About Using Cash Flow and Balance Sheet Balance 3-15
Viewing Your Total Plan and Forecast 3-15
Planning Using Cash Flow 3-16
Specifying Driver-Based Cash Use and Source Assumptions 3-16
Entering Financing and Investing Details 3-17
Running Financials Rules 3-17
Analyzing Financials with Dashboards 3-17
Analyzing Your Financials 3-18
Reviewing Forms and Instructions 3-18
Reviewing Data from Workforce, Projects, and Capital 3-18

4 Working With Workforce

Task Overview 4-1
Setting User Variables 4-3
Managing Compensation Expenses 4-4
  Managing Hiring Requisitions 4-4
    Adding Hiring Requisitions 4-5
    Updating Hiring Requisitions 4-6
  Updating Employee Compensation 4-7
  Updating Multiple Employees and Jobs Details 4-8
Changing an Employee's Status 4-10
Hiring Employees 4-11
Planning an Employee's Departure 4-11
Transferring Employees 4-12
Managing Jobs 4-13
  Adding Jobs 4-13
    Changing a Job's Salary 4-14
Planning Merit Rates 4-15
Calculating Compensation Expenses 4-16
Synchronizing Defaults 4-16
Troubleshooting a Rule's Error Message 4-17
Managing Noncompensation Expenses 4-18
Strategic Workforce Planning 4-18
Managing Demographics 4-18
Analyzing Workforce Expenses 4-19
Reporting on Data 4-19
Analyzing Project Utilization 4-20
5  Working With Projects

Task Overview 5-1
Setting User Variables 5-4
Adding Projects and Entering Project Details 5-5
Entering Project Assumptions 5-6
Planning Expenses 5-7
Planning Revenue 5-10
  Defining Revenue Recognition Obligation Details 5-13
Capitalizing Projects 5-14
Running Project Rules 5-15
Using Rolling Forecast with Projects 5-15
Preparing Forecast Data 5-16
Analyzing Project Financials With Dashboards 5-16
  Analyzing Project EVM 5-18
  Analyzing Project Performance 5-18
  Reviewing Forms and Instructions 5-19

6  Working With Capital

Task Overview 6-1
Setting User Variables 6-2
Entering Capital Asset Assumptions 6-3
Managing New Capital Investments 6-5
Managing Existing Assets 6-9
Managing Intangibles 6-11
Analyzing Capital Financials with Dashboards 6-13
Analyzing Capital Asset Financials 6-13

7  Working With Strategic Modeling

Task Overview 7-1
Working with Templates 7-3
Working with Models 7-4
  Managing Models 7-5
    Creating a Strategic Modeling Model 7-5
    Opening, Checking Out, and Deleting Models 7-7
Working in the Account View 7-7
  Working with Account Groups 7-8
  Working with Dataviews 7-9
Entering Account Data 7-10
Adding and Deleting Subaccount Members 7-10
Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.
Documentation Feedback

To provide feedback on this documentation, send email to epmdoc_ww@oracle.com, or, in an Oracle Help Center topic, click the Feedback button located beneath the Table of Contents (you may need to scroll down to see the button).

Follow EPM Information Development on these social media sites:

LinkedIn - http://www.linkedin.com/groups?gid=3127051&goback=gmp_3127051
Twitter - http://twitter.com/hyperionepminfo
Facebook - http://www.facebook.com/pages/Hyperion-EPM-Info/102682103112642
YouTube - https://www.youtube.com/oracleepminthecloud
Welcome

Related Topics

• About the Planning Modules
• About Integration
• Learning More

About the Planning Modules

Planning provides complete, planning and budgeting solutions for Financials, Workforce, Capital, Projects, and Strategic Modeling. It includes built-in best practice predefined content including forms, calculations, dashboards, drivers, and key performance indicators (KPIs). Forms are designed to integrate with the dashboards and reports that dynamically reflect your data, plans, and forecasts.

• Financials—Integrated driver-based planning for income statement, balance sheet, and cash flow. The out-of-box tools, such as KPIs, drivers, and accounts help you prepare reports faster. You can also use Financials to perform expense and revenue planning.

Watch this overview video to learn more about Financials.

Overview Video.

• Workforce—Headcount and compensation planning to link financial plans with the workforce plan. Budget for future headcount and related personnel expenses such as salary, benefits, and taxes.

Watch this overview video to learn more about Workforce.

Overview Video.

• Projects—Bridge the gap between project planning systems and the financial planning process. Assess the impact organizational projects and initiatives have on overall corporate resources, and ensure they align with short and long term financial targets.

Watch this overview video to learn more about Projects.

Overview Video.

• Capital—Plan for the long-term impact of capital assets on financial plans. Manage, prioritize, and plan for capital expenses.

Watch this overview video to learn more about Capital.

Overview Video.
• Strategic Modeling—For long-term strategic planning, this solution combines a set of rich financial forecasting and modeling features with built in on-the-fly scenario analysis and modeling capabilities. Watch this overview video to learn more about Strategic Modeling.

Overview Video

You might not see all the features described in this guide depending on what your Administrator has enabled. Administrators can incrementally enable some features, which would add additional forms, dashboards, KPIs, rules, and so on. Watch this overview video to learn more about Planning.

Overview Video.

About Integration

Depending on how your administrator set up your application, the administrator can set up these integration scenarios:

• In Financials, see a rollup of Workforce employee details and integrate Workforce expenses (such as salary, benefits, and so on) into Financials reporting.
• In Financials, see a rollup of Projects details and integrate project expenses and revenue into your Financials reporting.
• In Financials, see a rollup of Capital asset details and integrate the capital asset depreciation into Financials reporting.
• In Workforce, see the utilization of employees across projects or on a per project basis.
• In Projects, assign project assets to Capital asset classes to capitalize the assets. Assets are moved from Projects to Capital.
• In Projects, use Job Rates from Workforce.
• In Projects, use Equipment Rates from Capital.

Required steps are noted where needed, for example, when you add a new hire in Workforce or plan a new asset in Capital.

When you are ready to see integrated data, ask your administrator to run the required rules and push data. You can review integrated data in these dashboards:

• To see an overview of data rolled up to Financials, see Reviewing Data from Workforce, Projects, and Capital.
• To review employee utilization across projects, see Analyzing Project Utilization.
• To review capitalized assets that were pushed from Projects in the New Assets from Projects and Capital Work in Progress dashboards, see Analyzing Capital Financials with Dashboards. You can also see Asset Usage by Project in a dashboard. See Analyzing Capital Asset Financials.

Learning More

To get more information or help:
• Review best practices and access these videos by clicking Academy on the Home page:
  – Watch this overview video to learn more about Financials.
    
    ![Overview Video]
  – Watch this tutorial video to familiarize yourself with entering data in Financials.
    
    ![Tutorial Video]
  – Watch this overview video to learn more about Projects.
    
    ![Overview Video]
  – Watch this tutorial video to familiarize yourself with entering data in Projects.
    
    ![Tutorial Video]
  – Watch this overview video to learn more about Workforce.
    
    ![Overview Video]
  – Watch this tutorial video to familiarize yourself with entering data in Workforce.
    
    ![Tutorial Video]
  – Watch this overview video to learn more about Capital.
    
    ![Overview Video]
  – Watch this overview video to learn more.
    
    ![Overview Video]

• To get Help, click the arrow next to your user icon in the upper right corner of the screen, and then click Help.

• See these related guides on the Help Center (http://docs.oracle.com/cloud/latest/pbcs_common/index.html):
  – Getting Started with Oracle Enterprise Performance Management Cloud for Users
  – Working with Planning
2

Basic Tips

Related Topics

• Navigating
• About Driver-Based Planning, Trend-Based Planning, and Direct Input
• Working with a 13-Period Calendar
  The planning calendar for your application may be based on a 13-period calendar (instead of a 12-month calendar). Learn about working with a 13-period calendar.

Navigating

Useful navigation tips:

• To return to the Home page when you've navigated away from it, click the Oracle logo in the upper left corner (or your custom logo) or the Home icon.
• To see additional administrator tasks in the Navigator, click the horizontal bars next to the Oracle logo (or your custom logo).
• Expand a dashboard to full screen by clicking the Show/Hide bar at the top of the dashboard; click it again to return to normal view.
• Hover the cursor in the upper right corner of a form or dashboard to see a menu of options appropriate to the context, such as Actions, Save, Refresh, Settings, Maximize.
• In a subcomponent, use the horizontal and vertical tabs to switch tasks and categories.
  For example, use the vertical tabs to switch between reviewing Overview dashboards and planning Expenses. The vertical tabs differ, depending on the features that you've enabled.
Use the horizontal tabs to switch categories within a task. For example, in Expense planning, choose between entering expense drivers and reviewing trend-based planning expenses.

In Financials and Capital, the icon indicates a reporting form for reviewing data, not for data entry. The icon indicates that a form is a data entry form for entering planning details.

**About Driver-Based Planning, Trend-Based Planning, and Direct Input**

You can plan using several different methods:

- **Driver-based**—Enter global rate assumptions and other assumptions (for example revenue drivers or expense drivers) to take advantage of built-in accounts and calculations to drive the planning process.

- **Trend-based**—For Financials only, enter trend-based assumptions that let you plan and forecast based on trends. For example, you can plan by using current, projected, or past values (such as Forecast Average or Year Over Year Increase) and estimate the percent by which each value is likely to change.

- **Direct Entry**—Directly enter data, for example if your planning and forecasting does not have historic trends or specific business drivers. When you use this planning method, no built-in logic is used.

**Working with a 13-Period Calendar**

The planning calendar for your application may be based on a 13-period calendar (instead of a 12-month calendar). Learn about working with a 13-period calendar.
Note these points about 13-period calendars:

- The Period dimension has 13 Period members instead of 12 Month members. The administrator may have renamed the Period members from their default names TP1 through TP13 or created aliases for them. The 13 Period members are added to YearTotal in the Period dimension.
- Each period is exactly four weeks long (except every five or six years, when one quarter has five weeks.)
- By default, the first three quarters have three periods and the last quarter has four periods (3-3-3-4). When creating the application, however, the administrator can set which quarter to add four periods to.
- About every five to six years, a 53rd week occurs in a year. In such a year, that year’s total is typically higher. The administrator sets which period the 53rd week occurs in. The specified Salary Basis rate is the same for either a 52- or 53-week year.
- Calculation logic assumes that component expenses occur in the period with the last day of the month.

Watch this overview video to learn more about working with 13-period calendars.

Overview Video

For more information, see About 13 Period Calendars in Administering Planning Modules.
Working With Financials

Related Topics

• Task Overview
• Setting User Variables
• About Specifying Driver Values
• About Trends
• Planning Using a Rolling Forecast
• Planning at the Weekly Level
• Planning Revenue and Expense
• Planning Using Balance Sheets
• Planning Using Cash Flow
• Running Financials Rules
• Analyzing Financials with Dashboards
• Analyzing Your Financials
• Reviewing Data from Workforce, Projects, and Capital

Task Overview

In general, you'll build your Financials plans and forecasts in this order:

1. Define your user variables. See Setting User Variables. For information about specifying other preference settings, see Working with Planning Using the Simplified Interface.

2. Review and adjust driver values for recurring line items. These drivers, enabled by your administrator, determine how you will set, track, and analyze accounts. You can specify driver values using trend assumptions or by direct entry. Then enter, adjust, and calculate your expenses and revenues. You can:
   • Set and adjust drivers
   • Set and adjust trends
   • Manually adjust accounts

   See:
   • Planning Revenue and Expense
   • Planning Using Balance Sheets
   • Planning Using Cash Flow

3. Depending on your type of planning, review internal financial statements such as Balance Sheets and Cash Flow statements.

4. Ask your administrator to run the Rollup rule.
5. Get a status of your department’s or the total business financials, key trends, and KPIs using the interactive dashboards on the **Overview** tab. See Analyzing Financials with Dashboards.

6. Evaluate your financials using the provided dashboards and analysis forms. See Analyzing Your Financials.

To include Workforce, Capital, or Projects in your dashboards, have your administrator define data maps to make your other types of planning data and details available.

**Note:**

You might not see all the features described in this section, depending on what your Administrator has enabled.

**Note:**

In a 13-period application, for artifacts labelled with Month, such as **Current Month Actual, Month** does not represent a calendar month but the period defined through the 13 period calendar.

To get started, click **Financials**, and then select a component.
<table>
<thead>
<tr>
<th>Goal</th>
<th>Perform These Tasks</th>
<th>For More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expense</strong></td>
<td>Prepare revenue-driven or expense-driven plans and forecasts.</td>
<td>See Planning Revenue and Expense.</td>
</tr>
<tr>
<td>or</td>
<td>• For driver-based planning: While you can use the direct entry forms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to which you have access, leverage the intelligence provided by the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>driver- and trend-related forms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If applicable, specify values for the drivers that derive your revenue or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>expenses. You can specify values:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- By referencing and adjusting trends (using assumptions).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- By making manual adjustments.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• View, and if necessary adjust, the values of the accounts calculated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>by your drivers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Evaluate patterns of planned values against historic actuals using any of the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>provided trends.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enter revenue or expense values for miscellaneous accounts or those that aren't</td>
<td></td>
</tr>
<tr>
<td></td>
<td>calculated by drivers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If you use income statement, review your income statement..</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• <strong>Direct method only</strong>: Define cash flow and cash timing assumptions that specify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>how you receive and use cash.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enter your financing and investing activity such as purchases of fixed assets or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>repayments of borrowing.</td>
<td></td>
</tr>
</tbody>
</table>
Table 3-1  (Cont.) Financials Tasks

<table>
<thead>
<tr>
<th>Goal</th>
<th>Perform These Tasks</th>
<th>For More Information</th>
</tr>
</thead>
</table>
| **Balance Sheet** | Plan and manage financials using balance sheets.  
  - Specify your asset and liability driver values such as days sales outstanding (DSO), and days payable outstanding (DPO). You can specify drivers:  
    - By referencing and adjusting trends.  
    - By making manual adjustments.  
  - Enter and adjust revenue-based asset accounts such as receivables, cash in bank and other assets.  
  - Enter and adjust expense-based liability accounts such as payables, accrued compensation, and accrued expenses.  
  **Note:** If you also use cash flow and find that your balance sheets don't balance, see About Using Cash Flow and Balance Sheet Balance. | Planning Using Balance Sheets. |
| **Analysis** |  
  - Graphically evaluate actual, plan, and forecast financials at any business level.  
  - Analyze key revenue, expense, balance sheet, and cash flow metrics over time.  
  - Access grids.  
  - Review all of the available forms. | Analyzing Your Financials |

Watch this tutorial video to learn more about entering data in Financials.

