working Capital

The portion of Working Capital (v6120) attributable to the day-to-day operations of the company. The investing, financing, and other nonoperating portions are subtracted from Working Capital (v6120), leaving only the operating portion:

- Total Current Assets
- Total Marketable Securities
- Other Current Assets – Non-Operating
- Total Current Liabilities
+ Current Portion of Long-Term Debt

(v6125.00) Earnings Per Share

Traditional accounting measure of corporate performance for companies with a simple capital structure that reflects the net income available for each common share. The ratio is calculated as follows:

Income Available for Common Shareholders (v1850.00)

No. of Common Shares: Wtd. Average (v3410.00)

EPS growth does not necessarily lead to shareholder returns, even over longer periods of time. EPS growth can be achieved not only when management is investing at or above the market discount rate (cost of capital), but also when it is investing below the discount rate and thereby decreasing the value of the stock. A high EPS (v6125.00) ratio does not necessarily imply that the company has a positive cash flow and an ability to pay a high proportion of these earnings in dividends.

The accounting dividend payout ratio, or proportion of earnings that are distributed, can be calculated by dividing Dividends per Share (v6140) by Earnings Per Share (v6125.00). EPS (v6125.00) also is used to calculate the Price/Earnings (v5130) ratio, by dividing the Stock Price (v5.00.200) by EPS (v6125.00). A high Price/Earnings ratio may indicate these investor beliefs:

1. They expect high dividend growth
2. They view the stock as low risk and therefore are satisfied with low returns
3. They expect average company growth but a high payout ratio

(v6135.00) Fully Diluted EPS

Traditional accounting measure of corporate performance for companies with a complex capital structure that reflects the amount of net income available for common shares plus all potentially dilutive securities.
The ratio is calculated as follows:

\[
\frac{(v_{1850.00}) + (v_{3450.00})}{(v_{3410.00}) + (v_{3430.00})}
\]

where:
- \(v_{1850.00}\) Income Available for Common Shareholders
- \(v_{3450.00}\) Fully Diluted EPS Adjustment to Net Income
- \(v_{3410.00}\) Number of Common Shares: Wtd. Average
- \(v_{3430.00}\) Potentially Dilutive Securities

(\(v_{6140.00}\) Dividends per Share)

Measures the cash return to shareholders on their investment. The ratio is calculated as:

\[
\frac{\text{Common Dividends} (v_{1900.00})}{\text{No. of Common Shares: Wtd. Average} (v_{3410.00})}
\]

(\(v_{6145.00}\) Cash Flow per Share)

Cash Flow per Share (\(v_{6145.00}\)), when used over an extended period of time with Marketable Securities (\(v_{2017}\)) and Unused Debt Capacity (\(v_{3560}\)), can measure a company's ability to pay dividends. Cash Flow from Operations (\(v_{4100}\)), on which Cash Flow per Share (\(v_{6145.00}\)) is based, is a principal component of Shareholder Value (\(v_{5070}\)). Cash Flow per Share (\(v_{6145.00}\)) is defined as follows:

\[
\frac{\text{Cash Flow from Operations} (v_{4100.00})}{\text{No. of Common Shares: Wtd. Average} (v_{3410.00})}
\]

Note: This definition differs from another common formula used by security analysts, where depreciation expense and amortization of intangibles are added to net income to arrive at an estimation for cash flow used in their cash flow per share calculations.

Cash Flow from Operations (\(v_{4100}\)) (combined with the changes in Debt Capacity) must be sufficient to cover investment requirements and interest payments on debt. Unless it is, the company's solvency is deteriorating, and remedial steps must be taken before the company's financial position is jeopardized.
(v6150.00) Book Value per Share

Traditional accounting measure of the value of a company.

(v6155.00) Change in Earnings Per Share (%)

Period-by-period percentage change in Earnings Per Share (v6125).

(v6175.00) Sales Growth Rate (G)

A key Strategic Finance account used in determining Shareholder Value (v5070). By estimating the rate of anticipated sales growth, you evaluate shareholder value created from the projected cash flow, given your assumptions about other key accounts:

- Operating Profit Margin (P) (v6180)
- Incremental Working Capital Investment (W) (v6190)
- Incremental Fixed Capital Investment (F) (v6185)
- Residual Value Income Tax Rate (v4.00.560)
- Cash Income Tax Rate (Tc) (v6195)
- Cost of Capital (K) (v5000)

If you compare the sales growth of a company to the growth of the overall market, you can determine whether the company is gaining or losing market share. High sales growth may not indicate good economic performance. If a company is growing rapidly, there may be lower margins (due to lower prices or greater promotion expenses) and greater investments required in working and fixed capital. If those factors strain the financial resources of the company, its financial position and solvency may be jeopardized.

(v6180.00) Operating Profit Margin (P)

The Operating Profit Margin (P) (v6180.00) is a pretax, pre-interest measure:

Taxable Operating Profit (v3210.00)

Sales (Net) (v1030.00)

The Operating Profit Margin (P) (v6180.00) is one of the key Strategic Finance accounts affecting Shareholder Value (v5070).

(v6185.00) Incremental Fixed Capital Investment (F)

The portion of total expenditures Fixed Capital Investment (v2170.01), for the capacity expansion necessary to support incremental (increased) sales. It is defined as capital expenditures in excess of depreciation expense and net capitalized interest. Depreciation expense is assumed
to approximate the cost of replacing equipment to maintain the plant without adding capacity. 
As part of the financing decision, not the investment decision, Interest Capitalized (v1410) is 
excluded from Incremental Fixed Capital Investment (F) (v6185.00).

When expressed as a percentage of incremental Sales (v1030), it is known as “F,” a key Strategic 
Finance account affecting Shareholder Value (v5070):

Fixed Capital Inv. (v2170.01) - Depr. Exp (Funds) (v2190.01) 

Sales (Net) (v1030.00) - Sales (Net) (v1030.00) (prior period)

Depreciation Expense (Funds) (v2190.01), based on historical costs, may understate the cost of 
replacing equipment when that cost has increased because of inflation and regulatory forces 
such as environmental controls). The “F” (v6185.00) ratio does account for greater replacement 
costs, because they are captured in your estimate of total capital expenditures, Fixed Capital 
Investment (v2170.01). The numerator, therefore, impounds the cost of expansion and the cost 
of replacing equipment.

Whether the historical value of this account is a reasonable estimate for the next few years is 
dependent upon factors such as these:

● Your assessment of the speed and extent to which increased fixed capital costs can be passed 
on to customers through the selling price

● Whether assets can be used more effectively

● Whether the number of plants can be reduced

(v6190) Incremental Working Capital Investment (W)

The Incremental Working Capital Investment (v4070) required for operations is the increase in 
Total Current Assets (v2100) (excluding Marketable Securities (v2017)) minus the Increase in 
Total Current Liabilities (v2600) (excluding the Current Portion of Long-Term Debt (v2510) 
and Notes Payable (v2520)).

When this investment is expressed as a percentage of incremental or increased Sales (v1030), it 
is known as “W” (v6190.00), a key Strategic Finance account affecting Shareholder Value 
(v5070):

Incremental Working Capital Investment (v4070.00) 

Sales (Net) (v1030.00) - Sales (Net) (v1030.00) (prior period)

Incremental Working Capital Investment (W) (v6190.00) excludes the increases in Marketable 
Securities (v2017), Current Portion of Long-Term Debt (v2510), and Notes Payable (v2520) 
because those accounts are financing issues and are not part of the cash required for operations.

Incremental Working Capital Investment (v4070) represents the actual investment in 
receivables, inventory, and so on necessary to support sales growth. Because this investment is 
part of the company’s basic production and administrative function, it is included in the 
calculation of Cash Flow from Operations (v4100).
Past year-to-year balance sheet data may not provide a good measure of the increase or decrease in funds required for the future. Past figures can be misleading for two reasons:

1. Year-end figures on the balance sheet may not reflect the average or usual needs of the business during that year.
2. Estimating the cost of increased inventories based on the difference between the beginning and ending inventories balances may yield unreliable results.

**(v6195.00) Cash Income Tax Rate (Tc)**

Income Taxes on Operations (v3240) represents the portion of total income taxes that is applicable to operating profit only (Taxable Operating Profit (v3210)). Income Taxes on Operations (v3240) is the total taxes on Taxable Operating Profit (v3210) for a fiscal year that paid by installments or are payable within 12 months. (The latter are shown as a liability in Income Taxes Payable (v2530) at year end.)

The Cash Income Tax Rate (v6195) is calculated as follows:

\[
\text{Total Taxes on Operations (v3280.00)}
\]

\[
\text{Taxable Oper. Profit (v3210.00) + Gain on Sale of Assets (v1170.00)}
\]

**(v6200.00) Cost of Capital (K)**

This account appears on the Financial Ratios Report and displays the Cost of Capital (v5000) amount.

Cost of Capital (Kw) (v5000.00)

Cost of Capital (v5000.00) is the weighted average costs of debt and equity.

Enter the rate as a percentage. Using one rate for all periods is recommended.

Cost of Capital (Kw) forms the basis of the Discount Factor (Kw) (v5000.01) that is multiplied by future cash flows to calculate their present value.

Strategic Finance distinguishes between the Cost of Capital (v5000) during the forecast period and in the residual period, Long-Term Cost of Capital (%) (v5005). It is generally recommended that Cost of Capital (Kw) (v5000.00) and Long-Term Cost of Capital (%) (v5005) share input.