Overview Video.

Setting User Variables

Each planner must set the variables described below.

1. From the Home page, click Tools, then User Variables.
2. Set up these user variables:
   - Entity
   - Scenario
   - Version
• Reporting Currency
• Years

For Financials, set these user variables for the Account dimension:
• For the OFS Expense Account variable, select OFS_Total Other Expenses.
• For the OFS Expense Drivers variable, select OFS Expense Drivers for Forms.

Capital, Workforce, and Projects have their own dynamic variables (defined with the Use Context option), which allow user variables to be used in the Point of View. With dynamic variables, the value of the user variable changes dynamically based on the context of the form, and users don’t need to set the default value.

About Specifying Driver Values

Before building a plan or forecast, verify and if needed adjust the key drivers, enabled by your administrator, that derive revenues and expenses. You can specify driver values:
• Manually
• By referencing and adjusting current, past, or projected trends such as:
  – Prior Year Actual Average
  – Forecast Average
  – Year Over Year Increase / Decrease to adjust the last business year’s value by percentage

For cash flow, you'll specify the sources and timings of your revenue and expense categories. See Specifying Driver-Based Cash Use and Source Assumptions. For balance sheet, you'll specify items like accrued compensation, accounts receivable, and prepaid expenses. See Specifying Balance Sheet Drivers.

About Trends

You can enter trend-based assumptions that let you plan and forecast based on trends. Financials includes the following trends:

Note:
In a 13-period application, Month does not represent a calendar month but the period defined through the 13 period calendar.

• Current Year Actual Average—Calculates the average for an account for the Current Fiscal Year specified in Planning and Forecast Preparation.
• Current Month Actual—Takes the value for an account for the month or week specified as the Current Period for the Current Fiscal Year specified in Planning and Forecast Preparation.
• Hold Forecast to Current Year Plan—For the Forecast Scenario only, compares how much has been spent year to date for an account to the Plan for the current
year, and spreads the remainder evenly over the remaining months in the Forecast. For example, if Travel YTD Actuals is 260,000, the full year Plan is 500,000, and the current month is June, there is 240,000 remaining to be spread over the remaining 6 months in the year (July – Dec): 240000 / 6 = 40000. The 40000 is spread evenly for Jul to Dec. This trend ensures that you keep Forecast in line with Plan. If YTD spending exceeds the Plan, the forecast for the remaining periods is set to zero, rather than a negative number.

- Prior Year Actual Average—Calculates the average for an account for the year prior to the Current Fiscal Year specified in Planning and Forecast Preparation. For example, if the Current Fiscal Year is FY17, the prior year is FY16.
- Prior Year Actual with Seasonality—Takes the value for account for the month using the value for the same month in the prior year.
- Forecast Average—For the Plan Scenario only, takes the average for the Forecast from the prior year. For example, for FY18 in the Plan scenario, selecting this trend calculates the average for the account from FY17 in the Forecast Scenario.
- Forecast with Seasonality—For the Plan Scenario only, takes the monthly values from the Forecast from the prior year. For example, in FY18 for the Plan Scenario, selecting this trend calculates the monthly value for the account from FY17 in the Forecast Scenario.
- Year over Year Increase/Decrease—Applies a % increase or decrease to the prior year’s value.
- No Trend—Removes the trend and clears the data from a previously set trend.
- Monthly Growth—Calculates year over year change for an account using current year and prior year as the basis to calculate the growth.
- Prior Month Run Rate—Takes the value of the prior period. For example, if Current Month is June FY16 and the first period of Forecast is July, this trend takes the value of June and applies it to July. If adjustments are made to the July value, the adjusted July value is used for August.

Planning Using a Rolling Forecast

If your administrator enabled rolling forecast, you can plan using a rolling forecast in addition to, or instead of, standard forecasting. With rolling forecasts, you can perform continuous planning so you can plan beyond a one year horizon. Depending on how your administrator set up rolling forecast, you can plan continuously at a weekly level for either 13, 26, or 52 weeks, at a monthly level for either 12, 18, 24, 30, 36, 48, or 60 months, or at a quarterly level for either 4, 6, or 8 quarters. In an application with a 13-period calendar, you can plan continuously at a period level for 13 or 26 periods.

When your administrator updates the current time period, rolling forecast forms and dashboards are automatically updated to add or drop time periods to reflect the updated rolling forecast range. Trends and drivers are populated to newly added time periods.

You can plan with a rolling forecast using:

- Driver and trend-based planning.
- Manually entering rolling forecast values.
Forms and dashboards using a rolling forecast range are available in each component: **Revenue**, **Expense**, **Balance Sheet**, and **Cash Flow**.

KPIs are available for reporting purposes:

- **TTM** (Trailing Twelve Months). This scenario reports the activity in Flow based accounts over the prior twelve months.
- **Projected 12**. For Flow type accounts, this scenario reports on the sum of (current period + 11 future periods). For Balance type accounts – this scenario reports on a member value 12 periods in the future.

**Note:**
Select the **Rolling Forecast** scenario member only for forms on the **Rolling Forecast** tab.

Watch this overview video to learn more about planning using a rolling forecast.

[Overview Video.](#)

Watch this tutorial video to learn more about planning using a rolling forecast.

[Tutorial Video.](#)

### Table 3-2 Planning Using a Rolling Forecast

<table>
<thead>
<tr>
<th>Task</th>
<th>Goal</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Get an overview of revenue, expenses, balance sheet, or cash flow over the rolling forecast range in a dashboard format.</td>
<td><strong>Analyzing Financials with Dashboards</strong></td>
</tr>
<tr>
<td>Rolling Forecast</td>
<td>• For Revenue and Expense: Perform driver-based or trend-based planning over a rolling forecast range.</td>
<td>• <strong>Revenue and Expense</strong>: Specifying Drivers and Trends</td>
</tr>
<tr>
<td></td>
<td>• For Balance Sheet: Specify balance sheet drivers over a rolling forecast range.</td>
<td>• <strong>Balance Sheet</strong>: Specifying Balance Sheet Drivers</td>
</tr>
<tr>
<td></td>
<td>• For cash flow: Perform driver-based cash flow planning over a rolling forecast range.</td>
<td>• <strong>Cash flow</strong>: Specifying Driver-Based Cash Use and Source Assumptions</td>
</tr>
</tbody>
</table>
Table 3-2  (Cont.) Planning Using a Rolling Forecast

<table>
<thead>
<tr>
<th>Task</th>
<th>Goal</th>
<th>More Information</th>
</tr>
</thead>
</table>
| Direct Entry | Directly enter data, for example if your planning and forecasting does not have historic trends or specific business drivers. | • Revenue and Expense: Manually Entering Expenses and Revenues  
• Balance Sheet: Specifying Assets and Liabilities for Direct Balance Sheet  
• Cash Flow: Entering Financing and Investing Details |

Planning at the Weekly Level

After planning at the weekly level, run these rules to convert weeks to months before viewing dashboards and performing trend calculations:

• Convert Weekly Data to Monthly  
• Convert Monthly Data to Weekly

Alternatively, run "Convert Weekly Data to Monthly in Form" and "Convert Monthly Data to Weekly in Form" from the Actions menu for a form if your administrator associated these rules with your form.

In 12-period applications with 53 weeks and in 13-period applications, forms with time periods in which the 53rd week occur include Week 53. Settings your administrator made determine the period in which the 53rd week occurs.

For information about 13-period applications, see Working with a 13-Period Calendar.

Planning Revenue and Expense

The Financials Revenue and Expense components provide several options to help you plan and forecast:

Watch this tutorial video to learn more about revenue, expense, and income statement planning.

Tutorial Video.
### Table 3-3 Building Plans and Forecasts

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Use These Forms</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview</strong></td>
<td>Review an overview of your financials in a dashboard format.</td>
<td>• Revenue</td>
<td>Analyzing Financials with Dashboards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expense</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Income Statement</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Rolling Forecast</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Income Statement Rolling Forecast</td>
<td></td>
</tr>
<tr>
<td><strong>Driver and Trend Based</strong></td>
<td>Enter values for the drivers, defined by an administrator, that generate your revenue and expense values.</td>
<td>• Driver Based Revenue Planning</td>
<td>Specifying Drivers and Trends</td>
</tr>
<tr>
<td></td>
<td>View the actual account values calculated by our drivers, and override the values if they don’t meet my needs.</td>
<td>• Driver Based Expense Planning</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluate the difference between planned or forecast values and historic actuals using different driver trends.</td>
<td>• Driver Based Revenue Trends</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plan, without any internal driver-based logic, at the individual account level by manually entering and adjusting expenses.</td>
<td>• Driver Based Expense Trends</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Revenue Trends</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Expense Trends</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Trend Based Expense Planning</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3-3 (Cont.) Building Plans and Forecasts

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Use These Forms</th>
<th>More Information</th>
</tr>
</thead>
</table>
| Rolling Forecast | Plan revenue and expenses using a rolling forecast. Use these forms instead of, or in addition to, the forms on the **Driver and Trend Based** tab.  
• Enter values for the drivers, defined by an administrator, that generate your revenue and expense values.  
• View the actual account values calculated by our drivers, and override the values if they don’t meet your needs.  
• Evaluate the difference between planned or forecast values and historic actuals using different driver trends.  
• Make driver adjustments for rolling forecasts.  
• Make trend adjustments for rolling forecasts. | • Driver Based Revenue Planning | • Driver Based Expense Planning | • Planning Using a Rolling Forecast | • Specifying Drivers and Trends |
| Direct Entry     | • Enter and adjust account values that aren’t driver-derived.  
• Manually enter rolling forecast values. | • Enter Revenue | • Enter Expenses | • Planning Using a Rolling Forecast | • Manually Entering Expenses and Revenues |
Specifying Drivers and Trends

Specify drivers and trends for standard forecasts in **Driver and Trend Based**. Specify drivers and trends for rolling forecasts in **Rolling Forecast**. Calculated values for the accounts associated with your drivers display on **Driver-Based Revenue** and **Driver-Based Expense** on the tab for your forecasting method.

For details about the trends provided with Financials, see **About Trends**.

1. For standard forecasting: Click **Driver and Trend Based** and then **Driver Based Expense Planning | Driver Based Revenue Planning**. For rolling forecasting: Click **Rolling Forecast** and then **Driver Based Expense Planning | Driver Based Revenue Planning**.

2. Specify your context by selecting point of view dimensions such as specific product line or type of expense such as operating expenses, and then click ➔.

3. Perform a task in **Trend**:
   - To set values by adjusting using current, projected, or past values, select a trend, and estimate the percent by which each value is likely to change in **% Increase/Decrease**. E.g., to plan for a 3% overtime pay increase, you would set Overtime to Prior Year Actual Average, and enter .03 in **% Increase/Decrease**.
     
     For rolling forecasts, trends apply to all years in the rolling forecast range. When the current time period is updated, forms are updated to add or drop time periods to reflect the updated rolling forecast range; trends are always calculated for the entire rolling forecast range.
   
   - To set values manually without referencing historic data, select **No Trend**, and then enter values in **Adjustment (+/-)**.

4. Double-click **Year Total** to calculate assumed values.

5. View values for driver-calculated accounts:
   a. Click **Driver Based Expenses | Driver Based Revenue**, and then **Calculated Year Total** to view your annual, quarterly, or monthly driver-derived values. If they’re insufficient or incorrect, or inappropriate, you can override them in any period.
   b. Specify your context by selecting point of view dimensions such the year and scenario, and then click ➔.
   c. Expand **Adjust Year Total** to access the period for which to modify driver derived values, and enter new values.

6. To adjust calculated values for accounts or drivers for rolling forecasts, click **Driver Adjustments** and then enter a value in the **Adjustment (+/-)** column.
7. To adjust calculated values for accounts for trends for rolling forecasts in Expense, click Trend Adjustment and then enter a value in the Adjustment (+/-) column.

Manually Entering Expenses and Revenues

To enter miscellaneous or non-driver calculated expenses or revenues:

1. Click , and then Enter Revenue | Enter Expenses. If you are using a rolling forecast, click Enter Revenue Rolling Forecast | Enter Expenses Rolling Forecast.

2. Define your context by specifying point of view dimensions such as entity and scenario, and then click .

3. For each expense or revenue item, enter a monthly or quarterly value.

4. Double-click Year Total to view the annual total.

Viewing Your Total Plan and Forecast

Depending on your planning method, view your total plan and forecast. Select a form, and then specify the POV.

Table 3-4 Viewing Your Total Plan and Forecast

<table>
<thead>
<tr>
<th>Planning Method</th>
<th>Forms to View Total Plan and Forecast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver- and trend-based</td>
<td>For standard forecasting: click Driver and Trend Based, and then Total Expense - Forecast</td>
</tr>
<tr>
<td></td>
<td>For rolling forecasting: click Rolling Forecast , and then Total Expense</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Manual entry</th>
<th>Click Direct Entry , and then:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>For standard forecasting: Total Expense - Forecast</td>
</tr>
<tr>
<td></td>
<td>For rolling forecasting: Total Expense - Rolling Forecast</td>
</tr>
</tbody>
</table>
Viewing Your Income Statement

Click Expense or Revenue and then Income Statement.

Planning Using Balance Sheets

The Financials Balance Sheet component provides several options to help you plan using balance sheets:

Table 3-5  Balance Sheet Planning

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Use These Forms</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Review an overview of your balance sheet in a dashboard format.</td>
<td>- Balance Sheet</td>
<td>Analyzing Financials with Dashboards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Rolling Forecast</td>
<td></td>
</tr>
<tr>
<td>Driver and Trend</td>
<td>Setup and adjust drivers that will result in calculated balance sheet accounts.</td>
<td>- Driver-Based Balance Sheet Planning</td>
<td>Specifying Balance Sheet Drivers</td>
</tr>
<tr>
<td>Based</td>
<td>View the actual account values calculated by our drivers, and override values as necessary to balance assets and liabilities</td>
<td>- Driver-Based Balance Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Setup and adjust trends that will result in calculated balance sheet accounts.</td>
<td>- Trend-Based Balance Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enter and adjust account values that aren’t calculated by drivers.</td>
<td>- Enter Balance Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Modify monthly days in period.</td>
<td>- Days in Period</td>
<td></td>
</tr>
</tbody>
</table>
Table 3-5 (Cont.) Balance Sheet Planning

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Use These Forms</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolling Forecast</td>
<td>Perform balance sheet planning using a rolling forecast. Use these forms instead of, or in addition to, the forms on the Driver and Trend Based tab.</td>
<td>• Driver-Based Balance Sheet Planning • Driver-Based Balance Sheet • Trend-Based Balance Sheet • Trend Adjustment</td>
<td>• Planning Using a Rolling Forecast • Specifying Balance Sheet Drivers</td>
</tr>
<tr>
<td>Direct Entry</td>
<td>• Enter and adjust account values that aren't driver-derived. • Manually enter rolling forecast values.</td>
<td>• Enter Revenue • Enter Expenses • Enter Revenue Rolling Forecast • Enter Expenses Rolling Forecast</td>
<td>• Specifying Assets and Liabilities for Direct Balance Sheet • Planning Using a Rolling Forecast</td>
</tr>
</tbody>
</table>

Watch this overview video to learn more about planning using balance sheets.

[Overview Video]

Specifying Balance Sheet Drivers

To specify balance sheet drivers:

1. Click **Driver and Trend Based**, and then for indirect cash flow click **Driver Based Balance Sheet Planning**. For direct cash flow, click **Calculated Balance Sheet**, or **Trend Based Balance Sheet**.

   For rolling forecasts, click **Rolling Forecast**, and then **Driver Based Balance Sheet Planning** or **Trend Based Balance Sheet**.

2. Specify your context by selecting point of view dimensions such as specific product line or type of expense such as operating expenses, and then click ➔.
3. Set your assumptions for Trend, and then adjust them by % increase or decrease. The annual value projected is based on the value of the timeframe (prior year, for example) that you specify, and will follow the same monthly/quarterly pattern. By setting a percentage increase or decrease assumption, you can impact the projected value. For example, you may assume an expense or driver may increase due to inflation.

4. Double click Year Total to calculate assumed values.

5. View values for driver-calculated accounts:
   a. Click Driver Based Balance Sheet, and then Calculated Year Total to view your annual, quarterly, or monthly driver-derived values. If they’re insufficient or incorrect, or inappropriate, you can override them in any period.
   b. Specify your context by selecting point of view dimensions such the year and scenario, and then click.
   c. Expand Adjust Year Total to access the period for which to modify driver derived values, and enter new values.

6. To adjust calculated values for accounts for trends for rolling forecasts, click Trend Adjustment and then enter a value in the Adjustment (+/-).

Specifying Assets and Liabilities for Direct Balance Sheet

To specify your assets and liabilities:

1. Click Direct Entry, and then Enter Balance Sheet, or if you are using rolling forecast, Enter Balance Sheet Rolling Forecast.

2. Enter monthly or quarterly values for your assets such as cash in bank, pre-paid expenses, and accounts receivable.

3. Enter monthly or quarterly values for your liabilities such as accrued expense and compensation, short and long term borrowings, and accounts payable.

About Using Cash Flow and Balance Sheet Balance

Financials automatically balances your plan and forecast balance sheets. If your liabilities and equity exceed your assets, a short term investment is used. Alternatively, if your assets exceed your liabilities and equity, a short term borrowing is created. You must enter the impact to cash flow of the short term investment or the short term borrowing in Financing and Investing Details.

Viewing Your Total Plan and Forecast

Depending on your planning method, view your total plan and forecast. Select a form, and then specify the POV.
Table 3-6  Viewing Your Total Plan and Forecast

<table>
<thead>
<tr>
<th>Planning Method</th>
<th>Forms to View Total Plan and Forecast</th>
</tr>
</thead>
</table>
| Driver- and trend-based | For standard forecasting: click **Driver and Trend Based**, and then **Balance Sheet - Plan** or **Balance Sheet - Forecast**.  
For rolling forecasting: click **Rolling Forecast**, and then **Detailed Balance Sheet**. |
| Manual entry          | Click **Direct Entry**, and then:  
For standard forecasting: **Balance Sheet - Plan** or **Balance Sheet - Forecast**.  
For rolling forecasting: **Balance Sheet Rolling Forecast** |

**Planning Using Cash Flow**

Watch this overview video to learn more about planning using cash flow.

[Overview Video](#)

**Specifying Driver-Based Cash Use and Source Assumptions**

To define your cash assumptions:

1. For standard forecasting: Click **Driver Based**, and then **Cash Flow Uses Planning**.  
For rolling forecasting: Click **Rolling Forecast**, and then **Cash Flow Uses Planning Rolling Forecast**.
2. If necessary, select different point of view dimensions, and then click .
3. In **Cash Flow Impact Assumptions**, for each revenue account, specify the payment percentage you receive within 30, 60, or 90 days.
4. For each expense account, specify the percentage of the expense payment, such as repayments of borrowings or purchases of fixed assets that occurs within 30, 60, or 90 days.
5. Click **Cash Flow Direct Planning**.
6. Select your currency, the entity, scenario, version, and year, and then click .
7. Use **Product** or **Services** to select your revenue sources.
Watch this tutorial video to learn more about planning cash flow using the direct method.

![Tutorial Video]

## Entering Financing and Investing Details

If you are planning with indirect cash flow, use direct entry.

### Note:

If you also use Balance Sheet: Your plan and forecast balance sheets are automatically balanced by internal logic. If your liabilities and equity exceed your assets, a short term investment is used. Alternatively, if your assets exceed your liabilities and equity, a short term borrowing is created. You must enter the impact to cash flow of the short term investment or the short term borrowing in **Financing and Investing Details**.

To define your investing and financing:

1. Click **Direct Entry** and then **Financing and Investing**. If you are planning using a rolling forecast, click **Financing and Investing - Rolling Forecast**.
2. Specify your point of view and then click ➔.
3. For each activity, enter a monthly or quarterly value, and view the calculated year total.

## Running Financials Rules

You can run these rules in Financials:

- **Calculate Actuals**—Calculates any drivers and aggregates actuals for the selected periods.
- **Prepare Forecast**—Copies the selected periods of actuals to the Forecast scenario and then recalculates any accounts with a trend or driver to arrive at an updated forecast. Also copies current forecast to prior forecast version for comparison.
- **Prepare Plan**—Calculates trends and drivers for the selected year(s). You can use this rule to create a new year plan as years change. Or you can use it if you have prepared a multi-year plan and have updated data for trend and driver basis.

## Analyzing Financials with Dashboards

Predefined dashboards give you insight into overall financials for revenue, expenses, balance sheet, and cash flow. You can drill into members in dashboard charts to see the level of detail you want.
1. Click Revenue, Expense, Balance Sheet, or Cash Flow.

2. If it's not already selected, click Overview.

3. Use the Point of View bar to select different dimension members to display in the form, for example to select a different project or entity.

4. Click the horizontal tab for the type of dashboard you want to see. If you are planning over a rolling forecast range, click the rolling forecast dashboards.

### Analyzing Your Financials

Use the provided interactive dashboards to compare your plans, forecasts, and actuals, and to get a dynamic visual snapshot of your financials; at a total business level, or at an entity level perspective. You can drill-down to access more data for more detailed analysis.

Use the analysis forms to get a variety of detailed plan and forecast information and trend-based data. An administrator can customize the analysis forms, or create new ones. See Administering Planning Modules.

To view analysis forms and dashboards, click Financials, then Analysis, and then explore data using the vertical tabs.

### Reviewing Forms and Instructions

You can review all of the available forms and dashboards related to your financials, and review form instructions if your administrator provided them.

Click Analysis, and then click Forms.

### Reviewing Data from Workforce, Projects, and Capital

If you’ve integrated Financials with Workforce, Projects, or Capital, review a summary of the rolled up data.
1. Click **Analysis**, and then click **Forms**.

2. Select **Financials Integration Summary**, **Balance Sheet Integration Summary**, or **Cash Flow Direct Integration Summary**.

3. From the **Actions** menu, select **Roll Up** to push data from Workforce and Capital to Financials.

4. Review data that's been pushed from Workforce, Projects, or Capital:
   - **Financials Integration Summary**
     - Salary data from Workforce in the **Workforce Detail** column.
     - Expense and revenue from Projects in the **Project Detail** column.
     - Depreciation, amortization, and other expenses from Capital in the **Capital Detail** column.
   - **Balance Sheet Integration Summary**—Accounts that affect the balance sheet are pushed from Capital or Projects to Financials.
   - **Cash Flow Direct Integration Summary**—Accounts that affect the cash flow are pushed from Capital or Projects to Financials.
4

Working With Workforce

Related Topics

- Task Overview
- Setting User Variables
- Managing Compensation Expenses
- Managing Noncompensation Expenses
- Strategic Workforce Planning
- Managing Demographics
- Analyzing Workforce Expenses
- Reporting on Data
  For complete reporting on data, Workforce provides data maps, which enable you to push consolidated data from one cube to a reporting cube. For example, you can push compensation data to the reporting cube.
- Analyzing Project Utilization

Task Overview

Review the tasks you’ll perform in Workforce. In general, you’ll perform tasks in this order:

1. Before creating or updating plans and forecasts, run these business rules: Synchronize Defaults and Calculate Compensation. Access these business rules from Compensation Planning, then Manage Employees, then Existing Employees.
2. Set up user variables.
   See Setting User Variables.
3. Review or enter workforce assumptions and defaults. Your administrator may have set up initial assumptions. Use Compensation Planning, then Assumptions and Defaults.
4. Update workforce details.
   See the table below.
5. Run the Calculate Compensation business rule again to recalculate values.
6. Review dashboards and analytics.
**Note:**

You might not see all the features described in this section, depending on which features your administrator enabled.

**Note:**

In a 13-period application, for artifacts labelled with Month, **Month** does not represent a calendar month but the period defined through the 13 period calendar.

To get started, click ![start icon](image), and then select a component.

### Table 4-1  Workforce Tasks

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
</table>
| ![person icon](image) | • See an overview of compensation data  
• Manage new hires and existing employees  
• Manage employee details  
• Transfer employees from one entity to another  
• Set workforce assumptions (for example, hours worked per day)  
• Set the salary basis (for example, annual) and rate for Salary Grades  
• Set defaults for salary, additional earnings, benefits, and taxes | Managing Compensation Expenses |
| ![list icon](image) | • View the total of non compensation expenses  
• Enter or update non compensation expenses | Managing Noncompensation Expenses |
| ![person icon](image) | • Set headcount targets by job  
• Set attrition rate by year  
• Set strategic headcount drivers by year  
• Set annual strategic headcount driver rates by job | Strategic Workforce Planning |
### Table 4-1  (Cont.) Workforce Tasks

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographics</td>
<td>• See a headcount summary by demographic</td>
<td>Managing Demographics</td>
</tr>
<tr>
<td></td>
<td>• See workforce expenses by demographic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Assign demographics to employees or jobs</td>
<td></td>
</tr>
<tr>
<td>Analysis</td>
<td>• See a dashboard summary of headcount and FTE (full-time equivalent)</td>
<td>Analyzing Workforce Expenses</td>
</tr>
<tr>
<td></td>
<td>• Analyze compensation trends over time</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• View headcount and expenses by skill set</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• See an overview of utilization and staffing, by existing employees to hires</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you integrated Workforce with Projects, review dashboards and forms that show:</td>
<td>Analyzing Project Utilization</td>
</tr>
<tr>
<td></td>
<td>• Utilization and staffing overview.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FTE requirement across projects.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FTE requirement by project.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employee utilization. You can also reassign employees to projects as needed.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employee assignments.</td>
<td></td>
</tr>
</tbody>
</table>

Watch this tutorial video to learn more about entering data in Workforce.

Watch this tutorial video to learn more about entering data in Workforce.

### Setting User Variables

Each planner must set the variables described below.

1. From the Home page, click Tools, then User Variables
2. Set up these user variables:
   - Entity
   - Scenario
• Version
• Reporting Currency
• Years

For Financials, set these user variables for the Account dimension:
• For the OFS Expense Account variable, select OFS Total Other Expenses.
• For the OFS Expense Drivers variable, select OFS Expense Drivers for Forms.

Capital, Workforce, and Projects have their own dynamic variables (defined with the Use Context option), which allow user variables to be used in the Point of View. With dynamic variables, the value of the user variable changes dynamically based on the context of the form, and users don’t need to set the default value.

Managing Compensation Expenses

Before updating employee-related information, you can review current expenses trends and summaries by clicking or tapping Compensation, and then Overview.

Managing Hiring Requisitions

A hiring requisition adds placeholder expenses to the workforce budget until someone is hired to fill the requisition. When an employee is hired to fill the hiring requisition, the placeholder hiring requisition expense is transferred to and associated with the hired employee.

Hiring requisitions functionality is available if these Workforce features are enabled:
• Granularity type Employee or Employee and Job
• New Hires option under Workforce Management

When workforce demands exceed the number of available employees, you can use New Hires functionality to:
• Add a hiring requisition to be filled by an employee
• Change the status of a hiring requisition
• Associate a hiring requisition with an employee
• Remove hiring requisitions
• Calculate the resulting compensation expenses

Workforce initially provides 100 blank New Employee Hiring Requisitions, which you can use and then add more when you need to. To add a hiring requisition, use Compensation Planning, then Manage Employees, and then Add Hiring Requisition from Actions. (Use the same sequence for the other hiring requisition options.)

When you fill a hiring requisition by hiring an employee, you associate the hiring requisition with the employee. The reconciled FTE value equals the Hiring Requisition FTE value. In other words, the FTE and headcount is reduced for the hiring requisition and assigned to the associated employee.

To associate a hiring requisition to an employee:
1. Add a hiring requisition, if needed.
   See Adding Hiring Requisitions.
2. Associate the employee with the hiring requisition.
   This action transfers the FTE/headcount to the existing associated employee. The new hire requisition properties Reconciled FTE and Reconciled Headcount are populated. See Hiring Employees.
3. After the hiring requisition available FTE is assigned to an existing associated employee, you may opt to remove the hiring requisition because it no longer contributes to workforce compensation expenses.