**(v6260.00) Operating Profit Cash Interest Coverage**

Tells you the extent to which the operating earnings of a company are sufficient to cover the cash interest expense which the company is incurring in the current period. This account appears in the Interest Expense section of the Funding Analysis Report. It is calculated as follows:

\[
\text{Operating Profit (v1150.00)}
\]
(v6265.00) Operating Cash Flow Cash Interest Coverage
The cash flow before discretionary investments (such as fixed capital expenditures), which is available to meet current cash interest obligations. This account appears in the Interest Expense section of the Funding Analysis Report. It is calculated as follows:
Cash from Operating Cycle (v4320.00)

Total Cash Interest Expense (v3590.00)

(v6300.00) Increase in Shareholder Value
(Assume in Shareholder Value (%) (6305.00))
Appears on the Financial Ratios Report and displays the period-to-period currency and percentage changes in Shareholder Value (v5070), calculated using the Cum. PV of Cash Flows and Residual Value (v5030).

(v6310.00) Increase in DDM Value
(Assume in DDM Value (v6315.00))
Appears on the Financial Ratios Report and displays the period-to-period currency and percentage changes in the Cum. PV of Dividend and Equity Residual Value (v5330).

(v6320.00) Return on Invested Capital (%)
Calculated as:
Economic Profit NOPAT (v5745.00)
Adjusted Book Value (v5725.00) (prior period)
Residual Value Income Tax Rate (v4.00.560)

Residual Value Income Tax Rate (v4.00.560) is the tax rate applied to Taxable Operating Profit (v3210) during the years following the forecast period.

(v6325.00) E.P. Spread (ROIC-RROC)
Economic Profit Spread (ROIC - RROC) (%) (v6325.00) is calculated as follows:
(v6320.00) Return on Invested Capital (%)
- (v5702.00) Economic Profit RROC %
(v6330.00) Economic Profit
Calculated as: E.P. Spread (ROIC - RROC) (%) * Adjusted Book Value
where:
  • (v6325.00) E.P. Spread (ROIC - RROC) (%)
  • (v5725.00) Adjusted Book Value (prior period)

(v6500.00 - v6520.00) Debt Covenants #1 - #10
Five accounts can be used to enter debt covenant requirements and test your ability to meet them. Each account can have up to 999 subaccounts to accommodate covenants in your analysis. To accommodate required inputs and outputs for covenant tests, the Debt Covenant (v6500.00-v6520.00) accounts in Oracle Hyperion Strategic Finance have three related accounts, meaning that they automatically have additional associated accounts:

(v65xx.00) Covenant Test Parameter
Input account is accessible from the Financial Accounts view or the Account Input dialog. Enter a test parameter amount for each period in the file (such as Working Capital of $200MM in 1995, $250MM in 1996). You can enter a different test parameter from period to period. In the User Defined Account dialog, you can select the output type and units.

(v65xx.01) Actual Performance Equation
Accessible from the User Defined Account dialog. Enter a formula that measures the actual performance of the entity in the analysis such as Working Capital = Total Current Assets - Total Current Liabilities, using the formula v2100 - v2600). Also, select the output type and units.

(v65xx.02) Covenant Result
Accessible from the User Defined Account dialog, it calculates the difference between the test parameter and actual performance results. It measures the result of the entity performance relative to the covenant test it is measured against. The default formula entered for this account is: v65xx.01 - v65xx.00
Actual Test
where a typical usage example might be for a Minimum Working Capital covenant. The result is a negative number if the covenant is not met (actual is less than the test parameter).

You can change the default formula to reflect the “Test - Actual” (v65xx.00 - v65xx.01), where a typical usage example might be for a Maximum Debt to Equity covenant. The result is a negative number if the covenant is not met (test parameter is less than the actual amount).
These accounts are found in the Model Options dialog.
Glossary

activity-level authorization  Defines user access to applications and the types of activities they can perform on applications, independent of the data that will be operated on.

ad hoc report  An online analytical query that an end user creates dynamically.

adapter  Software that enables a program to integrate with data and metadata from target and source systems.

adaptive states  Interactive Reporting Web Client level of permission.

adjustment  See journal entry.

Advanced Relational Access  The integration of a relational database with an Essbase multidimensional database so that all data remains in the relational database and is mapped to summary-level data in the Essbase database.

agent  An Essbase server process that starts and stops applications and databases, manages connections from users, and handles user-access security. The agent is referred to as ESSBASE.EXE.

aggregate cell  A cell comprising several cells. For example, a data cell that uses Children(Year) expands to four cells containing Quarter 1, Quarter 2, Quarter 3, and Quarter 4 data.

aggregate function  A type of function, such as sum or calculation of an average, that summarizes or performs analysis on data.

aggregate limit  A limit placed on an aggregated request line item or aggregated metatopic item.
aggregate storage database  The database storage model designed to support large-scale, sparsely distributed data which is categorized into many, potentially large dimensions. Upper level members and formulas are dynamically calculated, and selected data values are aggregated and stored, typically with improvements in overall aggregation time.

aggregate view  A collection of aggregate cells based on the levels of the members within each dimension. To reduce calculation time, values are pre-aggregated and stored as aggregate views. Retrievals start from aggregate view totals and add up from there.

aggregation  The process of rolling up and storing values in an aggregate storage database; the stored result of the aggregation process.

aggregation script  In aggregate storage databases only, a file that defines a selection of aggregate views to be built into an aggregation.

alias table  A table that contains alternate names for members.

alternate hierarchy  A hierarchy of shared members. An alternate hierarchy is based upon an existing hierarchy in a database outline, but has alternate levels in the dimension. An alternate hierarchy allows the same data to be seen from different points of view.

ancestor  A branch member that has members below it. For example, the members Qtr2 and 2006 are ancestors of the member April.

appender  A Log4j term for destination.

application  1) A software program designed to run a specific task or group of tasks such as a spreadsheet program or database management system; 2) A related set of dimensions and dimension members that are used to meet a specific set of analytical requirements, reporting requirements, or both.

application administrator  A person responsible for setting up, configuring, maintaining, and controlling an application. Has all application privileges and data access permissions.

application currency  The default reporting currency for the application.

application server cluster  A loosely joined group of application servers running simultaneously, working together for reliability and scalability, and appearing to users as one application server instance. See also vertical application cluster and horizontal application cluster.

area  A predefined set of members and values that makes up a partition.

arithmetic data load  A data load that performs operations on values in the database, such as adding 10 to each value.

artifact  An individual application or repository item; for example, scripts, forms, rules files, Interactive Reporting documents, and financial reports. Also known as an object.

assemblies  Installation files for EPM System products or components.

asset account  An account type that stores values that represent a company’s assets.

assignment  The association of a source and destination in the allocation model that controls the direction of allocated costs or revenue flow.

asymmetric topology  An Oracle Fusion Middleware Disaster Recovery configuration that is different across tiers on the production site and standby site. For example, an asymmetric topology can include a standby site with fewer hosts and instances than the production site.

attribute  A characteristic of a dimension member. For example, Employee dimension members may have attributes of Name, Age, or Address. Product dimension members can have several attributes, such as a size and flavor.

attribute association  A relationship in a database outline whereby a member in an attribute dimension describes a characteristic of a member of its base dimension. For example, if product 100-10 has a grape flavor, the product 100-10 has the Flavor attribute association of grape. Thus, the 100-10 member of the Product dimension is associated with the Grape member of the Flavor attribute dimension.

Application Migration Utility  A command-line utility for migrating applications and artifacts.
Attribute Calculations dimension A system-defined dimension that performs these calculation operations on groups of members: Sum, Count, Avg, Min, and Max. This dimension is calculated dynamically and is not visible in the database outline. For example, using the Avg member, you can calculate the average sales value for Red products in New York in January.

attribute dimension A type of dimension that enables analysis based on the attributes or qualities of dimension members.

attribute reporting A reporting process based on the attributes of the base dimension members. See also base dimension.

attribute type A text, numeric, Boolean, date, or linked-attribute type that enables different functions for grouping, selecting, or calculating data. For example, because the Ounces attribute dimension has the type numeric, the number of ounces specified as the attribute of each product can be used to calculate the profit per ounce for that product.

authentication Verification of identity as a security measure. Authentication is typically based on a user name and password. Passwords and digital signatures are forms of authentication.

authentication service A core service that manages one authentication system.

auto-reversing journal A journal for entering adjustments that you want to reverse in the next period.

automated stage A stage that does not require human intervention; for example, a data load.

axis 1) A straight line that passes through a graphic used for measurement and categorization; 2) A report aspect used to arrange and relate multidimensional data, such as filters, pages, rows, and columns. For example, for a data query in Simple Basic, an axis can define columns for values for Qtr1, Qtr2, Qtr3, and Qtr4. Row data would be retrieved with totals in the following hierarchy: Market, Product.

backup A duplicate copy of an application instance.

balance account An account type that stores unsigned values that relate to a particular time.

balanced journal A journal in which the total debits equal the total credits.

bang character (!) A character that terminates a series of report commands and requests information from the database. A report script must be terminated with a bang character; several bang characters can be used within a report script.

base currency The currency in which daily business transactions are performed.

base dimension A standard dimension that is associated with one or more attribute dimensions. For example, assuming products have flavors, the Product dimension is the base dimension for the Flavors attribute dimension.

base entity An entity at the bottom of the organization structure that does not own other entities.

batch calculation Any calculation on a database that is done in batch; for example, a calculation script or a full database calculation. Dynamic calculations are not considered to be batch calculations.

batch file An operating system file that can call multiple ESSCMD scripts and run multiple sessions of ESSCMD. On Windows-based systems, batch files have BAT file extensions. On UNIX, batch files are written as a shell script.

Batch Loader An FDM component that enables the processing of multiple files.

batch POV A collection of all dimensions on the user POV of every report and book in the batch. While scheduling the batch, you can set the members selected on the batch POV.

batch processing mode A method of using ESSCMD to write a batch or script file that can be used to automate routine server maintenance and diagnostic tasks. ESSCMD script files can execute multiple commands and can be run from the operating system command line or from within operating system batch files. Batch files can be used to call multiple ESSCMD scripts or run multiple instances of ESSCMD.

block The primary storage unit which is a multidimensional array representing the cells of all dense dimensions.

block storage database The Essbase database storage model categorizing and storing data based on the sparsity of data values defined in sparse dimensions. Data values are stored in blocks, which exist only for sparse dimension members for which there are values.
Blocked Account  An account that you do not want calculated in the consolidated file because you want to enter it manually.

book  1) In Financial Reporting, a container that holds a group of similar documents. Books may specify dimension sections or dimension changes; 2) In Data Relationship Management, a collection of exports that can be run together as a group. Export results can be combined together or output separately.

book POV  The dimension members for which a book is run.

bookmark  A link to a reporting document or a Web site, displayed on a personal page of a user. The types of bookmarks are My Bookmarks and image bookmarks.

bounding rectangle  The required perimeter that encapsulates the Interactive Reporting document content when embedding Interactive Reporting document sections in a personal page, specified in pixels for height and width or row per page.

broadcast message  A simple text message sent by an administrator to a user who is logged on to a Planning application. The message details information such as system availability, notification of application refresh, or application backups.

build method  A method used to modify database outlines. Choice of a build method is based on the format of data in data source files.

business process  A set of activities that collectively accomplish a business objective.

business rules  Logical expressions or formulas that are created within an application to produce a desired set of resulting values.

cache  A buffer in memory that holds data temporarily.

calc script  A set of commands that define how a database is consolidated or aggregated. A calculation script may also contain commands that specify allocation and other calculation rules separate from the consolidation process.

Calculated Accounts  Accounts with formulas that you cannot alter. These formulas are fixed to maintain the accounting integrity of the model that you are building. For example, the formula for Net Income, a Calculated Account, is modeled into Strategic Finance and cannot be changed in historical or forecast periods.

calculated member in MaxL DML  A member designed for analytical purposes and defined in the optional WITH section of a MaxL DML query.

Calculation Manager  A module of Enterprise Performance Management Architecture (EPMA) that Planning and Financial Management users can use to design, validate, and administrate business rules in a graphical environment.

calculation status  A consolidation status that indicates that some values or formula calculations have changed. You must recomconsolidate to get the correct values for the affected entity.

calendar  User-defined time periods and their relationship to each other. Q1, Q2, Q3, and Q4 comprise a calendar or fiscal year.

cascade  The process of creating multiple reports for a subset of member values.

Catalog pane  An area that displays a list of elements available to the active section. If Query is the active section, a list of database tables is displayed. If Pivot is the active section, a list of results columns is displayed. If Dashboard is the active section, a list of embeddable sections, graphic tools, and control tools are displayed.

categories  Groupings by which data is organized. For example, Month.

cause and effect map  A map that depicts how the elements that form your corporate strategy relate and how they work together to meet your organization’s strategic goals. A Cause and Effect map tab is automatically created for each Strategy map.

CDF  See custom-defined function.

CDM  See custom-defined macro.

cell  1) The data value at the intersection of dimensions in a multidimensional database; the intersection of a row and a column in a worksheet; 2) A logical group of nodes belonging to one administrative domain.

cell note  A text annotation for a cell in an Essbase database. Cell notes are a type of LRO.

CHANGED status  Consolidation status that indicates data for an entity has changed.

chart template  A template that defines the metrics to display in Workspace charts.
child  A member with a parent above it in the database outline.

choice list  A list of members that a report designer can specify for each dimension when defining the report’s point of view. A user who wants to change the point of view for a dimension that uses a choice list can select only the members specified in that defined member list or those members that meet the criteria defined in the function for the dynamic list.

clean block  A data block in which the database is fully calculated, if a calculation script calculates all dimensions at once, or if the SET CLEARUPDATESTATUS command is used in a calculation script.

cluster  An array of servers or databases that behave as a single resource which share task loads and provide failover support; eliminates one server or database as a single point of failure in a system.

cluster interconnect  A private link used by a hardware cluster for heartbeat information, to detect node failure.

cluster services  Software that manages cluster member operations as a system. With cluster services, you can define a set of resources and services to monitor through a heartbeat mechanism between cluster members and to move these resources and services to a different cluster member as efficiently and transparently as possible.

clustered bar charts  Charts in which categories are viewed side-by-side; used only with vertical bar charts.

code page  A mapping of bit combinations to a set of text characters. Different code pages support different sets of characters. Each computer contains a code page setting for the character set requirements of the language of the computer user. In the context of this document, code pages map characters to bit combinations for non-Unicode encodings. See also encoding.

column  In Data Relationship Management, a field of data associated with an import source or the results of a query, compare, validation, or export.

committed access  An Essbase Kernel Isolation Level setting that affects how Essbase handles transactions. Under committed access, concurrent transactions hold long-term write locks and yield predictable results.

computed item  A virtual column (as opposed to a column that is physically stored in the database or cube) that can be calculated by the database during a query, or by Interactive Reporting Studio in the Results section. Computed items are calculations of data based on functions, data items, and operators provided in the dialog and can be included in reports or reused to calculate other data.

connection file  See Interactive Reporting connection file (.oce)

consolidated file (Parent)  A file into which all of the business unit files are consolidated; contains the definition of the consolidation.

consolidation  The process of aggregating data from dependent entities to parent entities. For example, if the dimension Year consists of the members Qtr1, Qtr2, Qtr3, and Qtr4, its consolidation is Year.

consolidation file (*.cns)  A graphical interface that enables you to add, delete, or move Strategic Finance files in the consolidation process using either a Chart or Tree view. It also enables you to define and modify the consolidation.

consolidation rule  The rule that is executed during the consolidation of the node of the hierarchy. This rule can contain customer-specific formulas appropriate for the correct consolidation of parent balances. Elimination processing can be controlled within these rules.

content  Information stored in the repository for any type of file.

content browser  A component that enables users to browse and select content to be placed on a Workspace Page.

context variable  A variable that is defined for a particular task flow to identify the context of the taskflow instance.

contribution  The value added to a parent from a child entity. Each child has a contribution to its parent.

controls groups  Groupings used in FDM to maintain and organize certification and assessment information, especially helpful for meeting Sarbanes-Oxley requirements.

conversion rate  See exchange rate.

cookie  A segment of data placed on your computer by a Web site.
correlated subqueries  Subqueries that are evaluated once for every row in the parent query; created by joining a topic item in the subquery with a topic in the parent query.

critical business area (CBA)  An individual or a group organized into a division, region, plant, cost center, profit center, project team, or process; also called accountability team or business area.

critical success factor (CSF)  A capability that must be established and sustained to achieve a strategic objective; owned by a strategic objective or a critical process and is a parent to one or more actions.

crosstab reporting  Reporting that categorizes and summarizes data in table format. The table cells contain summaries of the data that fit within the intersecting categories. For example, a crosstab report of product sales information could show size attributes, such as Small and Large, as column headings and color attributes, such as Blue and Yellow, as row headings. The cell in the table where Large and Blue intersect could contain the total sales of all Blue products that are sized Large.

cube  A block of data that contains three or more dimensions. An Essbase database is a cube.

cube deployment  In Essbase Studio, the process of setting load options for a model to build an outline and load data into an Essbase application and database.

cube schema  In Essbase Studio, the metadata elements, such as measures and hierarchies, representing the logical model of a cube.

currency conversion  A process that converts currency values in a database from one currency into another. For example, to convert one U. S. dollar into the European euro, the exchange rate (for example, 0.923702) is multiplied by the dollar (1* 0.923702). After conversion, the European euro amount is .92.

Currency Overrides  A feature allowing the selected input method for any input period to be overridden to enable input of that period’s value as Default Currency/Items. To override the input method, enter a pound sign (#) before or after the number.

currency partition  A dimension type that separates local currency members from a base currency, as defined in an application. Identifies currency types, such as Actual, Budget, and Forecast.

custom calendar  Any calendar created by an administrator.

custom dimension  A dimension created and defined by users. Channel, product, department, project, or region could be custom dimensions.

custom property  A property of a dimension or dimension member that is created by a user.

custom report  A complex report from the Design Report module, composed of any combination of components.

custom-defined function (CDF)  Essbase calculation functions developed in Java and added to the standard Essbase calculation scripting language using MaxL. See also custom-defined macro.

custom-defined macro (CDM)  Essbase macros written with Essbase calculator functions and special macro functions. Custom-defined macros use an internal Essbase macro language that enables the combination of calculation functions and they operate on multiple input parameters. See also custom-defined function.

cycle through  Perform multiple passes through a database while calculating it.

dashboard  A collection of metrics and indicators that provide an interactive summary of your business. Dashboards enable you to build and deploy analytic applications.

data cache  A buffer in memory that holds uncompressed data blocks.

data cell  See cell.

data file cache  A buffer in memory that holds compressed data (PAG) files.

data form  A grid display that enables users to enter data into the database from an interface such as a Web browser, and to view and analyze data or related text. Certain dimension member values are fixed, giving users a specific view into the data.

data function  Function that computes aggregate values, including averages, maximums, counts, and other statistics that summarize groupings of data.

data load location  In FDM, a reporting unit responsible for submitting source data into the target system. Typically, one FDM data load location exists for each source file loaded to the target system.
**data load rules**  A set of criteria that determines how to load data from a text-based file, a spreadsheet, or a relational data set into a database.

**data lock**  A feature that prevents changes to data according to specified criteria, such as a period or scenario.

**data mining**  The process of searching through an Essbase database for hidden relationships and patterns in a large amount of data.

**data model**  A representation of a subset of database tables.

**data value**  See cell.

**database connection**  A file that stores definitions and properties used to connect to data sources and enables database references to be portable and widely used.

**date measure**  In Essbase, a member tagged as Date in the dimension where measures are represented. The cell values are displayed as formatted dates. Dates as measures can be useful for analysis types that are difficult to represent using the Time dimension. For example, an application may need to track acquisition dates for a series of capital assets, but the acquisition dates span too large a period to allow for feasible Time dimension modeling. See also typed measure.