Adding Hiring Requisitions

When workforce demands exceed the number of available employees, you can add hiring requisitions to be filled by employees. You can create multiple requisitions simultaneously, set their FTE, their employee type, their time span, and their salary.

For an overview, see Managing Hiring Requisitions.

**Note:**

This topic applies only to the Employee and the Employee and Job granularity options.

To add hiring requisitions:

1. Click Compensation Planning, then Manage Employees, and then New Hires.
2. Click Actions, and then Add Hiring Requisitions.
3. At Requisition Details, set these aspects, and then click Next:
   - Number of requisitions you're adding
   - FTE value for each
   - Employee Type (for example, Regular, Contractor, or Temporary)
4. For Calendar Information, select the Start Year and Start Month to set when the requisition's expenses are to be included in expense calculations, and then click Next.
   In a 13-period application, Month does not represent a calendar month but the period defined through the 13 period calendar.
   Optionally, select the End Year and End Month if you know the end date for an employee. Specifying an ending period is especially useful for temporary employees; doing so saves you from having to plan their departure using the Plan Departure rule. Calculations for their workforce expenses then begin and end with their start and end dates. Note that if you use the ending period option, you must select both the end year and month.
5. At Job and Salary Options, select:
   - Which Job the requisition is for
   - Which Union Code the requisition is for
The option for setting the requisition's salary:

- **Salary Defaults**: Select to set the salary based on the salary defaults, which are set on the **Defaults** tab of **Compensation Planning**.
- **Salary Basis and Rate**: Select to directly enter the salary rate (for example, 6000) and basis (for example, Monthly).
- **Salary Grade**: Select to set the salary by selecting a salary grade. Your administrator imports salary grades, and you set the defaults for new hires by selecting **Compensation Planning**, then **Assumptions**, and then **Salary Grades**. If you don't select a salary option, then the salary defaults are used. Selecting either **Salary Basis and Rate** or **Salary Grade** overrides any salary default assignments.

6. Click **Launch**. The Additional Earnings, Benefits, Taxes, headcount, and so on are calculated for the specified requisitions during the time range you specified.

If needed, you can later change the Salary Rate, Salary Basis, Salary Grade, Status, or end period for a hiring requisition you've added. See **Updating Hiring Requisitions**.

To update the salary after the to-be-hired (TBH) has been associated with a hired employee, see **Updating Employee Compensation**.

### Updating Hiring Requisitions

After you've added a hiring requisition, you can update its status description, salary, or time span. You can also remove a requisition.

To update a hiring requisition:

1. Click **Compensation Planning**, then **Manage Employees**, and then **New Hires**.
2. Select the requisition to update.
3. Click the **Actions** gear, and then **Change Requisition**.
4. At **Change Requisition**, select the option that applies, and then click **Next**:
   - **Status**—Select to set an informational description to the requisition: **New**, **Active**, **Approved**, **Unapproved**, **On-hold**, or **Closed**.
   - **Salary**—Select to update the salary basis, rate, or grade for the requisition. Skip to Step 5.
   - **Extend Calendar**—Select to change the requisition's end date. Calculations for a requisition's workforce expenses begin and end with the requisition's start and end dates. Skip to Step 6.
   - **Reduce Calendar**—Skip to Step 7.
5. To update the salary associated with the requisition:
   a. Select the **Year** and the **From Period** to set the effective date for your updates.
   b. Select the option for setting the salary:
      - **Salary Defaults**—Select to set the salary based on the salary defaults, which are set on the **Defaults** tab of **Compensation Planning**.
      - **Salary Basis and Rate**—Select to directly enter the salary rate (for example, 6000) and basis (for example, Monthly).
      - **Salary Grade**—Select to set the salary by selecting a salary grade. Your administrator imports salary grades, and you set the defaults for new hires by selecting **Compensation Planning**, then **Assumptions**—and then **Salary Grades**. If you don't select a salary option, then the salary defaults are used. Selecting either **Salary Basis and Rate** or **Salary Grade** overrides any salary default assignments.

6. To extend the time span for the requisition:
   a. In **Copy Properties from**, select the month to use as the basis for which requisition properties to copy to the extended range. This option enables you to carry forward into the extended range such aspects as FTE, Status, Employee Type, and Pay Type.
   b. Select the **End Year** and **End Month**. Specifying an end month and year saves you from having to plan their departure using the Plan Departure rule. Note that you must select both the end year and month.

7. To reduce the time span of the requisition, select the **End Year** and **End Month**. You must select both the end year and month.

8. Click **Launch**. The Additional Earnings, Benefits, Taxes, headcount, and so on are calculated for the specified requisitions during the time range you specified.

### Updating Employee Compensation

Depending on your application's granularity, on **Employee Details**, you can update such information as salary, Performance Ratings, FTE, Employee Type, Union Code, and Demographics.

**Tip:**
You can also quickly update and process data on multiple existing employees. See **Updating Multiple Employees and Jobs Details**.

To view and update employee compensation:

1. Click **Compensation Planning**
, and then **Employee Details**

2. To update an employee’s salary, select the employee from the POV, and then:
   a. Click the **Actions** gear, and then **Change Existing Details**.
   b. From **Change Employee**, select **Salary**, and then click **Next**.
   c. Select the **Year** and **From Period** as the effective date for the updated salary.
   d. From **Salary Options**, select:
      - **Salary Defaults**: Select to set the salary based on the salary defaults, which are set on the **Defaults** tab of **Compensation Planning**.
      - **Salary Basis and Rate**: Select to directly enter the salary rate (for example, 6000) and basis (for example, Monthly).
      - **Salary Grade**: Select to set the salary by selecting a salary grade. Your administrator imports salary grades, and you set the defaults for new hires by selecting **Compensation Planning**, then **Assumptions**, and then **Salary Grades**. If you don't select a salary option, then the salary defaults are used. Selecting either **Salary Basis and Rate** or **Salary Grade** overrides any salary default assignments.
   e. Click **Launch**. The employee’s salary is calculated during the time range you specified.

### Updating Multiple Employees and Jobs Details

To quickly update and process data on multiple existing employees or jobs and then process the updated data in Workforce, you can use the **Mass Update** forms.

Using these forms enables you to quickly review and edit information after data is loaded. Designed for optimal processing efficiency, each form is associated with a Groovy rule that processes only the changed data. Which form you use depends on the kind of data you’re updating.

You can change existing properties or add a new record and then apply configured default assignments. You can change existing properties or add a new record and then override default assignments and rates. After modifying salary, you can re-apply configured default assignments for benefits, additional earnings and taxes. You can override default assignments and then apply the configured defaults.

Watch this tutorial video to learn how to update employee and job information and then process the updated data.

**Tutorial Video**

To quickly make changes to existing employees, jobs, and entity defaults:
1. Click **Compensation Planning**

   , and then **Mass Update**

2. Select the form that best suits your situation:

   **Note:**

   Each granularity option (Employee, Job, or Employee and Job) supports the following forms and Groovy rules. However, the Employee model supports updating only employees, and the Job model supports updating only jobs.

### Table 4-2 Forms for Making Mass Updates

<table>
<thead>
<tr>
<th>Your Objective</th>
<th>Use This Form / Tab</th>
<th>The Groovy Rule that is Run Upon Save</th>
</tr>
</thead>
</table>
| • Assign updated entity defaults for benefits, taxes, and additional earnings, based on employee or job driver details  
• Update employee properties, job properties, or salary-related information  
• Calculate the non-salary components based on the definition of components in the Benefits and Taxes Wizard | **Process Data and Synchronize Defaults**  
When you make updates on this form:  
• The updates are copied to all future periods in the Year Range.  
• Applies the entity defaults with the component definition and rates in the Benefits and Taxes Wizard. | **Incremental Process Data with Synchronize Defaults** |
| • Update, add, or remove an existing benefit, tax, or additional earning  
• Update employee properties or job properties  
• Calculate the non-salary components based on the definition of components in the Benefits and Taxes Wizard | **Process Updated Data**  
When you make updates on this form:  
• The updates are copied to all future periods in the Year Range.  
| **Incremental Process Data with Synchronize Definition** |
### Table 4-2 (Cont.) Forms for Making Mass Updates

<table>
<thead>
<tr>
<th>Your Objective</th>
<th>Use This Form / Tab</th>
<th>The Groovy Rule that is Run Upon Save</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assign updated entity defaults for benefits, taxes, and additional earnings based on employee or job driver details by changing the Process option to Yes for the employees or jobs to which you want to apply the updated entity defaults</td>
<td>Synchronize Defaults</td>
<td>Incremental Synchronize Defaults</td>
</tr>
<tr>
<td>• Change the salary, basis, and rate for an employee</td>
<td>When you update salary details for the selected year and month in the POV on this form:</td>
<td></td>
</tr>
<tr>
<td>• Calculate the non-salary components based on the definition of components in the Benefits and Taxes Wizard</td>
<td>• The updates are copied to all future periods in the Year Range.</td>
<td></td>
</tr>
<tr>
<td>• Apply any changes across component information (such as rate changes, payment frequency, or maximum value type) for the benefit, tax, or additional earning by changing the Process option to Yes for the employees or jobs</td>
<td>Synchronize Definitions</td>
<td>Incremental Synchronize Definition</td>
</tr>
<tr>
<td>• Update, add, or remove an existing benefit, tax, or additional earning</td>
<td>When you change the assignments of earnings, benefits or, taxes and corresponding options and tiers:</td>
<td></td>
</tr>
<tr>
<td>• Calculate the non-salary components based on the definition of components provided in the Benefits and Taxes Wizard</td>
<td>• The updates are copied to all future periods in the Year Range.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Compensation is recalculated based on the component definition and rates in the Benefits and Taxes Wizard.</td>
<td></td>
</tr>
</tbody>
</table>

**Notes about the Mass Update forms:**

- Oracle recommends that you not change the Start Month to a later month because calculations persist for expenses from the original month, even though the new month is displayed in Employee Details.

- **Process Data and Synchronize Defaults** and **Process Updated Data** forms:
  At least one Employee/Job intersection must exist on the POV before you can add another Employee/Job row to the forms using the Select Member list.

---

### Changing an Employee's Status

To change an employee's status:
1. Click **Compensation Planning**, then **Manage Employees**, and then **Existing Employees**.

2. Select the employee in the row, and then from the **Actions** gear, click **Change Existing Details**.

3. From **Change Employee**, select **Status**.

4. Select the pertinent information, including the new status:
   - **Active**—The employee's workforce expenses are included fully in workforce calculations.
   - **Disability**—The employee’s workforce expenses are not calculated for the specified period.
   - **Leave of Absence**—The employee's workforce expenses are not calculated for the specified period.
   - **Maternity**—The employee’s workforce expenses are calculated according to the Partial Payment Factor, set in assumptions. The Partial Payment Factor sets the pay percentage to apply to the employee's salary. To set this percentage in assumptions, click **Compensation Planning**, and then **Assumptions**.
   - **On Sabbatical**—The employee’s workforce expenses are not calculated for the specified period.

5. Select the year, month, and duration in months of the status. You can also add a comment.

### Hiring Employees

When you hire an employee, you associate the employee with an existing hiring requisition.

When you hire an employee, you add them as a member to the Employee dimension. Then you associate the employee to a hiring requisition (TBH), which assigns their FTE and headcount to the application. (For information on hiring requisitions, see **Managing Hiring Requisitions**). After you reconcile the new employee with a hiring requisition, you manage the employee’s workforce information on the **Existing Employees** form.

To associate a newly hired employee with a hiring requisition:

1. Click **Compensation**, then **Manage Employees**, and then **New Hires**.

2. Click the row containing the hiring requisition to associate with the new hire, then **Actions**, and then **Associate Employee**.
   
   The new employee’s compensation expenses are added to the totals, and the headcount and compensation expenses for the hiring requisition are cleared.

### Planning an Employee’s Departure

When an employee resigns or is terminated, to stop their associated compensation expenses from being included in calculations as of their departure month, use **Plan Departure**.

To plan an employee's departure:
1. Click **Compensation Planning**, then **Manage Employees**, and then **Existing Employees**.
2. Select the employee.
3. Click **Actions**, and then **Plan Departure**.
4. Select the pertinent date and information. For example, select the month, year, reason the employee is leaving, and add optional comments. The employee's workforce expenses aren't included in calculations beginning with the departure month.
5. Click **Launch**.

To undo an employee's departure:

1. Click **Compensation Planning**, then **Manage Employees**, and then **Existing Employees**.
2. Click **Actions**, then **Business Rules**, and then **Process Loaded Data**.
3. Select the employee, job, and month and year of the employee's termination. Add optional comments, and then click **Launch**. The employee's workforce expenses are again included in calculations.

### Transferring Employees

Transferring an employee changes the department (or entity) against which their compensation expenses are calculated. Managers transfer employees using either of these processes:

- **One-step Transfer**—Use the Transfer rule if you own both the source and target entities (that is, you have access permissions to the source and target entities).
- **Two-step Transfer**—Use the Transfer Out and Transfer In rules if you don't have access permissions to both the source and target entities. The two-step transfer provides security. For example, it ensures that managers in Department A can't see member data for Department B if they don't have access permissions to the Department B entity. You should transfer out an employee during the same month in which the receiving department transfers in the employee.

**Note:**

After an employee is transferred out, their data is not retained in the former department as of the transfer month. When the employee is transferred to the new department, the status is set to Active for that department, and the employee’s salary is calculated in the new department.

To use the two-step employee-transfer process:

1. Click **Compensation Planning**, then **Manage Employees**, and then **Existing Employees**.
2. Click the **Actions** gear, and then **Transfer Out**.
Transfer Out causes the employee's name to be displayed in the **Review Pending Transfers** form.

3. To transfer the employee into the target department, in **Review Pending Transfers**, select the employee, then **Actions**, and then **Transfer In**.

![Tip:](image)

Oracle recommends that you review pending transfers before approving a plan.

### Managing Jobs

If the application is based on the **Job** granularity option, you can use the **Add Job** rule to add jobs and the **Change Salary** rule to change the salary for jobs. The changes are effective from the period and month that you specify.