**Default Currency Units**  The unit scale of data. For example, if you select to define your analysis in thousands and enter 10, this unit is interpreted as 10,000.

**dense dimension**  In block storage databases, a dimension likely to contain data for every combination of dimension members. For example, time dimensions are often dense because they can contain all combinations of all members. Contrast with sparse dimension.

**dependent entity**  An entity that is owned by another entity in the organization.

**derived text measure**  In Essbase Studio, a text measure whose values are governed by a predefined rule expressed as a range. For example, a derived text measure, called “Sales Performance Index,” based on a measure Sales, could consist of the values “High,” “Medium,” and “Low.” This derived text measure is defined to display “High,” “Medium,” and “Low” depending on the range in which the corresponding sales values fall. See also text measure.

**descendant**  Any member below a parent in the database outline. In a dimension that includes years, quarters, and months, the members Qtr2 and April are descendants of the member Year.

**Design Report**  An interface in Web Analysis Studio for designing custom reports, from a library of components.

**destination**  1) In Business Rules, a block of the database where calculated values are stored; 2) In Profitability and Cost Management, the association of a source and destination in the allocation model that controls the direction of allocated costs or revenue flow.

**destination currency**  The currency to which balances are converted. You enter exchange rates and convert from the source currency to the destination currency. For example, when you convert from EUR to USD, the destination currency is USD.

**detail chart**  A chart that provides the detailed information that you see in a Summary chart. Detail charts appear in the Investigate Section in columns below the Summary charts. If the Summary chart shows a Pie chart, then the Detail charts below represent each piece of the pie.

**dimension**  A data category used to organize business data for the retrieval and preservation of values. Dimensions usually contain hierarchies of related members grouped within them. For example, a Year dimension often includes members for each time period, such as quarters and months.

**dimension build**  The process of adding dimensions and members to an Essbase outline.

**dimension build rules**  Specifications, similar to data load rules, that Essbase uses to modify an outline. The modification is based on data in an external data source file.

**dimension tab**  In the Pivot section, the tab that enables you to pivot data between rows and columns.

**dimension table**  1) A table that includes numerous attributes about a specific business process; 2) In Essbase Integration Services, a container in the OLAP model for one or more relational tables that define a potential dimension in Essbase.

**dimension type**  A dimension property that enables the use of predefined functionality. Dimensions tagged as time have a predefined calendar functionality.
**dimensionality** In MaxL DML, the represented dimensions (and the order in which they are represented) in a set. For example, the following set consists of two tuples of the same dimensionality, because they both reflect the dimensions (Region, Year): { (West, Feb), (East, Mar) }

**direct rate** A currency rate that you enter in the exchange-rate table. The direct rate is used for currency conversion. For example, to convert balances from JPY to USD, in the exchange-rate table, enter a rate for the period/scenario where the source currency is JPY and the destination currency is USD.

**dirty block** A data block containing cells that have been changed since the last calculation. Upper-level blocks are marked as dirty if their child blocks are dirty (that is, if they have been updated).

**Disaster Recovery** The ability to safeguard against natural or unplanned outages at a production site by having a recovery strategy for applications and data to a geographically separate standby site.

**display type** One of three Web Analysis formats saved to the repository: spreadsheet, chart, and pinboard.

**dog-ear** The flipped page corner in the upper-right corner of the chart header area.

**domain** In data mining, a variable representing a range of navigation within data.

**drill-down** Navigation through the query result set using the dimensional hierarchy. Drilling down moves the user perspective from aggregated data to detail. For example, drilling down can reveal hierarchical relationships between years and quarters or quarters and months.

**drill-through** The navigation from a value in one data source to corresponding data in another source.

**driver** In Profitability and Cost Management, an allocation method that describes the mathematical relationship between the sources that use the driver and the destinations to which those sources allocate cost or revenue. For Business Modeling, see also cost driver and activity driver.

**duplicate alias name** A name that occurs more than once in an alias table and can be associated with more than one member in a database outline. Duplicate alias names can be used with duplicate member outlines only.

**duplicate member name** Multiple occurrences of a member name in a database, with each occurrence representing a different member. For example, a database has two members named New York. One member represents New York state and the other member represents New York city.

**duplicate member outline** A database outline containing duplicate member names.

**Dynamic Calc and Store members** Members in a block storage outline that Essbase calculates only upon the first retrieval of the value. Essbase then stores the calculated value in the database. Subsequent retrievals do not require calculating.

**Dynamic Calc members** Members in a block storage outline that Essbase calculates only at retrieval time. Essbase discards calculated values after completing the retrieval request.

**dynamic calculation** In Essbase, a calculation that occurs only when you retrieve data on a member that is tagged as Dynamic Calc or Dynamic Calc and Store. The member’s values are calculated at retrieval time instead of being precalculated during batch calculation.

**dynamic hierarchy** In aggregate storage database outlines only, a hierarchy in which members are calculated at retrieval time.

**dynamic member list** A system-created named member set that is based on user-defined criteria. The list is refreshed automatically whenever it is referenced in the application. As dimension members are added and deleted, the list automatically reapplies the criteria to reflect the changes.

**dynamic reference** A pointer in the rules file to header records in a data source.

**dynamic report** A report containing data that is updated when you run the report.

**Dynamic Time Series** A process that performs period-to-date reporting in block storage databases.

**dynamic view account** An account type indicating that account values are calculated dynamically from the data that is displayed.

**Eliminated Account** An account that does not appear in the consolidated file.

**elimination** The process of zeroing out (eliminating) transactions between entities within an organization.
employee A user responsible for, or associated with, specific business objects. Employees need not work for an organization; for example, they can be consultants. Employees must be associated with user accounts, for authorization purposes.

encoding A method for mapping bit combinations to characters for creating, storing, and displaying text. Each encoding has a name; for example, UTF-8. Within an encoding, each character maps to a specific bit combination; for example, in UTF-8, uppercase A maps to HEX41. See also code page, locale.

ending period A period enabling you to adjust the date range in a chart. For example, an ending period of “month” produces a chart showing information through the end of the current month.

Enterprise View An Administration Services feature that enables management of the Essbase environment from a graphical tree view. From Enterprise View, you can operate directly on Essbase artifacts.

entity A dimension representing organizational units. Examples: divisions, subsidiaries, plants, regions, products, or other financial reporting units.

EPM Oracle home A subdirectory of Middleware home containing the files required by EPM System products. The EPM Oracle home location is specified during installation with EPM System Installer.

EPM Oracle instance A directory containing active, dynamic components of EPM System products (components that can change during run-time). You define the EPM Oracle instance directory location during configuration with EPM System Configurator.

Equity Beta The riskiness of a stock, measured by the variance between its return and the market return, indicated by an index called “beta.” For example, if a stock’s return normally moves up or down 1.2% when the market moves up or down 1%, the stock has a beta of 1.2.

essbase.cfg An optional configuration file for Essbase. Administrators may edit this file to customize Essbase Server functionality. Some configuration settings may also be used with Essbase clients to override Essbase Server settings.

EssCell A function entered into a cell in Essbase Spreadsheet Add-in to retrieve a value representing an intersection of specific Essbase database members.

ESSCMD A command-line interface for performing Essbase operations interactively or through batch script files.

ESSLANG The Essbase environment variable that defines the encoding used to interpret text characters. See also encoding.

ESSMSH See MaxL Shell.

exceptions Values that satisfy predefined conditions. You can define formatting indicators or notify subscribing users when exceptions are generated.

exchange rate type An identifier for an exchange rate. Different rate types are used because there may be multiple rates for a period and year. Users traditionally define rates at period end for the average rate of the period and for the end of the period. Additional rate types are historical rates, budget rates, forecast rates, and so on. A rate type applies to a specific time.

expense account An account that stores periodic and year-to-date values that decrease net worth if they are positive.

Extensible Markup Language (XML) A language comprising a set of tags used to assign attributes to data that can be interpreted between applications according to a schema.

external authentication Logging on to Oracle EPM System products with user information stored outside the application. The user account is maintained by the EPM System, but password administration and user authentication are performed by an external service, using a corporate directory such as Oracle Internet Directory (OID) or Microsoft Active Directory (MSAD).

externally triggered events Non-time-based events for scheduling job runs.

Extract, Transform, and Load (ETL) Data-source-specific programs for extracting data and migrating it to applications.

extraction command An Essbase reporting command that handles the selection, orientation, grouping, and ordering of raw data extracted from a database; begins with the less-than (<) character.
fact table The central table in a star join schema, characterized by a foreign key and elements drawn from a dimension table. This table typically contains numeric data that can be related to all other tables in the schema.

failover The ability to switch automatically to a redundant standby database, server, or network if the primary database, server, or network fails or is shut down. A system that is clustered for failover provides high availability and fault tolerance through server redundancy and fault-tolerant hardware, such as shared disks.

Favorites gadget A gadget that contains links to Reporting and Analysis documents and URLs. See also gadget.

file delimiter A character, such as a comma or tab, that separates fields in a data source.

filter A constraint on data sets that restricts values to specific criteria; for example, to exclude certain tables, metadata, or values, or to control access.

flow account An unsigned account that stores periodic and year-to-date values.

footer Text or images at the bottom of report pages, containing dynamic functions or static text such as page numbers, dates, logos, titles or file names, and author names.

format string 1) In Essbase, a method for transforming the way cell values are displayed; 2) In Data Relationship Management, a parameter of a Format or Formatted Date derived property that indicates the format in which a property value should be returned.

formula In Data Relationship Management, business logic used by a derived property to dynamically calculate a property value.

frame An area on the desktop. Two main areas: the navigation and workspace frames.

free-form grid An object for presenting, entering, and integrating data from different sources for dynamic calculations.

free-form reporting Creating reports by entering dimension members or report script commands in worksheets.

function In Data Relationship Management, a syntactic element of a derived property formula that accepts parameters and returns dynamic values.

gadget A simple, specialized, lightweight application that provides easy viewing of EPM content and enables access to core Reporting and Analysis functionality.

genealogy data Additional data that is optionally generated after allocation calculations. This data enables reporting on all cost or revenue flows from start to finish through all allocation steps.

generation A layer in a hierarchical tree structure that defines member relationships in a database. Generations are ordered incrementally from the top member of the dimension (generation 1) down to the child members. Use the unique generation name to identify a layer in the hierarchical tree structure.

generic jobs Non-SQR Production Reporting or non-Interactive Reporting jobs.

global report command A command in a running report script that is effective until it is replaced by another global command or the file ends.

grid POV A means for specifying dimension members on a grid without placing dimensions in rows, columns, or page intersections. A report designer can set POV values at the grid level, preventing user POVs from affecting the grid. If a dimension has one grid value, you put the dimension into the grid POV instead of the row, column, or page.

group A container for assigning similar access permissions to multiple users.

GUI Graphical user interface

hardware cluster A collection of computers that provides a single view of network services (for example, an IP address) or application services (such as databases and Web servers) to clients of these services. Each node in a hardware cluster is a standalone server that runs its own processes. These processes can communicate with one another to form what looks like a single system that cooperatively provides applications, system resources, and data to users.

high availability A system attribute that enables an application to continue to provide services in the presence of failures. This is achieved through removal of single points of failure, with fault-tolerant hardware, as well as server clusters; if one server fails, processing requests are routed to another server.
Historical Average  An average for an account over a number of historical periods.

holding company  An entity that is part of a legal entity group, with direct or indirect investments in all entities in the group.

horizontal application server cluster  A cluster with application server instances on different machines.

host  A server on which applications and services are installed.

host properties  Properties pertaining to a host, or if the host has multiple Oracle EPM homes, to an Oracle EPM home.

Hybrid Analysis  An analysis mapping low-level data stored in a relational database to summary-level data stored in Essbase, combining the mass scalability of relational systems with multidimensional data.

hyperlink  A link to a file, a Web page, or an intranet HTML page.

Hypertext Markup Language (HTML)  A programming language specifying how Web browsers display data.

identity  A unique identification for a user or group in external authentication.

image bookmarks  Graphic links to Web pages or repository items.

IMPACTED status  A status that indicates changes in child entities consolidating into parent entities.

implied share  A member with one or more children but only one that is consolidated, so the parent and child share a value.

import format  In FDM, the definition of the structure of the source file that enables the loading of a source data file to an FDM data-load location.

inactive group  A group for which an administrator has deactivated system access.

INACTIVE status  A status that indicates entities deactivated from consolidation for the current period.

inactive user  A user whose account was deactivated by an administrator.

income account  An account storing periodic and year-to-date values that, if positive, increase net worth.

index  1) A method where Essbase uses sparse-data combinations to retrieve data in block storage databases. 2) The index file.

index cache  A buffer containing index pages.

index entry  A pointer to an intersection of sparse dimensions. Index entries point to data blocks on disk and use offsets to locate cells.

index file  An Essbase file storing block storage data retrieval information, residing on disk, and containing index pages.

index page  A subdivision in an index file. An index page contains pointers to data blocks.

input data  Data loaded from a source rather than calculated.

installation assemblies  Product installation files that plug in to EPM System Installer.

integration  A process that is run to move data between Oracle’s Hyperion applications using Shared Services. Data integration definitions specify the data moving between a source application and a destination application, and they enable the data movements to be grouped, ordered, and scheduled.

intelligent calculation  A calculation method tracking updated data blocks since the last calculation.

Interactive Reporting connection file (.oce)  Files encapsulating database connection information, including the database API (ODBC, SQL*Net, and so on), database software, the database server network address, and database user name. Administrators create and publish Interactive Reporting connection (.oce) files.

intercompany elimination  See elimination.

intercompany matching  The process of comparing balances for pairs of intercompany accounts within an application. Intercompany receivables are compared to intercompany payables for matches. Matching accounts are used to eliminate intercompany transactions from an organization’s consolidated totals.

intercompany matching report  A report that compares intercompany account balances and indicates whether the accounts are in balance.
interdimensional irrelevance  A situation in which a dimension does not intersect with other dimensions. Because the data in the dimension cannot be accessed from the nonintersecting dimensions, the nonintersecting dimensions are not relevant to that dimension.

intersection  A unit of data representing the intersection of dimensions in a multidimensional database; also, a worksheet cell.

intrastage assignment  An assignment in the financial flow to an object within the same stage.

introspection  A deep inspection of a data source to discover hierarchies based on the inherent relationships in the database. Contrast with scraping.

Investigation  See drill-through.

isolation level  An Essbase Kernel setting that determines the lock and commit behavior of database operations. Choices are: committed access and uncommitted access.

iteration  A pass of the budget or planning cycle in which the same version of data is revised and promoted.

Java application server cluster  An active-active application server cluster of Java Virtual Machines (JVMs).

Java Database Connectivity (JDBC)  A client-server communication protocol used by Java-based clients and relational databases. The JDBC interface provides a call-level API for SQL-based database access.

job output  Files or reports produced from running a job.

jobs  Documents with special properties that can be launched to generate output. A job can contain Interactive Reporting, SQR Production Reporting, or generic documents.

join  A link between two relational database tables or topics based on common content in a column or row. A join typically occurs between identical or similar items within different tables or topics. For example, a record in the Customer table is joined to a record in the Orders table because the Customer ID value is the same in each table.

journal entry (JE)  A set of debit-credit adjustments to account balances for a scenario and period.

KeyContacts gadget  A gadget that contains a group of Smart Space Collaborator users and provides access to Smart Space Collaborator. For example, you can have a KeyContacts gadget for your marketing team and another for your development team. See also gadget.

latest  A spreadsheet keyword used to extract data values from the member defined as the latest time period.

layer  1) The horizontal location of members in a hierarchical structure, specified by generation (top down) or level (bottom up); 2) Position of objects relative to other objects. For example, in the Sample Basic database, Qtr1 and Qtr4 are in the same layer, so they are also in the same generation, but in a database with a ragged hierarchy, Qtr1 and Qtr4 might not be in same layer, though they are in the same generation.

layout area  An area on a Workspace Page where content can be placed.

legend box  A box containing labels that identify the data categories of a dimension.

level  A layer in a hierarchical tree structure that defines database member relationships. Levels are ordered from the bottom dimension member (level 0) up to the parent members.

level 0 block  A data block for combinations of sparse, level 0 members.

level 0 member  A member that has no children.

liability account  An account type that stores “point in time” balances of a company’s liabilities. Examples: accrued expenses, accounts payable, and long-term debt.

lifecycle management  The process of migrating an application, a repository, or individual artifacts across product environments.

line item detail  The lowest level of detail in an account.

lineage  The relationship between different metadata elements showing how one metadata element is derived from one or more other metadata elements, ultimately tracing the metadata element to its physical source. In Essbase Studio, a lineage viewer displays the relationships graphically. See also traceability.

JSP  Java Server Page.
link  1) A reference to a repository object. Links can reference folders, files, shortcuts, and other links; 2) In a taskflow, the point where the activity in one stage ends and another begins.

link condition A logical expression evaluated by the taskflow engine to determine the sequence of launching taskflow stages.

linked data model Documents that are linked to a master copy in a repository

linked partition A shared partition that enables you to use a data cell to link two databases. When a user clicks a linked cell in a worksheet, Essbase opens a new sheet displaying the dimensions in the linked database. The user can then drill down those dimensions.

linked reporting object (LRO) A cell-based link to an external file such as cell notes, URLs, or files with text, audio, video, or pictures. (Only cell notes are supported for Essbase LROs in Financial Reporting.) Contrast with local report object.

load balancer Hardware or software that directs the requests to individual application servers in a cluster and is the only point of entry into the system.

load balancing Distribution of requests across a group of servers, which helps to ensure optimal end user performance.

local currency An input currency type. When an input currency type is not specified, the local currency matches the entity’s base currency.

local report object A report object that is not linked to a Financial Reporting report object in Explorer. Contrast with linked reporting object.

local results A data model’s query results. Results can be used in local joins by dragging them into the data model. Local results are displayed in the catalog when requested.

locale A computer setting that specifies a location’s language, currency and date formatting, data sort order, and the character set encoding used on the computer. Essbase uses only the encoding portion. See also encoding, ESSLANG.

locale header record A text record at the beginning of some non-Unicode-encoded text files, such as scripts, that identifies the encoding locale.

location alias A descriptor that identifies a data source. The location alias specifies a server, application, database, user name, and password. Location aliases are set by DBAs at the database level using Administration Services Console, ESSCMD, or the API.

locked A user-invoked process that prevents users and processes from modifying data.

locked data model A data model that cannot be modified by a user.

LOCKED status A consolidation status indicating that an entity contains data that cannot be modified.

Log Analyzer An Administration Services feature that enables filtering, searching, and analysis of Essbase logs.

logic group In FDM, one or more logic accounts generated after a source file is loaded into FDM. Logic accounts are calculated accounts derived from the source data.

logical Web application An aliased reference used to identify the internal host name, port, and context of a Web application. In a clustered or high-availability environment, this is the alias name that establishes a single internal reference for the distributed components. In EPM System, a nonclustered logical Web application defaults to the physical host running the Web application.

LRO See linked reporting object.

managed server An application server process running in its own Java Virtual Machine (JVM).

manual stage A stage that requires human intervention.

Map File A file that stores the definition for sending data to or retrieving data from an external database. Map files have different extensions (.mps to send data; .mpr to retrieve data).

Map Navigator A feature that displays your current position on a Strategy, Accountability, or Cause and Effect map, indicated by a red outline.