![Tip:](image)

When you update job data on a form, to recalculate expenses, click the **Actions** gear, and then run the **Calculate Job Compensation** rule. For example, if you change a job's status, review that job's FTE and then run **Calculate Job Compensation**.

### Adding Jobs

You can add jobs and set their properties if the application is based on the **Job** granularity option.

To add jobs:

1. Click **Compensation Planning**, and then **Manage Jobs**.
2. Specify the **POV**.
3. Click the **Actions** gear, and then select **Add Job**.
4. On **Job Details**:
   - In **Job**, click the Member Selector, and then select the position.
   - Enter the full-time equivalent in **FTE**.
   - Enter the number of **Regular**, **Contractor**, and **Temporary** headcount for the job.
   - Click **Next**.
5. On **Calendar Information**, select the **Start Year** and **Start Month** for the job, and then click **Next**.
6. On **Pay Type, Skill Set, and Salary Options**, select these options:
   - **Pay Type**—for example, Exempt or Non-exempt
   - **Skill Set**—for example, Java or Management
• **Salary Options:**
  
  – **Salary Defaults:** Select to set the salary based on the salary defaults, and then click **Launch**. Salary defaults are set on the **Defaults** tab of **Compensation Planning**.

  – **Salary Basis and Rate:** Select this option, and then click **Next** to directly enter the **Salary Rate** (for example, 6000) and select the **Salary Basis** (for example, Monthly). Then click **Launch**.

  – **Salary Grade:** Select to set the salary by selecting a salary grade, and then click **Next** to select the grade. Then click **Launch**. Selecting **Salary Grade** bypasses the default assignments and instead uses the Salary Grade Basis and Rates at the specific level 0 Entity member or the Company Assumptions Entity member. Salary grades are set on the **Assumptions** tab of **Compensation Planning**.

A message confirms that you successfully added the job. The expenses for the job are calculated starting from the start month and year you specified.

### Note:

Because jobs are members in the Job dimension, you can't remove a job through the Workforce interface. Instead, the administrator can delete the job member using the Dimension Editor. Alternately, you could repurpose an existing job.

## Changing a Job's Salary

If the application is based on the **Job** granularity option, you can change the salary of jobs and specify which period and year the change takes effect using the **Change Salary** rule.

To change a job's salary:

1. Select **Compensation**, and then **Manage Jobs**.
2. Specify the POV and click on the job to change.
3. Click the **Actions** gear, and then **Change Salary**.
4. At **Salary Options**:
   
   • From the **Year** Member Selector, select the effective year for the change.
   
   • From the **From Period** Member Selector, select the effective month or period for the change.

   • From **Salary Options**, select how to set the salary:
     
     – **Salary Defaults:** Set the salary based on the salary defaults, and then click **Launch**.

     – **Salary Basis and Rate:** Select this option, and then click **Next** to directly enter the **Salary Rate** (for example, 6000) and select the **Salary Basis** (for example, Monthly). Then click **Launch**.

     – **Salary Grade:** Select to set the salary by selecting a salary grade, and then click **Next** to select the grade. Then click **Launch**.
Selecting **Salary Grade** bypasses the default assignments and instead uses the Salary Grade Basis and Rates at the specific level0 Entity member or the Company Assumptions Entity member.

Salary grades are set on the **Assumptions** tab of **Compensation Planning**.

A message confirms that you've successfully changed the job's salary. The expenses are calculated for the job starting from the start month and year you specified.

### Planning Merit Rates

Merit rate increases are added to salary calculations. You can plan merit rates for employees using these methods:

- Based on the employee's performance rating, for example, Meets Expectations, Exceeds Expectations, or No Merit. (Your administrator can create or import performance ratings.)

- By setting default percentage rates by entity in the **Default Merit** member. If the performance rating isn't set for an employee (you can set and view performance ratings on the **Employee Details** form) or if you want to plan merit rates at a more generic level, you can set default percentage rates for merit increases by entity. The merit increase for the year is included in the base salary calculations of that year and is carried forward into the base salary for subsequent years.

  This method is particularly useful when managers don't yet have performance information, for example, when planning merit increases for future years. To simplify planning when merit rates are the same across entities, you can also copy merit rates from one entity to another using the rule **Copy Merit Rates**.

To set merit rates:

1. Click 📊.
2. Click **Assumptions**, and then **Merit Rates**.
3. From the Point of View links, select the Scenario, Version, and Entity.
4. Set merit rates using the method you prefer:
   - In the performance rating row, enter the merit percentage rate.
   - If no performance rating is set, enter the merit percentage rate in the **Default Merit** row. This value is used in salary calculations only if the performance rating is blank.

   **Optional:** To copy the merit rates from one entity to another, run the rule **Copy Merit Rates** from the **Actions** menu. At the rule's prompt, select the parent or child entity member whose merit rate you want to copy and the target level 0 member to copy the rate to. Selecting a source parent member enables you to easily push merit rates. Even after you've copied a merit rate to another entity, you can still overwrite the rate in the **Merit Rates** form.
Note:

Merit rates must be set at the level 0 entity level, whether they're based on performance rating or the Default Merit member. If managers enter merit rates at the company Assumptions (No Entity) member, the rates aren't effective until they're copied or added to specific level 0 child members of Total Entity. Individual entity owners can use the rule Copy Merit Rates and then modify the rates if needed.

5. Click Actions, and then Synchronize Component Definition. Running this rule recalculates tax thresholds that may change as a result of merit increases for employees.

Calculating Compensation Expenses

Whenever you update data in Workforce, to recalculate expenses, you must run the Calculate Compensation rule. Click Actions, and then Calculate Compensation.

Note:

If you get an error message about invalid data when running a business rule, see Troubleshooting a Rule's Error Message.

Synchronizing Defaults

You must run the Synchronize Defaults business rule when entity defaults are added or existing defaults are changed. Running Synchronize Defaults pushes the updated configuration information so that form calculations are based on the updated information.

To run Synchronize Defaults, select Actions, then Business Rules, and then Synchronize Defaults. If you launch Synchronize Defaults using the right-click menu, you should use it for a selected employee-job combination.

If you intend to execute the business rule for:

- Only one person, highlight the row containing that person's name, and then run the business rule.
- Multiple people, or to select the dimensionality with a runtime prompt, highlight a blank row and then run the business rule.

Note:

When an existing salary grade, benefit, tax, or additional earning is updated, to push the updated definitions to employees and jobs, run the Synchronize Component Definition business rule. This business rule doesn't update entity defaults.
Note:
After new data has been imported, run the business rule Process Loaded Data to copy the data to the necessary periods in the planning year range. Running this business rule copies the information from the substitution variables &CurYr and &CurMnth.

Tip:
To quickly update and process data on multiple existing employees or jobs, you can use the Mass Update forms. Each form is associated with a Groovy rule that processes only the changed data. See Updating Multiple Employees and Jobs Details.

Note:
If you get an error message about invalid data when running a business rule, see Troubleshooting a Rule's Error Message.

Troubleshooting a Rule's Error Message
To make it easy for you to work with data, Workforce extensively uses Smart List drop-down lists. Smart Lists that are defined with the property Create from Members use text data (the member names), not the Smart Lists' numeric ID. If a Smart List in your application mistakenly has numeric data or is missing data, you get an error message when you run a predefined business rule such as Process Loaded Data or Synchronize Defaults.

To find and fix incorrect Smart List values:
1. Click Compensation Planning, and then Defaults.
   Check to see if there's invalid data (numeric instead of text data) related to employee properties and compensation.
3. To make sure there are no invalid Smart List values at the employee and job combination, click the Validate tab.
   If there's numeric data for a Smart List, your administrator can fix this error by reloading the data for that employee and job combination or by adding the missing member to the hierarchy. Then you can select that member from the Smart List drop-down list. Or, you can select another Smart List value that fits your needs.
Managing Noncompensation Expenses

You manage noncompensation expenses such as training or travel expenses using Other Expenses.

- To view a summary of expenses, click Summary.
- To add or update noncompensation expenses, click Non Compensation Expenses.

Strategic Workforce Planning

Strategic Workforce Planning helps ensure that you have the right skill sets and headcount to align with the organization's long-term strategy. Often driven by Human Resource departments, strategic planning often looks ahead two to ten years and considers such factors as:

- Attrition rates, including retirement ages
- New product lines or technologies that require certain skill sets and headcount
- The most critical job roles that require focus on retention

Strategic Workforce Planning translates long-term corporate strategy into execution plans by ensuring that the strategy is supported by the right workforce. It provides a regular, proactive way to anticipate future workforce trends and gaps.

To analyze workforce requirements in the future, click . Then enter anticipated workforce requirements:

- **Strategic Headcount Planning**: Set future headcount targets such as regular and departed headcount.
- **Strategic Headcount Attrition Rate**: Set the target attrition rate for each job.
- **Strategic Headcount Driver**: Enter the headcount driver for planning strategic headcount demand.
- **Strategic Headcount Driver Rate**: Enter the headcount driver rate for planning strategic headcount demand.

Managing Demographics

Demographics describe employee attributes that are unique to each individual, such as Ethnicity, Gender, Religion, Veteran Status, Highest Education Degree, and Age Band. Analyzing demographics can help:

- Ensure fairness in hiring
- Address talent gaps as older employees retire
- Examine how many employees and what skill sets your future projects require
To view and update demographics, for example, to set an attribute for a new employee, click **Demographics**. Then:

- To see a graphic summary of headcount by demographic, click **Headcount Overview**.
- To see a graphic summary of workforce expenses by demographic, click **Workforce Expenses Overview**.
- To set a demographic by employee and job, click **Employee Demographics**.

To ensure correct calculations in the dashboards, on the **Demographics by Employee** form, you can select any demographic member, including the Unspecified Demographic member. However, avoid selecting a No_<demographic_member_name> member, for example, No Highest Education Degree, No Age Band, or No Gender.

**Note:**

Your administrator sets up which demographics the organization tracks.

---

**Analyzing Workforce Expenses**

So that you can see the big picture of headcount, compensation, trends, skills sets, and so on, Workforce provides predefined dashboards. From a dashboard, you can drill to the detail data by clicking or tapping links. You can also perform what-if analysis in many ways. For example, change a value in the grid and see its immediate effect in the chart.

To access an analysis dashboard, in Workforce, click **Analysis** and then explore the data presented on the vertical tabs.

---

**Reporting on Data**

For complete reporting on data, Workforce provides data maps, which enable you to push consolidated data from one cube to a reporting cube. For example, you can push compensation data to the reporting cube.

The data maps:

- Compensation Data for Reporting—For reporting on compensation information
- Headcount Data for Reporting—For reporting on headcount data
- Non Compensation data for Reporting—For reporting on non compensation information

To access the data maps:
1. Click **Application**, then **Data Exchange**, and then **Data Maps**.

2. Click the data map to use, and then from **Actions**, click **Push Data**. The data in the reporting cube is always cleared before data is pushed to it.

The *Administering Planning* guide describes how to set up and change data maps.

## Analyzing Project Utilization

If you enabled integration between Workforce and Projects, the Projects **Utilization** Analysis component provides predefined analysis dashboards and forms that give you insight into workforce metrics.

Watch this tutorial video to learn about analyzing employee utilization in projects.

### Tutorial Video

1. To review project utilization, from the Home page, click **Workforce**, then **Analysis**, and then the **Project Utilization** tab.

2. From the **Actions** menu, click **Aggregate**.

3. Click the horizontal tabs to review dashboards for information on:
   - Utilization and staffing overview.
   - FTE requirement across projects.
   - Employee utilization. You can also reassign employees to projects as needed.
   - FTE requirement by project.
   - Employee utilization.
   - Employee assignments.
Working With Projects

Related Topics

- Task Overview
- Setting User Variables
- Adding Projects and Entering Project Details
- Entering Project Assumptions
- Planning Expenses
- Planning Revenue
- Capitalizing Projects
- Running Project Rules
- Using Rolling Forecast with Projects
- Preparing Forecast Data
- Analyzing Project Financials With Dashboards
- Analyzing Project Performance

Task Overview

Review the tasks you'll perform in Projects. In general, you'll plan projects in this order:

1. Set user variables. See Setting User Variables.
2. Enter project details. See Adding Projects and Entering Project Details.
3. Review or enter project standard rate assumptions set up by your administrator. See Entering Project Assumptions.
4. Manage project expenses and revenue, including setting up driver-based assumptions for expenses and revenue. See Planning Expenses and Planning Revenue.
5. Optionally:
   - For capital projects, if Projects is integrated with Capital, you can plan for capitalization of projects. See Capitalizing Projects.
   - For contract projects, define revenue recognition performance obligations and percentages, and perform revenue recognition what-if analysis. See Defining Revenue Recognition Obligation Details.
   - Analyze projects over a rolling forecast range. See Using Rolling Forecast with Projects.
To get started, click **Projects** and then select a component:

### Table 5-1  Projects Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Summary</strong></td>
<td>• Review project overview and variance dashboards.</td>
<td>• Analyzing Project Financials With Dashboards</td>
</tr>
<tr>
<td></td>
<td>• Add new projects and enter project details.</td>
<td>• Adding Projects and Entering Project Details</td>
</tr>
<tr>
<td></td>
<td>• Review project rate assumptions, including Standard Rates, Overhead, Working Days and Hours, and Discount Rate.</td>
<td>• Entering Project Assumptions</td>
</tr>
</tbody>
</table>
Table 5-1  (Cont.) Projects Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expense</td>
<td>Plan project expenses using best practice driver-based models using built in</td>
<td>• Entering Project Assumptions</td>
</tr>
<tr>
<td></td>
<td>calculations or by entering expenses directly. You can plan for expenses such as</td>
<td>• Planning Expenses</td>
</tr>
<tr>
<td></td>
<td>labor (including rate-driven expenses), equipment (including rates based on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>asset class), and materials (including rates based on standard material costs).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review overall project expenses in the dashboard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Set up driver-based expense assumptions.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enter expenses directly and plan project benefits.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review project expense details.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review project rate assumptions, including Standard Rates, Overhead, Working Days</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Hours, and Discount Rate.</td>
<td></td>
</tr>
</tbody>
</table>

Chapter 5
Task Overview
### Table 5-1  (Cont.) Projects Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
</table>
| **Revenue** | Plan project revenue, for contract projects only. Use built-in analysis tools to analyze project performance.  
- Review overall contract project revenue in the dashboard.  
- Set up driver-based revenue assumptions.  
- Enter revenue directly.  
- Define revenue recognition performance obligations and percentages, and perform revenue recognition what-if analysis.  
- Review and analyze project revenue details, using metrics such as NPV, ROI, IRR, and EVM to track project variances and performance.  
- Review project rate assumptions, including Standard Rates, Overhead, Working Days and Hours, and Discount Rate. |  
- Entering Project Assumptions  
- Planning Revenue  
- Defining Revenue Recognition Obligation Details  

| **Analysis** |  
- Analyze projects using built-in calculations and dashboards that display variance, cash flow, and profitability.  
- Review built-in KPI calculations such as ROI, NPV, FTE. Review overall project expenses and cash flow.  
- Review a list of predefined forms. |  
- Analyzing Project Performance  
- Reviewing Forms and Instructions |

Watch this tutorial video to learn more about entering data in Projects.