Marginal Tax Rate The rate used to calculate the after-tax cost of debt; represents the tax rate applied to the last earned income dollar (the rate from the highest tax bracket into which income falls) and includes federal, state, and local taxes. Based on current level of taxable income and tax bracket, you can predict marginal tax rate.
**Market Risk Premium** The additional rate of return paid over the risk-free rate to persuade investors to hold “riskier” investments than government securities. Calculated by subtracting the risk-free rate from the expected market return. These figures should closely model future market conditions.

**master data model** An independent data model that is referenced as a source by multiple queries. When used, “Locked Data Model” is displayed in the Query section’s Content pane; the data model is linked to the master data model displayed in the Data Model section, which an administrator may hide.

**mathematical operator** A symbol that defines how data is calculated in formulas and outlines. Can be any of the standard mathematical or Boolean operators; for example, +, -, *, /, and %.

**MaxL** The multidimensional database access language for Essbase, consisting of a data definition language (MaxL DDL) and a data manipulation language (MaxL DML). See also MaxL DDL, MaxL DML, and MaxL Shell

**MaxL DDL** The data definition language used by Essbase for batch or interactive system-administration tasks.

**MaxL DML** The data manipulation language used in Essbase for data query and extraction.

**MaxL Perl Module** A Perl module (essbase.pm) that is part of Essbase MaxL DDL. This module can be added to the Perl package to provide access to Essbase databases from Perl programs.

**MaxL Script Editor** A script-development environment in Administration Services Console. MaxL Script Editor is an alternative to using a text editor and the MaxL Shell for administering Essbase with MaxL scripts.

**MaxL Shell** An interface for passing MaxL statements to Essbase Server. The MaxL Shell executable file is located in the Essbase bin directory (UNIX: essmsh; Windows: essmsh.exe).

**MDX (multidimensional expression)** A language used for querying and calculation in multidimensional-compliant databases.

**measures** Numeric values in an OLAP database cube that are available for analysis. Measures are margin, cost of goods sold, unit sales, budget amount, and so on. See also fact table.

**member** A discrete component within a dimension. A member identifies and differentiates the organization of similar units. For example, a time dimension might include members Jan, Feb, and Qtr1.

**member list** A named system- or user-defined group that references members, functions, or member lists within a dimension.

**member load** In Essbase Integration Services, the process of adding dimensions and members (without data) to Essbase outlines.

**member selection report command** A type of Report Writer command that selects member ranges based on outline relationships, such as sibling, generation, and level.

**member-specific report command** A type of Report Writer formatting command that is executed as it is encountered in a report script. The command affects only its associated member and executes the format command before processing the member.

**merge** A data load option that clears values only from the accounts specified in the data load file and replaces them with values in the data load file.

**metadata** A set of data that defines and describes the properties and attributes of the data stored in a database or used by an application. Examples of metadata are dimension names, member names, properties, time periods, and security.

**metadata elements** Metadata derived from data sources and other metadata that is stored and cataloged for Essbase Studio use.

**metadata sampling** The process of retrieving a sample of members in a dimension in a drill-down operation.

**metadata security** Security set at the member level to restrict users from accessing certain outline members.

**metaoutline** In Essbase Integration Services, a template containing the structure and rules for creating an Essbase outline from an OLAP model.
**Middleware home**  A directory that includes the Oracle WebLogic Server home and can also include the EPM Oracle home and other Oracle homes. A Middleware home can reside on a local file system or on a remote shared disk that is accessible through NFS.

**migration audit report**  A report generated from the migration log that provides tracking information for an application migration.

**migration definition file (.mdf)**  A file that contains migration parameters for an application migration, enabling batch script processing.

**migration log**  A log file that captures all application migration actions and messages.

**migration snapshot**  A snapshot of an application migration that is captured in the migration log.

**MIME Type**  An attribute that describes the data format of an item, so that the system knows which application should open the object. A file's MIME (Multipurpose Internet Mail Extension) type is determined by the file extension or HTTP header. Plug-ins tell browsers which MIME types they support and which file extensions correspond to each MIME type.

**mining attribute**  In data mining, a class of values used as a factor in analysis of a set of data.

**minireport**  A report component that includes layout, content, hyperlinks, and the query or queries to load the report. Each report can include one or more minireports.

**minischema**  A graphical representation of a subset of tables from a data source that represents a data modeling context.

**missing data (#MISSING)**  A marker indicating that data in the labeled location does not exist, contains no value, or was never entered or loaded. For example, missing data exists when an account contains data for a previous or future period but not for the current period.

**model**  1) In data mining, a collection of an algorithm's findings about examined data. A model can be applied against a wider data set to generate useful information about that data; 2) A file or content string containing an application-specific representation of data. Models are the basic data managed by Shared Services, of two major types: dimensional and non-dimensional application objects; 3) In Business Modeling, a network of boxes connected to represent and calculate the operational and financial flow through the area being examined.

**multidimensional database**  A method of organizing, storing, and referencing data through three or more dimensions. An individual value is the intersection point for a set of dimensions. Contrast with relational database.

**Multiload**  An FDM feature that allows the simultaneous loading of multiple periods, categories, and locations.

**My Workspace Page**  Customizable Workspace Pages created by users. They are marked specially so that they can be easily accessed from one single place without having to navigate the repository.

**named set**  In MaxL DML, a set with its logic defined in the optional WITH section of a MaxL DML query. The named set can be referenced multiple times in the query.

**native authentication**  The process of authenticating a user name and password from within the server or application.

**nested column headings**  A report column heading format that displays data from multiple dimensions. For example, a column heading that contains Year and Scenario members is a nested column. The nested column heading shows Q1 (from the Year dimension) in the top line of the heading, qualified by Actual and Budget (from the Scenario dimension) in the bottom line of the heading.

**NO DATA status**  A consolidation status indicating that this entity contains no data for the specified period and account.

**non-dimensional model**  A Shared Services model type that includes application objects such as security files, member lists, calculation scripts, and Web forms.

**non-unique member name**  See duplicate member name.

**null value**  A value that is absent of data. Null values are not equal to zero.
**numeric attribute range**  A feature used to associate a base dimension member that has a discrete numeric value with an attribute that represents a value range. For example, to classify customers by age, an Age Group attribute dimension can contain members for the following age ranges: 0-20, 21-40, 41-60, and 61-80. Each Customer dimension member can be associated with an Age Group range. Data can be retrieved based on the age ranges rather than on individual age values.

**ODBC**  Open Database Connectivity. A database access method used from any application regardless of how the database management system (DBMS) processes the information.

**OK status**  A consolidation status indicating that an entity has already been consolidated, and that data has not changed below it in the organization structure.

**OLAP Metadata Catalog**  In Essbase Integration Services, a relational database containing metadata describing the nature, source, location, and type of data that is pulled from the relational data source.

**OLAP model**  In Essbase Integration Services, a logical model (star schema) that is created from tables and columns in a relational database. The OLAP model is then used to generate the structure of a multidimensional database. See also online analytical processing (OLAP).

**online analytical processing (OLAP)**  A multidimensional, multiuser, client-server computing environment for users who analyze consolidated enterprise data in real time. OLAP systems feature drill-down, data pivoting, complex calculations, trend analysis, and modeling.

**Open Database Connectivity (ODBC)**  Standardized application programming interface (API) technology that allows applications to access multiple third-party databases.

**Oracle home**  A directory containing the installed files required by a specific product, and residing within the directory structure of Middleware home. See also Middleware home.

**organization**  An entity hierarchy that defines each entity and their relationship to others in the hierarchy.

**origin**  The intersection of two axes.

**outline**  The database structure of a multidimensional database, including all dimensions, members, tags, types, consolidations, and mathematical relationships. Data is stored in the database according to the structure defined in the outline.

**outline synchronization**  For partitioned databases, the process of propagating outline changes from one database to another database.

**page**  A display of information in a grid or table often represented by the Z-axis. A page can contain data from one field, derived data from a calculation, or text.

**page file**  An Essbase data file.

**page heading**  A report heading type that lists members represented on the current page of the report. All data values on the page have the members in the page heading as a common attribute.

**page member**  A member that determines the page axis.

**palette**  A JASC-compliant file with a .PAL extension. Each palette contains 16 colors that complement each other and can be used to set the dashboard color elements.

**parallel calculation**  A calculation option. Essbase divides a calculation into tasks and calculates some tasks simultaneously.

**parallel data load**  In Essbase, the concurrent execution of data load stages by multiple process threads.

**parallel export**  The ability to export Essbase data to multiple files. This may be faster than exporting to a single file, and it may resolve problems caused by a single data file becoming too large for the operating system to handle.

**parent adjustments**  The journal entries that are posted to a child in relation to its parent.

**parents**  The entities that contain one or more dependent entities that report directly to them. Because parents are entities associated with at least one node, they have entity, node, and parent information associated with them.
**partition area** A subcube within a database. A partition is composed of one or more areas of cells from a portion of the database. For replicated and transparent partitions, the number of cells within an area must be the same for the data source and target to ensure that the two partitions have the same shape. If the data source area contains 18 cells, the data target area must also contain 18 cells to accommodate the number of values.

**partitioning** The process of defining areas of data that are shared or linked between data models. Partitioning can affect the performance and scalability of Essbase applications.

**pattern matching** The ability to match a value with any or all characters of an item entered as a criterion. Missing characters may be represented by wild-card values such as a question mark (?) or an asterisk (*). For example, “Find all instances of apple” returns apple, but Find all instances of apple* returns apple, applesauce, applecranberry, and so on.

**percent consolidation** The portion of a child’s values that is consolidated to its parent.

**percent control** The extent to which an entity is controlled within the context of its group.

**percent ownership** The extent to which an entity is owned by its parent.

**performance indicator** An image file used to represent measure and scorecard performance based on a range you specify; also called a status symbol. You can use the default performance indicators or create an unlimited number of your own.

**periodic value method (PVA)** A process of currency conversion that applies the periodic exchange rate values over time to derive converted results.

**permission** A level of access granted to users and groups for managing data or other users and groups.

**perspective** A category used to group measures on a scorecard or strategic objectives within an application. A perspective can represent a key stakeholder (such as a customer, employee, or shareholder/financial) or a key competency area (such as time, cost, or quality).

**pinboard** One of the three data object display types. Pinboards are graphics composed of backgrounds and interactive icons called pins. Pinboards require traffic lighting definitions.

**pins** Interactive icons placed on graphic reports called pinboards. Pins are dynamic. They can change images and traffic lighting color based on the underlying data values and analysis tools criteria.

**pivot** Alter the perspective of retrieved data. When Essbase first retrieves a dimension, it expands data into rows. You can then pivot or rearrange the data to obtain a different viewpoint.

**planner** A user who can input and submit data, use reports that others create, execute business rules, use task lists, enable e-mail notification for themselves, and use Smart View. Planners comprise the majority of users.

**planning unit** A data slice at the intersection of a scenario, version, and entity; the basic unit for preparing, reviewing, annotating, and approving plan data.

**plot area** The area bounded by X, Y, and Z axes; for pie charts, the rectangular area surrounding the pie.

**plug account** An account in which the system stores any out-of-balance differences between intercompany account pairs during the elimination process.

**post stage assignment** Assignments in the allocation model that are assigned to locations in a subsequent model stage.
POV (point of view)  A feature for setting data focus by selecting members that are not already assigned to row, column, or page axes. For example, selectable POVs in FDM could include location, period, category, and target category. In another example, using POV as a filter in Smart View, you could assign the Currency dimension to the POV and select the Euro member. Selecting this POV in data forms displays data in Euro values.

precalculation  Calculating the database before user retrieval.

precision  Number of decimal places displayed in numbers.

predefined drill paths  Paths used to drill to the next level of detail, as defined in the data model.

presentation  A playlist of Web Analysis documents, enabling reports to be grouped, organized, ordered, distributed, and reviewed. Includes pointers referencing reports in the repository.

preserve formulas  User-created formulas kept within a worksheet while retrieving data.

primary measure  A high-priority measure important to your company and business needs. Displayed in the Contents frame.

Process Monitor Report  A list of locations and their positions within the FDM data conversion process. You can use the process monitor report to monitor the status of the closing process. The report is time-stamped. Therefore, it can be used to determine to which locations at which time data was loaded.

product  In Shared Services, an application type, such as Planning or Performance Scorecard.

Production Reporting  See SQR Production Reporting.

project  An instance of Oracle's Hyperion products grouped together in an implementation. For example, a Planning project may consist of a Planning application, an Essbase cube, and a Financial Reporting Server instance.

provisioning  The process of granting users and groups specific access permissions to resources.

proxy server  A server acting as an intermediary between workstation users and the Internet to ensure security.

public job parameters  Reusable named job parameters created by administrators and accessible through the access control system.

dynamic precalculation  An assignment in the financial flow that also has the source as one of its destinations.

reconfig URL  A URL that is used to reload servlet configuration settings dynamically when users are already logged on to the Workspace.

record  In a database, a group of fields making up one complete entry. For example, a customer record may contain fields for name, address, telephone number, and sales data.

recurring template  A journal template for making identical adjustments in every period.

recurring time event  An event specifying a starting point and the frequency for running a job.

redundant data  Duplicate data blocks that Essbase retains during transactions until Essbase commits updated blocks.

regular journal  A feature for entering one-time adjustments for a period. A regular journal can be balanced, balanced by entity, or unbalanced.

Related Accounts  Accounts related to the main account and grouped under the same main account number. The account structure groups all main and related accounts under the same main account number. The main account is distinguished from related accounts by the first suffix of the account number.

relational database  A type of database that stores data in related two-dimensional tables. Contrast with multidimensional database.
replace A data load option that clears values from all accounts for periods specified in the data load file and loads values from the data load file. If an account is not specified in the load file, its values for the specified periods are cleared.

replicated partition A portion of a database, defined through Partition Manager, used to propagate an update to data mastered at one site to a copy of data stored at another site. Users can access the data as though it were part of their local database.

Report Extractor An Essbase component that retrieves report data from the Essbase database when report scripts are run.

report object In report designs, a basic element with properties defining behavior or appearance, such as text boxes, grids, images, and charts.

report script A text file containing Essbase Report Writer commands that generate one or more production reports.

Report Viewer An Essbase component that displays complete reports after report scripts are run.

reporting currency The currency used to prepare financial statements, and converted from local currencies to reporting currencies.

repository Storage location for metadata, formatting, and annotation information for views and queries.

resources Objects or services managed by the system, such as roles, users, groups, files, and jobs.

restore An operation to reload data and structural information after a database has been damaged or destroyed, typically performed after shutting down and restarting the database.

restructure An operation to regenerate or rebuild the database index and, in some cases, data files.

result frequency The algorithm used to create a set of dates to collect and display results.

review level A Process Management review status indicator representing the process unit level, such as Not Started, First Pass, Submitted, Approved, and Published.

Risk Free Rate The rate of return expected from “safer” investments such as long-term U.S. government securities.

role The means by which access permissions are granted to users and groups for resources.

roll-up See consolidation.

root member The highest member in a dimension branch.

runtime prompt A variable that users enter or select before a business rule is run.

sampling The process of selecting a representative portion of an entity to determine the entity’s characteristics. See also metadata sampling.

saved assumptions User-defined Planning assumptions that drive key business calculations (for example, the cost per square foot of office floor space).

scaling Scaling determines the display of values in whole numbers, tens, hundreds, thousands, millions, and so on.

scenario A dimension for classifying data; for example, Actuals, Budget, Forecast1, or Forecast2.

schema In relational databases, a logical model that represents the data and the relationships between the data.

scope The area of data encompassed by any Essbase operation or setting; for example, the area of data affected by a security setting. Most commonly, scope refers to three levels of granularity, where higher levels encompass lower levels. The levels, from highest to lowest: the entire system (Essbase Server), applications on Essbase Server, or databases within Essbase Server applications. See also persistence.

score The level at which targets are achieved, usually expressed as a percentage of the target.

scorecard A business object that represents the progress of an employee, strategy element, or accountability element toward goals. Scorecards ascertain this progress based on data collected for each measure and child scorecard added to the scorecard.

scraping An inspection of a data source to derive the most basic metadata elements from it. Contrast with introspection.

secondary measure A low-priority measure, less important than primary measures. Secondary measures do not have Performance reports but can be used on scorecards and to create dimension measure templates.

security agent A Web access management provider (for example, Oracle Access Manager, Oracle Single Sign-On, or CA SiteMinder) that protects corporate Web resources.
security platform A framework enabling Oracle EPM System products to use external authentication and single sign-on.

serial calculation The default calculation setting. Divides a calculation pass into tasks and calculates one task at a time.

services Resources that enable business items to be retrieved, changed, added, or deleted. Examples: Authorization and Authentication.

servlet A piece of compiled code executable by a Web server.

shared disks See shared storage.

shared member A member that shares storage space with another member of the same name, preventing duplicate calculation of members that occur multiple times in an Essbase outline.

Shared Services Registry The part of the Shared Services repository that manages EPM System deployment information for most EPM System products, including installation directories, database settings, computer names, ports, servers, URLs, and dependent service data.

shared storage A set of disks containing data that must be available to all nodes of a failover cluster; also called shared disks.

Shared Workspace Pages Workspace Pages shared across an organization that are stored in a special System folder and can be accessed by authorized users from the Shared Workspace Pages Navigate menu.

sibling A child member at the same generation as another child member and having the same immediate parent. For example, the members Florida and New York are children of East and each other’s siblings.

silent response files Files providing data that an installation administrator would otherwise be required to provide. Response files enable EPM System Installer or EPM System Configurator to run without user intervention or input.

single point of failure Any component in a system that, if it fails, prevents users from accessing the normal functionality.

single sign-on (SSO) The ability to log on once and then access multiple applications without being prompted again for authentication.

smart tags Keywords in Microsoft Office applications that are associated with predefined actions available from the Smart Tag menu. In Oracle EPM System products, smart tags can also be used to import Reporting and Analysis content and to access Financial Management and Essbase functions.

SmartCut A link to a repository item, in URL form.

snapshot Read-only data from a specific time.

source currency The currency from which values originate and are converted through exchange rates to the destination currency.

sparse dimension In block storage databases, a dimension unlikely to contain data for all member combinations when compared to other dimensions. Contrast with dense dimension. For example, not all customers have data for all products.

SPF files Printer-independent files created by an SQR Production Reporting server, containing a representation of the actual formatted report output, including fonts, spacing, headers, footers, and so on.

Spotlighter A tool that enables color coding based on selected conditions.

SQL spreadsheet A data object that displays the result set of a SQL query.

SQR Production Reporting A specialized programming language for data access, data manipulation, and creating SQR Production Reporting documents.

stage 1) A task description that forms one logical step within a taskflow, usually performed by an individual. A stage can be manual or automated; 2) For Profitability, logical divisions within the model that represent the steps in the allocation process within your organization.

stage action For automated stages, the invoked action that executes the stage.

staging area A database that you create to meet the needs of a specific application. A staging area is a snapshot or restructured version of one or more RDBMS.

staging table A database that you create to meet the needs of a specific application. A staging area is a snapshot or restructured version of one or more RDBMS.
standard dimension  A dimension that is not an attribute dimension.

standard journal template  A journal function used to post adjustments that have common adjustment information for each period. For example, you can create a standard template that contains the common account IDs, entity IDs, or amounts, and then use the template as the basis for many regular journals.