[Overview Video](#)

### Setting User Variables

Each planner must set the variables described below.
1. From the Home page, click **Tools**, then **User Variables**.

2. Set up these user variables:
   - Entity
   - Scenario
   - Version
   - Reporting Currency
   - Years

   For Financials, set these user variables for the **Account** dimension:
   - For the **OFS Expense Account** variable, select **OFS Total Other Expenses**.
   - For the **OFS Expense Drivers** variable, select **OFS Expense Drivers for Forms**.

   Capital, Workforce, and Projects have their own dynamic variables (defined with the **Use Context** option), which allow user variables to be used in the Point of View. With dynamic variables, the value of the user variable changes dynamically based on the context of the form, and users don’t need to set the default value.

---

**Adding Projects and Entering Project Details**

After defining project assumptions, add projects and enter project details. Some project attributes are predefined but you can change them in the Project Details. You can choose from these project types:

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| Contract projects     | Manage revenue-generating projects. Includes three types of projects with different ways of generating revenue:  
                        | • Time and materials projects, including labor, equipment, materials  
                        | • Fixed price projects  
                        | • Cost plus projects  
                        | Contract projects are the only projects where you can plan revenue.  
                        | Manage expense-driven internal projects such as IT and maintenance. |
| Indirect projects     | Manage projects related to assets, with the ability to capitalize assets.   |
| Capital projects      |                                                                             |
Adding Projects

To add a new project:

1. Click **Project Summary**.
2. Select the vertical tab for the type of project you want to add (Contract, Indirect, or Capital) and then click **Project Details**.
   
   You see tabs only for the project types that are enabled.
3. From the **Actions** menu, select **Add New Project**.
4. Enter a project name, description, and start and end dates.
5. Add project details. Project details vary depending on the project type.
   
   For Contract projects, you also specify the project type (time and materials, fixed price, cost plus). If Revenue is enabled for contract projects, you also specify:
   
   - **Revenue Recognition**—when the revenue will be recognized:
     - Monthly, Quarterly, or Semiannually
     - After Completion
     - When Billed—When you select this method, you must also specify the period and year for revenue recognition in the Revenue Obligation Details form. See Defining Revenue Recognition Obligation Details.
     - Performance Obligation—Allows you to recognize revenue based on a percent completion method based on actual completion of the contract.
   
   You define performance obligation details and the % allocation that would determine the transaction prices, which allows you to simulate recognized revenue. This method can help you simulate the US GAAP ASC 606 and IFRS 15 requirements for contract projects. When you select this method, you specify the performance obligation details, revenue recognition percentages, and the period and year for revenue recognition in the Revenue Obligation Details form. See Defining Revenue Recognition Obligation Details.
   
   - **Revenue Cash Flow Incidence**—how revenue cash flow is recognized.

**Note:**

If the project is set up with **Override Rates** set to **Yes**, planners can override the global standard rate (set by administrators) when setting up revenue and expense drivers.

### Entering Project Assumptions

Planners set up expense and revenue assumptions for driver-based planning.
Reviewing the Standard Rates Set By Administrators

Before beginning revenue and expense planning, review the standard rate

assumptions set up by your administrator. Click Expense or Revenue, and then click Assumptions.

The standard rates include, for example, Labor, Material, and Equipment rates, days in a month, hours in a day and so on.

Planning Expenses

The Projects Expense component provides several options to help you plan project expenses:

Table 5-3  Planning Project Expenses

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Review project expenses in a dashboard format.</td>
<td>Analyzing Project Financials With Dashboards</td>
</tr>
<tr>
<td>Driver Based</td>
<td>Perform driver-based expense planning by setting up expense assumptions.</td>
<td>Entering Expense Drivers</td>
</tr>
<tr>
<td>Direct Entry</td>
<td>Enter expenses directly in a spreadsheet-like format.</td>
<td>Entering Expenses Directly and Planning Project Benefits (Internal Projects Only)</td>
</tr>
<tr>
<td></td>
<td>Plan project benefits.</td>
<td></td>
</tr>
<tr>
<td>Project Expense</td>
<td>Review overall expenses for a project in a grid.</td>
<td>Reviewing Overall Project Expenses</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Review global rate assumptions that drive project financials.</td>
<td>Entering Project Assumptions</td>
</tr>
</tbody>
</table>

Entering Expense Drivers

When you do driver-based planning using expense assumptions, expenses are calculated using the built-in formulas, using global rates and the expense drivers you enter. For example, when you enter labor assumptions for your project, such as the
job class, rate, start and end dates, the total project labor costs are automatically calculated using the rates per job class and the start and end dates.

To use driver-based expense planning, review the existing rates your administrator entered, and then add and modify your expense assumptions.

1. Click Expense.

2. Click Driver Based.

3. Select the horizontal tab for the expense assumptions you want to enter and select the members from the Point of View, and then review or update driver details.
   - Labor—Enter details for labor assumptions for each job or job code, such as start and end date, FTE, location.
   - Equipment—For each type of equipment, enter start and end dates and units.
   - Material—For each type of material, enter cash flow incidence. Set the payment terms for expenses; the selected value impacts the cash outflow on the project. Options are: Two months prior, one month prior, current month, next month, 2 months after, 3 months after, 4 months after.
   - Other—Enter any additional resources and the cash flow incidence or other custom assumptions for each.

4. If the project is set up with Override Rates set to Yes, and the global rate is not correct for a project, enter the new rate.

5. To add or remove expense assumptions, from the Actions menu, select Add Line Items or Remove Line Item.

6. When you've finished entering expense assumptions, from the Actions menu, select Calculate Expenses.

**Note:**

If Projects is integrated with Workforce, calculating expenses pushes data such as utilization to Workforce. Then, in Workforce you must also select Aggregate from the Actions menu.

If Projects is integrated with Financials, and expense accounts are mapped, calculating expenses and rolling up Projects pushes data to Financials.

**Entering Expenses Directly**

You can directly enter project expenses. When you enter expenses directly, no driver-based calculations are used.

When you change project dates, or when you import projects, before directly entering expenses, on the Project Details form, from the Actions menu, click Refresh Project Dates.
1. Click Expenses

2. Click Direct Entry.

3. Select the project from the Point of View, and then select expense types and enter expense details on each row.

   **Tip:**
   
   You can copy a cell value and drag the cursor to fill all the cells in a row. If you enter at the Year total level, values are automatically spread evenly to lower levels.

4. From the Actions menu, you can select Add Line Items or Remove Line Item.

5. When you've finished entering expenses, from the Actions menu, select Calculate Expenses.

**Planning Project Benefits (Internal Projects Only)**

In addition to planning expenses, you can also plan for tracking project benefits for both capital and indirect projects. By planning project benefits, you can quantify the financial benefits to help justify the need for the project. For example, if you are setting up a new web site, you can track financial benefits that might come out of the project. For example, you might get incremental revenue from leads from the web site; or, if you handle queries on the web site, you might see call center savings. Or a new video conferencing facility can lead to savings on travel expenses.

You can also plan the non-financial benefits of a project, which can be used to justify a project and help measure a project's success. For example, a new web site might improve the customer satisfaction index, or you might see an incremental increase in your user base by investing in the project. You can quantify the benefits and map them to various project accounts.

1. Click Expenses

2. Click Direct Entry.

3. Select Project Financial Benefits to enter financial benefits for the selected account. Enter any assumptions about the benefit, and enter the benefit amount. The benefit amount is used in ROI and other KPI calculations to justify the project. The financial benefits can be mapped to a revenue account or an expense account. Based on this definition, the amounts are assigned to the respective financial accounts.
4. Select **Project Non Financial Benefits** and select a non financial benefit. Enter any assumptions about the benefit and enter a value.

Non financial benefits help set additional measurable targets to justify the project over and above the financial benefits. While these are not used in KPI calculations, they can be tracked to quantify the benefit. For example, if you want to set the user base to grow to a certain level based on a marketing campaign project, set the target values here.

You can also capture additional qualitative project benefits that aren't trackable with numbers that can help justify projects. For example, you could note that customers will have a better user experience with the improved web site design.

Rules are run when you save and the KPIs are calculated based on the financial benefits you specified. This is not applicable for non financial benefits because they are not used for calculations.

**Reviewing Overall Project Expenses**

You can review an overall summary of project expenses in a spreadsheet-like format. Values come from driver-based expenses and from direct input.

1. Click **Expenses**.

2. Click **Project Expense**.

3. Change the project or other members to review by selecting different members from the Point of View.

**Planning Revenue**

The Projects Revenue component provides several options to help you plan project revenue (for contract projects only):

**Table 5-4 Planning Project Revenue**

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Review project revenue in a dashboard format.</td>
<td><a href="#">Analyzing Project Financials With Dashboards</a></td>
</tr>
<tr>
<td>Driver Based</td>
<td>Perform driver-based revenue planning by setting up revenue assumptions. Define revenue recognition performance obligations and percentages, and perform revenue recognition what-if analysis.</td>
<td><a href="#">Entering Revenue Drivers and Defining Revenue Recognition Obligation Details</a></td>
</tr>
</tbody>
</table>
Table 5-4  (Cont.) Planning Project Revenue

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Entry</td>
<td>Enter revenue directly in a spreadsheet-like format.</td>
<td>Entering Revenue Directly</td>
</tr>
<tr>
<td>Analysis</td>
<td>Review overall revenue for a project, project profitability, and project cash flow in a grid.</td>
<td>Reviewing Overall Project Revenue</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Review global rate assumptions that drive project financials.</td>
<td>Entering Project Assumptions</td>
</tr>
</tbody>
</table>

Entering Revenue Drivers

When you do driver-based planning using revenue assumptions, revenue is calculated using the built-in formulas, using the revenue drivers you enter. For example, you can set up labor or equipment assumptions for contract projects and indicate how revenue is recognized.

To use driver-based revenue planning, review the existing rates your administrator entered, and add and modify your own assumptions.

1. Click Revenue.

2. Click Driver Based.

3. Select the horizontal tab for the revenue assumptions you want to enter and enter assumption details.

   - **Labor**—Enter revenue assumptions for labor such as billing rate.
   - **Material**—Enter revenue assumptions for material such as billing rate per unit.
   - **Equipment**—Enter revenue assumptions for equipment such as billing rate.
   - **Other**—Set other revenue assumptions.
   - **Cost Plus**—Set the Margin earned for a Cost Plus Project. The margin % can be set on the Total Expense or at a more detailed level.
   - **Revenue Recognition What If**—Set the revenue recognition terms for the project and perform what-if analysis. See Defining Revenue Recognition Obligation Details.

4. If the project is set up with **Override Standard Labor Rates, Override Standard Equipment Rates**, or **Override Standard Materials Rates** set to Yes, and the global rate is not correct for a project, enter the new rate.
5. To add or remove revenue assumptions, from the **Actions** menu, select **Add Line Items** or **Remove Line Item**.

6. When you’ve finished entering revenue assumptions, from the **Actions** menu, select **Calculate Revenues**.

**Entering Revenue Directly**

You can directly enter project revenue. When you enter revenue directly, no driver-based calculations are used.

When you change project dates, or when you import projects, before directly entering revenue, on the **Project Details** form, from the **Actions** menu, click **Refresh Project Dates**.

1. Click **Revenue**.

2. Click **Direct Entry**.

3. Select the project from the Point of View, and then select revenue types and enter revenue details on each row.

   **Tip:**
   
   You can copy a cell value and drag the cursor to fill all the cells in a row.
   
   If you enter at the Year total level, values are automatically spread evenly to lower levels.

4. From the **Actions** menu, you can select **Add Line Items** or **Remove Line Item**.

5. When you’ve finished entering revenue, from the **Actions** menu, select **Calculate Revenue**.

**Reviewing Overall Project Revenue**

You can review an overall summary of project revenue in a spreadsheet-like format. Values come from driver-based expenses and from direct input.

1. Click **Revenue**.

2. Click **Analysis**.

3. Change the project or other members to review by selecting different members from the Point of View.

4. Click the horizontal tabs to review total project revenue, project profitability, or project cash flow.
Defining Revenue Recognition Obligation Details

For revenue-generating contract projects, if the revenue recognition methods is **When Billed** or **Performance Obligation**, you must specify the period and year for revenue recognition. Additionally, when the revenue recognition method is **Performance Obligation**, you specify revenue recognition percentages against obligations that you define. Revenue allocated to a performance obligation should be recognized when the goods or services are transferred to the customer, which occurs when the customer has control of the asset or use of the service.

You can perform revenue recognition what-if analysis by analyzing different revenue recognition terms, helping in the decision making process to decide on the financial terms of contract projects based on the performance obligation details.

Using the **When Billed** or **Performance Obligation** method can help you simulate the US GAAP ASC 606 and IFRS 15 requirements for contract projects.

Before performing this task, complete these tasks:

1. Create a contract project with a revenue recognition method of **When Billed** or **Performance Obligation**.
2. Enter project expenses (either directly or by drivers), and then from the Actions menu, select **Calculate Expenses**.
3. Enter project revenue (either directly or by drivers), and then from the Actions menu, select **Calculate Revenues**.