Status bar  The bar at the bottom of the screen that displays helpful information about commands, accounts, and the current status of your data file.

stored hierarchy  In aggregate storage databases outlines only, a hierarchy in which the members are aggregated according to the outline structure. Stored hierarchy members have certain restrictions; for example, they cannot contain formulas.

strategic objective (SO)  A long-term goal defined by measurable results. Each strategic objective is associated with one perspective in the application, has one parent, the entity, and is a parent to critical success factors or other strategic objectives.

Strategy map  Represents how the organization implements high-level mission and vision statements into lower-level, constituent strategic goals and objectives.

structure view  Displays a topic as a simple list of component data items.

Structured Query Language  A language used to process instructions to relational databases.

Subaccount Numbering  A system for numbering subaccounts using nonsequential whole numbers.

subscribe  Flags an item or folder to receive automatic notification whenever the item or folder is updated.

Summary chart  In the Investigates Section, a chart that rolls up detail charts shown below in the same column, plotting metrics at the summary level at the top of each chart column.

supervisor  A user with full access to all applications, databases, related files, and security mechanisms for a server.

supporting detail  Calculations and assumptions from which the values of cells are derived.

suppress rows  A setting that excludes rows containing missing values and underscores characters from spreadsheet reports.

symmetric multiprocessing (SMP)  A server architecture that enables multiprocessing and multithreading. Performance is not significantly degraded when a large number of users simultaneously connect to an single instance.

symmetric topology  An Oracle Fusion Middleware Disaster Recovery configuration that is identical across tiers on the production site and standby site. In a symmetric topology, the production site and standby site have the identical number of hosts, load balancers, instances, and applications. The same ports are used for both sites. The systems are configured identically and the applications access the same data.

sync  Synchronization of Shared Services and application models.

synchronized  The condition that exists when the latest version of a model resides in both the application and in Shared Services. See also model.

system extract  A feature that transfers data from application metadata into an ASCII file.

tabs  Navigable views of accounts and reports in Strategic Finance.

target  Expected results of a measure for a specified period of time (day, quarter, and so on).

task list  A detailed status list of tasks for a particular user.

taskflow  The automation of a business process in which tasks are passed from one taskflow participant to another according to procedural rules.

taskflow definition  Business processes in the taskflow management system that consist of a network of stages and their relationships; criteria indicating the start and end of the taskflow; and information about individual stages, such as participants, associated applications, associated activities, and so on.

taskflow instance  A single instance of a taskflow including its state and associated data.

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taskflow management system  A system that defines, creates, and manages the execution of a taskflow, including definitions, user or application interactions, and application executables.

taskflow participant  The resource that performs the task associated with the taskflow stage instance for both manual and automated stages.

Taxes - Initial Balances  Strategic Finance assumes that the Initial Loss Balance, Initial Gain Balance, and Initial Balance of Taxes Paid entries have taken place in the period before the first Strategic Finance time period.


text measure  In Essbase, a member tagged as Text in the dimension where measures are represented. The cell values are displayed as predefined text. For example, the text measure Satisfaction Index may have the values Low, Medium, and High. See also typed measure, text list, derived text measure.

time dimension  The time period that the data represents, such as fiscal or calendar periods.

time events  Triggers for job execution.

time scale  A scale that displays metrics by a specific time span, such as monthly or quarterly.

time series reporting  A process for reporting data based on a calendar date (for example, year, quarter, month, or week).

Timeline Viewer  An FDM feature that enables users to view dates and times of completed process flow steps for specific locations.

Title bar  A bar that displays the Strategic Finance name, the file name, and the scenario name Version box.

toast message  A message that fades in the lower-right corner of the screen.

token  An encrypted identification of one valid user or group on an external authentication system.

top and side labels  Column and row headings on the top and sides of a Pivot report.

top-level member  A dimension member at the top of the tree in a dimension outline hierarchy, or the first member of the dimension in sort order if there is no hierarchical relationship among dimension members. If a hierarchical relationship exists, the top-level member name is generally the same as the dimension name.

trace allocations  A Profitability feature that enables you to visually follow the flow of financial data, either forwards or backwards, from a single intersection throughout the model.

trace level  The level of detail captured in a log file.

traceability  The ability to track a metadata element to its physical source. For example, in Essbase Studio, a cube schema can be traced from its hierarchies and measure hierarchies to its dimension elements, date/time elements, measures, and, ultimately, to its physical source elements. See also lineage.

traffic lighting  Color-coding of report cells, or pins based on a comparison of two dimension members, or on fixed limits.

transformation 1) A process that transforms artifacts so that they function properly in the destination environment after application migration; 2) In data mining, the modification of data (bidirectionally) flowing between the cells in the cube and the algorithm.

translation  See currency conversion.

Transmission Control Protocol/Internet Protocol (TCP/IP)  A standard set of communication protocols linking computers with different operating systems and internal architectures. TCP/IP utilities are used to exchange files, send mail, and store data to various computers that are connected to local and wide area networks.

transparent login  A process that logs in authenticated users without launching the login screen.

transparent partition  A shared partition that enables users to access and change data in a remote database as though it is part of a local database.

triangulation  A means of converting balances from one currency to another through a third common currency. For example, to convert balances from the Danish krone to the British pound, balances could be converted from the krone to the euro and from the euro to the pound.
triggers  An Essbase feature whereby data is monitored according to user-specified criteria that, when met, cause Essbase to alert the user or system administrator.

trusted user  Authenticated user.

tuple  MDX syntax element that references a cell as an intersection of a member from each dimension. If a dimension is omitted, its top member is implied. Examples: (Jan); (Jan, Sales); ([Jan], [Sales], [Cola], [Texas], [Actual]).

two-pass  An Essbase property that is used to recalculate members that are dependent on the calculated values of other members. Two-pass members are calculated during a second pass through the outline.

unary operator  A mathematical indicator (+, -, *, /, %) associated with an outline member. The unary operator defines how the member is calculated during a database roll-up.

Unicode-mode application  An Essbase application wherein character text is encoded in UTF-8, enabling users with computers configured for different languages to share application data.

unique member name  A nonshared member name that exists only once in a database outline.

unique member outline  A database outline that is not enabled for duplicate member names.

upgrade  The process of deploying a new software release and moving applications, data, and provisioning information from an earlier deployment to the new deployment.

upper-level block  A type of data block wherein at least one of the sparse members is a parent-level member.

user directory  A centralized location for user and group information, also known as a repository or provider. Popular user directories include Oracle Internet Directory (OID), Microsoft Active Directory (MSAD), and Sun Java System Directory Server.

user variable  A variable that dynamically renders data forms based on a user's member selection, displaying only the specified entity. For example, a user variable named Department displays specific departments and employees.

user-defined attribute (UDA)  An attribute, associated with members of an outline to describe a characteristic of the members, that can be used to return lists of members that have the specified associated UDA.

user-defined member list  A named, static set of members within a dimension defined by the user.

validation  The process of checking a business rule, report script, or partition definition against the outline to ensure that the object being checked is valid.

validation rules  Rules used in FDM to enforce data integrity. For example, in FDM, validation rules ensure that certain conditions are met after data is loaded from FDM to the target application.

value dimension  A dimension that is used to define input value, translated value, and consolidation detail.

variance  The difference between two values (for example, between planned and actual values).

version  A possible outcome used within the context of a scenario of data. For example, Budget - Best Case and Budget - Worst Case where Budget is scenario and Best Case and Worst Case are versions.

vertical application server cluster  A cluster with multiple application server instances on the same machine.

view  A year-to-date or periodic display of data.

visual cue  A formatted style, such as a font or a color, that highlights specific data value types. Data values may be dimension members; parent, child, or shared members; dynamic calculations; members containing a formula; read-only data cells; read-and-write data cells; or linked objects.

WebLogic Server home  A subdirectory of Middleware home containing installed files required by a WebLogic Server instance. WebLogic Server home is a peer of Oracle homes.

weight  A value assigned to an item on a scorecard that indicates the relative importance of that item in the calculation of the overall scorecard score. The weighting of all items on a scorecard accumulates to 100%. For example, to recognize the importance of developing new features for a product, the measure for New Features Coded on a developer's scorecard would be assigned a higher weighting than a measure for Number of Minor Defect Fixes.
**wild card**  Character that represents any single character (?) or group of characters (*) in a search string.

**WITH section**  In MaxL DML, an optional section of the query used for creating reusable logic to define sets or members. Sets or custom members can be defined once in the WITH section and then referenced multiple times during a query.

**workbook**  An entire spreadsheet file with many worksheets.

**workflow**  The steps required to process data from start to finish in FDM. The workflow consists of Import (loading data from the GL file), Validate (ensures that all members are mapped to a valid account), Export (loads the mapped members to the target application), and Check (verifies accuracy of data by processing data with user-defined validation rules).

**Workspace Page**  A page created with content from multiple sources including documents, URL, and other content types. Enables a user to aggregate content from Oracle and non-Oracle sources.

**write-back**  The ability for a retrieval client, such as a spreadsheet, to update a database value.

**ws.conf**  A configuration file for Windows platforms.

**wsconf_platform**  A configuration file for UNIX platforms.

**XML**  See Extensible Markup Language.

**XOLAP**  An Essbase multidimensional database that stores only the outline metadata and retrieves all data from a relational database at query time. XOLAP supports aggregate storage databases and applications that contain duplicate member names.

**Y axis scale**  A range of values on Y axis of charts displayed in Investigate Section. For example, use a unique Y axis scale for each chart, the same Y axis scale for all Detail charts, or the same Y axis scale for all charts in the column. Often, using a common Y axis improves your ability to compare charts at a glance.

**Zero Administration**  A software tool that identifies version number of the most up-to-date plug-in on the server.

**ZoomChart**  A tool for viewing detailed information by enlarging a chart. A ZoomChart enables you to see detailed numeric information on the metric that is displayed in the chart.