To define revenue obligation details for a contract project that has a Revenue Recognition method of **When Billed** or **Performance Obligation**:

1. Click **Revenue**, then **Driver-Based**, and then **Revenue Recognition What If** to open the Revenue Recognition dashboard.
2. In **Project Details**, review the details. You can also change the revenue recognition method.
3. In **Revenue Obligation Details**, enter obligation details that describe either a milestone or specific terms of the contract that need to be fulfilled based on when you plan to recognize the revenue, and then save your changes:
   - **Obligation Details**—Enter a description of each obligation for the project. A performance obligation is defined as a promise to transfer a good or service.
   - **Revenue Recognition**—Enter the % of total revenue for the project that needs to be recognized when each obligation is fulfilled. This step is required only when the Revenue Recognition method is **Performance Obligation**; it is not required for **When Billed**.
   - **When Period**—Select the period in which to recognize the revenue for each obligation.
   - **When Year**—Select the year in which to recognize the revenue for each obligation.
When you save the form, based on the % of revenue recognition input, the recognized revenue, unearned revenue, and accrued revenue are calculated per month and year.

4. In **Total Project Revenue**, review the impact of your changes to unearned, accrued, and recognized revenue in a grid.

5. In **Revenue Recognition Trend**, review the impact of your changes to the recognized revenue and un earned revenue in a trend line.

**Performing Revenue Recognition What-If Analysis**

You can perform what-if analysis for revenue recognition using the **Revenue Recognition What If** dashboard. You can use milestone-based revenue recognition to understand the impact of various contract project scenarios on profit and loss. For example:

- Use the **Project Details** form to change the revenue recognition method for a project.
- Use the **Revenue Obligation Details** form to modify the obligations, percentages, and periods for recognizing revenue.

Review the impact of your changes in the **Total Project Revenue** grid or in the **Revenue Recognition Trend** graph.

Watch this overview video to learn more about defining revenue recognition obligation details and performing what-if analysis.

[Overview Video.](#)

**Capitalizing Projects**

For capital projects, you can allocate project expenses either partially or in full to one or more assets. For example, if you have a project related to building a new facility, you might allocate equipment costs to the Machinery and Equipment asset class.

To capitalize projects:

1. Click **Project Summary**.

2. Click **Capital** and then click **Project Capitalization**.

3. In the **Total Project Expenses** area, select a project and view your total project expenses.

4. In the **Allocate Expense to Asset** area, select a project expense you want to capitalize, and then select the corresponding capital expense account. Also select the asset class (for example, Machinery or Buildings) where you plan the expense to be capitalized. You can select one or multiple assets for the expense to be allocated. Choose the same asset class/asset in case you want multiple expenses to be assigned to same asset. Indicate how much of the cost should be capitalized.
(making it a capital expense versus an operating expense) and enter capitalization details.

When you save, the **Total Project Expenses** area is updated to show the capitalized expense compared to the total expense.

The **Capital Work in Progress** area is updated with the capitalized projects.

5. In the **Capital Work in Progress** area, add additional details for each capitalized asset and specify the planned inservice date, which drives the depreciation and other expense calculations.

6. From the Action menu, select **Calculate Depreciation**.

The depreciation for the assigned capital project asset is calculated, based on the inservice date.

The capitalized assets are pushed from Projects to Capital. In Capital, in **New Asset Planning**, select the asset class and project to see the capitalized asset's value and associated depreciation.

### Running Project Rules

If you are responsible for several projects and would like to see rolled up project level at entity level, run these rules:

- **Rollup Projects**
- **Rollup Project Cube**

### Using Rolling Forecast with Projects

If your administrator set up rolling forecast for Projects, after you plan and forecast your projects, you can analyze projects over a rolling forecast time period range.

To review your projects in a rolling forecast time period range, click **Projects**, then **Analysis**, and then **Rolling Forecast**.

Rolling forecast forms and dashboards are set up based on the rolling forecast range.

When your administrator updates the current time period, rolling forecast forms and dashboards are automatically updated to add or drop time periods to reflect the updated rolling forecast range.

KPIs are available for reporting purposes:

- **TTM** (Trailing Twelve Months). This scenario reports the activity in Flow based accounts over the prior twelve months.
- **Projected 12**. For Flow type accounts, this scenario reports on the sum of (current period + 11 future periods). For Balance type accounts – this scenario reports on a member value 12 periods in the future.
Preparing Forecast Data

To prepare forecast data, complete these tasks:

1. Create a project.
2. Enter project expenses (either directly or by drivers), and then from the Actions menu, select Calculate Expenses.
3. Enter project revenue (either directly or by drivers), if appropriate for your project, and then from the Actions menu, select Calculate Revenues.
4. Prepare forecast data by copying data from the Plan scenario to the Forecast scenario using one of these two methods:
   - Approve the project: Click Project Summary, then the vertical tab for the project type, and then Project Details. Select the project, and then from the Actions menu, select Approve Project.
   - Copy data from the Plan scenario to the Forecast scenario: Click Project Summary, then the vertical tab for the project type, and then Project Details. From the Actions menu, select Copy Projects. Specify details for source and target scenario and version, and then click Launch.
5. Prepare forecast data by copying Actual data to the Forecast scenario: From the Home page, click Rules and then Prepare Detailed Forecast Data. Specify details for the entity, projects, Plan scenario and version, and the months and years that contain Actual data, and then click Launch.

Now the Forecast scenario includes Actuals for the specified months and year, and Plan data for the rest of the future periods. Any data that was previously in the Forecast scenario is now in Prior FCST.

Analyzing Project Financials With Dashboards

Predefined dashboards give you insight into overall project financials and expense and revenue metrics. You can drill in to members in dashboard charts to see the level of detail you want.

Project Dashboards

At any time during your planning process, use the dashboards in Project Summary to get an overview of your projects. There are dashboards for each enabled project type.

1. Click Project Summary
2. Click the vertical tab for the project type:
3. Click the horizontal tab for the type of dashboard you want to see:
   • **Projects Overview** for an overview
   • **Projects Variance** to see project variance measures
   • **EVM** (Earned Value Management) to see project schedule variances

4. Use the Point of View bar to select different dimension members to display in the form, for example to select a different project or entity.

**Expense Dashboards**
Review the expense dashboard to see an overall summary of project expenses and metrics in chart form.

1. Click **Expenses**.

2. If it's not already selected, click **Overview**.

3. Use the Point of View bar to select different dimension members to display in the form, for example to select a different project or entity.

**Revenue Dashboards**
Review the revenue dashboard to see an overall summary of project revenue and metrics in chart form.

1. Click **Revenue**.

2. If it's not already selected, click **Overview**.

3. Use the Point of View bar to select different dimension members to display in the form, for example to select a different project or entity.
Analyzing Project EVM

Projects provides rules and dashboards that make it easy to measure and analyze project EVM. To analyze EVM measures, you must first prepare forecast data. See Preparing Forecast Data.

Once you have Forecast data, you can analyze project EVM.

To analyze project EVM:

1. Click Project Summary, then the vertical tab for the project type, and then EVM.

2. In the Enter % Complete Estimate form, enter a value for % Complete for the project for the current month, and then save the form. EVM measures are calculated when you save the form.

   Perform this step each month to update the percent complete for the project.

3. Review the updated EVM measures in the EVM dashboard.

Analyzing Project Performance

The Projects Analysis component provides predefined analysis dashboards that give you insight into overall project financials and KPIs.

You can track and analyze performance at a project level or, if programs are enabled, also at the program level.

Table 5-5 Analyzing Project Performance

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview</td>
<td>Get an overview of project performance including variance, profitability, and cash flow in a dashboard.</td>
</tr>
<tr>
<td>Profitability</td>
<td>Review project expenses and project cash flow in a grid. Use the Project Detailed Analysis form to see a summary of the KPIs for each project so you can evaluate project performance for all projects in one place.</td>
</tr>
<tr>
<td>Program</td>
<td>If your administrator enabled the Program dimension, and you mapped projects to programs, review program KPIs including ROI, NPV, and Payback and program performance such as profitability and NPV in dashboards.</td>
</tr>
</tbody>
</table>
Table 5-5  (Cont.) Analyzing Project Performance

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rolling Forecast</td>
<td>If your administrator enabled Rolling Forecast, review forms and dashboards over the defined rolling forecast range. When your administrator updates the current time period, rolling forecast forms and dashboards are automatically updated to add or drop time periods to reflect the updated rolling forecast range.</td>
</tr>
</tbody>
</table>

Click **Analysis**, and then click the type of analysis to review.

You can drill in to members in dashboard charts to see the level of detail you want. Change the project or other members to review by selecting different members from the Point of View.

**Note:**

If you enabled integration between Workforce and Projects, the Workforce **Utilization Analysis** component provides predefined analysis dashboards and forms that give you insight into workforce metrics. For more information, see Analyzing Project Utilization.

If you enabled both Projects and Financials, and you mapped accounts, you can review the data that was moved from Projects to Financials. See Reviewing Data from Workforce, Projects, and Capital.

**Reviewing Forms and Instructions**

You can review all of the available forms and dashboards related to project planning, and review form instructions if your administrator provided them.

Click **Analysis**, and then click **Forms**.
Working With Capital

Related Topics

• Task Overview
• Setting User Variables
• Entering Capital Asset Assumptions
• Managing New Capital Investments
• Managing Existing Assets
• Managing Intangibles
• Analyzing Capital Financials with Dashboards
• Analyzing Capital Asset Financials

Task Overview

Review the tasks you'll perform in Capital. In general, you'll plan capital assets in this order:

1. Set user variables. See Setting User Variables.
2. Review or enter capital assumptions, including driver-based assumptions for depreciation and amortization, funding assumptions, and other expense assumptions. See Entering Capital Asset Assumptions.
3. Add new capital assets and new asset details, and manage new assets. Managing New Capital Investments.
4. Manage existing assets and intangible assets. See Managing Existing Assets and Managing Intangibles.
5. Get an overview of Capital financials with dashboards. See Analyzing Capital Financials with Dashboards.
6. Review the financial impact of Capital assets. See Analyzing Capital Asset Financials.

Note:

You might not see all the features you see in this section, depending on what your Administrator has enabled.
To get started, click **Capital** and then select a component:

<table>
<thead>
<tr>
<th>Task</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investments</td>
<td>Plan for purchasing new fixed assets. For example, plan for new assets such as buying machinery, laptops, trucks. Manage depreciation or cash flows.</td>
<td>Managing New Capital Investments</td>
</tr>
<tr>
<td>Existing Assets</td>
<td>Manage existing assets.</td>
<td>Managing Existing Assets</td>
</tr>
<tr>
<td>Intangibles</td>
<td>Manage intangible assets, such as copyrights, patents, trade secrets, and brand valuation.</td>
<td>Managing Intangibles</td>
</tr>
<tr>
<td>Analysis</td>
<td>Analyze Capital financials.</td>
<td>Analyzing Capital Asset Financials</td>
</tr>
</tbody>
</table>

Watch this tutorial video to learn more about entering data in Capital.

**Overview Video.**

### Setting User Variables

Each planner must set the variables described below.

1. From the Home page, click **Tools**, then **User Variables**.
2. Set up these user variables:
   - Entity
   - Scenario
   - Version
   - Reporting Currency
   - Years
For Financials, set these user variables for the Account dimension:

- For the OFS Expense Account variable, select OFS_Total Other Expenses.
- For the OFS Expense Drivers variable, select OFS Expense Drivers for Forms.

Capital, Workforce, and Projects have their own dynamic variables (defined with the Use Context option), which allow user variables to be used in the Point of View. With dynamic variables, the value of the user variable changes dynamically based on the context of the form, and users don’t need to set the default value.

## Entering Capital Asset Assumptions

Add or modify assumptions for planning capital assets such as depreciation and amortization, funding assumptions, cash flow and funding assumptions, and other expense assumptions.

These assumptions drive calculations using the built-in best practice and formulas, using driver values you enter.

You can set these default assumptions at the entity level or at the No Entity (global) level. If no assumptions are set at the entity level, global assumptions are used in calculations.

1. Click Investments, Existing Assets, or Intangibles.

   ![Note]

   You enter assumptions for each asset type and they are stored separately.

2. Click Assumptions.

3. Select the horizontal tab for the asset assumptions you want to enter and enter assumption details. Change the members on the Point of View if needed to enter assumptions for other members.

- **Depreciation Assumptions**—For each asset, enter:
  - **Useful Life (in Years)**—Indicates the useful life (in years) of assets: the period during which an asset is expected to be usable for the purpose it was acquired and used for depreciation and amortization calculations.
  - **Depreciation Method**—For new and existing assets only. Straight Line, Sum of Years’ Digits, Declining Balance Year, Declining Balance Period, or No Depreciation.
  - **Depreciation Convention**—For new and existing assets only. ProRate Beginning Period, ProRate Actual Date, Mid Period.
- **Amortization Method**—For intangibles only. Indicates the amortization method to use for assets. Only applicable for assets with a finite useful life. Finite (spreads the asset value evenly over the useful life of the asset), Indefinite lived (no amortization). Only Straight Line method is supported.

- **Low Value Lease Term (in Months)**—For lease assets, if IFRS16 – Standard is enabled, enter a threshold value. Lease assets that meet the low value threshold you enter, for example a lease value term less than 12 months, are calculated using the IFRS16 standard for low value assets, and are charged off on the P&L rather than being treated like other assets.

- **Low Value Lease Amount**—For lease assets, if IFRS16 – Standard is enabled, enter a threshold value. Lease assets that meet the low value threshold you enter, for example a lease value less than $5,000, are calculated using the IFRS16 standard for low value assets, and are charged off on the P&L rather than being treated like other assets

- **Funding Assumptions**—For each asset, enter:
  - **Cash Flow Incidence**—Determines the cash flow for capital purchases; the assumption by which the pattern of cash flow is defined. Selections are: Before 2 Months, Before 1 Month, Same Month, Next Month, After 2 Months, After 3 Months, After 4 Months, or Staggered. The selection made directly impacts the Cash Flow statement.
    
    In a 13-period application, Month does not represent a calendar month but the period defined through the 13 period calendar.
  
  - **Cash Flow Staggered Periods**—Determines the number of cash flow periods if the cash flow incidence is staggered.
  
  - **Funding %**—Percentage of the capital purchases funded by an external source.
  
  - **Funding Incidence**—Determines the funding for the capital purchases; the assumption by which the pattern of cash inflow is defined. Selections are: Before 2 Months, Before 1 Month, Same Month, Next Month, After 2 Months, After 3 Months, After 4 Months, or Staggered.
  
  - **Funding Staggered Periods**—Determines the number of funding periods if the Funding Incidence is staggered.

- **Other Expenses**—Enter assumptions for other expenses such as the percentage for Repairs, Insurance, Maintenance, and Taxes.

  To assign expense drivers to another plan year, select Assign % Drivers from the Actions menu. This option allows you to copy drivers from one year to another, varying by a specified increase in percentage. For example, if insurance is 2% and you select Assign % Drivers and increment by 2, then the insurance becomes 4%.

  When there is a change made in assumptions, for example adding new assumptions or modifying assumptions, on the Other Expense Assumptions page, highlight the asset class you modified, and then select Synchronize Drivers from the Actions menu.
Managing New Capital Investments

The Investments component provides several options to help you manage new capital asset investments.

After defining or reviewing capital assumptions, add capital assets and enter asset details. You can manage these asset types:

Table 6-1 Managing New Capital Assets

<table>
<thead>
<tr>
<th>Asset Type</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Overview</td>
<td>• Review an overview of new capital assets in a dashboard.</td>
<td>Analyzing Capital Financials with Dashboards</td>
</tr>
<tr>
<td></td>
<td>• Review the asset value of capitalized projects.</td>
<td></td>
</tr>
<tr>
<td>New Asset Planning</td>
<td>Add new capital assets and asset details and manage new assets and new leased assets.</td>
<td>Adding New Capital Assets</td>
</tr>
<tr>
<td>Lease Asset Planning</td>
<td>Add new leased assets and asset details and manage new leased assets.</td>
<td>Adding New Leased Assets</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Enter assumptions to drive capital asset financials.</td>
<td>Entering Capital Asset Assumptions</td>
</tr>
</tbody>
</table>

Adding New Capital Assets

After defining or reviewing capital assumptions, add capital assets and enter asset details.

1. Click Investments and then click New Asset Planning.

2. On the New Asset Detail page, select the Asset Class from the drop down list. For example, select a category such as Machinery, Buildings or Vehicles, depending on what’s defined for your business.

3. If you’ve integrated Capital and Projects, you can select a project to see the planned asset value for the project.

4. On the New Asset Detail page, hover over the upper right side of the page to activate the menu, and from the Actions menu, select Add New Asset.

5. Enter asset details and then click Launch.

   The fields marked with * are mandatory fields that drive the asset cost and depreciation and other expense calculations.

6. Click the Funding horizontal tab to enter funding assumptions for your assets.
If you've entered assumption for cash flow, funding, depreciation/amortization, those values are filled in by default but you can override them at the asset level.

7. Click the Asset Related Expenses horizontal tab to enter other asset expenses. If you've entered assumptions for asset related expenses, those values are filled in by default but you can override them at the asset level.

8. Click the Detailed Justification horizontal tab to enter a text-based description and justification for the new capital asset.

9. When you're done adding assets, on the New Asset Detail page, hover over the upper right side of the page to activate the menu, and from the Actions menu, select Calculate Assets. You'll see the new assets reflected in the graphs on the bottom of the page.

10. From the Actions menu, select Roll Up to sum the asset class data for use in Financials.

11. If you've integrated Capital with Financials, when you are ready to see Capital data in Financials, ask your administrator to run the required rules and push data.

**Note:**

If you are integrating Capital with Projects, you can review capitalized assets that were pushed from Projects by selecting the asset class and project. You can review the New Assets from Projects and Capital Work in Progress dashboards to review capitalized projects information.

**Note:**

When adding an asset, if the salvage value is set to 0 (zero), the DB Year or DB Period depreciation method may not produce the desired results. To produce correct depreciation calculations when using the DB Year depreciation method, Oracle recommends that the salvage value be set to at least 1% of the basic cost.

After calculating the asset, if currency precision is set to 0, depreciation values for Declining balance Year are rounded and may not appear correct. However, internally the full correct value is stored and used in calculations.

Removing Assets

You can remove a new asset:

On the New Asset Detail page, select the asset, and then from the Actions menu, select Remove Asset.

Adding New Leased Assets

If you are performing lease asset planning without using the IFRS-16 standard, there are two types of leased assets:
• Operating Lease—Similar to rental agreements, operating leases are for short durations. The lessor, who retains exposure to the risks and benefits of ownership, generally covers the maintenance, insurance, and repair costs of the asset.

• Capitalized Lease—Leases that last for almost the life of the asset and where the asset is worthless after the lease period. The lessee effectively assumes all the risks and benefits of ownership, including maintenance, repairs, insurance, and obsolescence. The lessor's role is primarily to provide financing for the asset. At termination, the asset is usually transferred to the lessee for a specified sum, which is similar to buying an asset in installments over time.

If you are performing lease asset planning using the IFRS-16 standard (your administrator enabled IFRS16 – Standard for the application), all leases are operating leases.

1. Click Investments and then click Lease Asset Planning.
2. On the New Asset Detail page, select the Asset Class from the drop down list. For example, select a category such Desktop, Furniture, or Office Equipment, depending on what's defined for your business.
3. If you've integrated Capital and Projects, select a project to associate the asset with.
4. On the Lease Asset Planning page, hover over the upper right side of the page to activate the menu, and from the Actions menu, select Add New Leased Asset.
5. On the Add Leased Asset form, enter details such as lease term, lease payment, payment frequency, and for IFRS-16 Standard-enabled applications, Index Rate, and then click Launch.
6. Click Calculate Leased Assets to see the updated impact of leased assets.

Lease Asset Planning without IFRS-16 Standard

When a leased asset is added, Capital automatically selects a lease type (Operating Lease or Capitalized Lease) based on the parameters entered. After you add a leased asset, you can change the lease type on the New Leased Asset Details form. Note that if you change the asset parameters later, you must also remember to change the lease type, if applicable.

Criteria that Capital applies when classifying a lease as Operating versus Capitalized:

• Transfer of ownership at the end of the lease term
• Purchase option at a certain date during the lease period at a bargain (much less than the expected market value of the asset at that time)
• The lease term is for the major part of the asset's useful life (at least 75% of the asset's useful life)
• The present value of the lease payments exceeds 90% of the initial value of the asset

Capitalized leases affect the Income Statement and the Balance Sheet, whereas operating leases affect only the Income Statement.

Impact of leasing type on financial statements:
• Operating Lease—The lease payments are recorded as operating expense (rent expense) on the Income Statement.

• Capitalized Lease:
  – Records an asset and liability on the Balance Sheet to reflect the value of equipment and the obligation of the lease payments respectively (debt)
  – Depreciates the asset over its useful life, which reduces the asset on the Balance Sheet and generates a depreciation expense on the Income Statement
  – The interest associated with the lease must be listed as an expense on the Income Statement (imputed interest payment)

Note the following about Present Value of Lease calculations:

• Payment timing is not considered in the calculation for Present Value of Lease.
• When the payment frequency is anything other than annual, the present value of the lease is calculated based on the Lease Payment value (as entered by the user) and by converting the actual value the user entered for the interest rate and number of periods, based on the payment frequency.
• Present Value of Lease is not displayed as a negative number.

Lease Asset Planning with IFRS-16 Standard

When IFRS16-Standard is enabled, the Calculate Leased Assets rule uses the new standards for calculating lease assets.

• All leases are recognized on the balance sheet except for low value or low tenure leases.
• Low value or low tenure lease thresholds are based on the values you entered in Depreciation & Amortization Assumptions for Low Value Lease Term (in Months) and Low Value Lease Amount. Lease assets that meet the low value thresholds you entered are calculated using the IFRS16 standard for low value assets, and are charged off on the P&L rather than being treated like other assets.
  – If a lease payment is less than the low value lease amount, rent is calculated without calculating PV or NPV of the assets.
  – If a lease payment term is less than low value lease term, rent is calculated without calculating PV or NPV of the assets.
• If you set an Index Rate, the next period’s lease is based on an index of the previous period’s lease, which allows lease amounts to increase for inflation. If you don’t set the index rate, the lease payments are the same for each period. The Calculate Leased Assets business rule takes the index rate into account when calculating the NPV of an asset.
  – If you set an Index Rate for an asset, Calculate Leased Assets calculates NPV of the leased asset instead of PV of the leased asset.
  – For leased assets with an Index Rate, Calculate Leased Assets calculates PV of leased assets for all assets whose lease start date is prior to the planning and forecast year range.
  – If you don’t set an index rate for an asset, Calculate Leased Assets calculates PV of the asset.
• Lease asset depreciation varies based on the ownership of the lease. If ownership is with the lessor, depreciation is charged for lease term or until the end of useful
life of the asset - whichever is earlier. If ownership is with the lessee, depreciation is charged for useful life of the asset.

Converting New Assets to Existing Assets

When you are ready to reconcile a planned new asset to an existing asset, on the New Asset Detail page or Lease Asset Planning page, select the asset and then from the Actions menu, select Convert New to Existing.

The asset and all the associated data is moved from new to existing assets.

Removing Lease Assets

You can remove a lease asset:

On the Lease Asset Planning page, select the asset, and then from the Actions menu, select Remove Asset.

Managing Existing Assets

The Existing Assets component provides several options to help you manage existing capital assets.

<table>
<thead>
<tr>
<th>Table 6-2</th>
<th>Managing Existing Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>Description</td>
</tr>
<tr>
<td>Overview</td>
<td>Review overview and variance dashboards for existing capital assets.</td>
</tr>
<tr>
<td>Manage Assets</td>
<td>Manage existing assets:</td>
</tr>
<tr>
<td></td>
<td>• Retirements and transfers</td>
</tr>
<tr>
<td></td>
<td>• Funding assumptions</td>
</tr>
<tr>
<td></td>
<td>• Asset-related expense drivers</td>
</tr>
<tr>
<td></td>
<td>• Improvements</td>
</tr>
<tr>
<td>Existing Leased Assets</td>
<td>Manage existing leased assets.</td>
</tr>
<tr>
<td>Assumptions</td>
<td>Enter assumptions to drive calculations for existing assets.</td>
</tr>
</tbody>
</table>

Transferring and Retiring Existing Assets

You can transfer or retire existing assets when needed. For example, transfer ownership of an asset to another organization or retire it by selling it or writing off its value.
1. Click **Existing Assets** and then click **Manage Assets**.
2. Select the asset, and then hover to see the **Actions** menu, and then select **Transfer Asset** or **Retire Asset**.
3. Enter transfer details for the asset such as the Transfer To entity, the date, and the justification. Or, enter retirement details such as the retirement date, whether it’s a sale or a write-off, the retire costs, and the sale or write-off value.
4. For the target entity, you must calculate the assets: Navigate to the target entity (in the Point of View bar), and from the Actions menu, select **Calculate Asset**.

The asset cost is no longer included in calculations as of the time of retirement. If you transferred the asset, you see that the asset is transferred to the other entity.

### Improving Existing Assets

Facilities and cost center managers plan for improving assets (for example, upgrading an asset, adding floor space, and so on). Enter details, such as the improvement name for the asset, description, asset units, asset rate, salvage value, physical location, purchase date, and in-service date.

**Note:**

Before you improve an asset, you must select the **Enable for Dynamic Children** member property for the Asset Detail and specify the **Number of Possible Dynamic Children**, and then refresh the application. This essentially is splitting the asset from one asset to multiple assets. To allow planners to improve the assets, enable dynamic parent property for the asset you want to improve. The existing asset detail should be loaded against a child under this parent to represent the base asset. All other improvements will be captured as a sibling to this base asset.

For example, create a member under the asset and load the existing asset detail against that. Here is how the hierarchy would look:

**Office Building No#3020 - Enable Dynamic Parent Property**
- **Office Building No#3020 - Base Asset**
- **Office Building No#3020 - Improvement 1**
- **Office Building No#3020 - Improvement 2**

In this example, when the Asset Detail dimension is being built, load the Parent member and the Base Asset and load all data against the Base Asset member. Improvement 1 and Improvement 2 members are created when you launch the Improvement rule in Capital. (Planners can rename the improvements.)

1. Click **Existing Assets** and then click **Manage Assets**.
2. Select **Improvements** on the horizontal tabs.
3. Select an asset, and then from the **Actions** menu, select **Improvement**.

4. Enter details, such as the improvement name for the asset, description, asset units, asset rate, salvage value, physical location, purchase date, and in-service date and then click **Launch**.

   The asset with the improvement name is added below the original asset.

### Managing Existing Leased Assets

You manage existing leased assets in the same way you manage existing assets.

1. Click **Existing Assets** and then click **Existing Leased Assets**.

2. Manage expenses, amortization, and so on.

3. Hover to see the **Actions** menu, and then select **Calculate All** and **Roll Up**. This aggregates data for Total Entity, Total Fixed Asset, and any custom dimensions that are enabled.

### Managing Intangibles

The **Intangibles** component provides several options to help you manage intangible assets (assets such as leasehold improvements, software rights, trade secrets, and brand valuation).

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overview</strong></td>
<td>Review an overview of intangible asset financials.</td>
<td><strong>Analyzing Capital Financials with Dashboards</strong></td>
</tr>
<tr>
<td><strong>New Intangibles</strong></td>
<td>Add new intangible assets.</td>
<td><strong>Adding and Managing New Intangibles</strong></td>
</tr>
<tr>
<td><strong>Existing Intangibles</strong></td>
<td>Manage existing intangible assets.</td>
<td><strong>Managing Existing Intangibles</strong></td>
</tr>
<tr>
<td><strong>Assumptions</strong></td>
<td>Review depreciation and amortization assumptions to drive Capital asset financials.</td>
<td><strong>Entering Capital Asset Assumptions</strong></td>
</tr>
</tbody>
</table>
Adding and Managing New Intangibles

To add a new intangible:

1. Click Intangibles and then click New Intangibles.
2. On the Asset Details page, select the Asset Class from the drop down list. For example, select a category such Copyright, Royalty, or Brand Valuation, depending on what's defined for your business.
3. If you've integrated Capital and Projects, select a project from the Page drop-down list to associate the asset with.
4. On the Asset Details page, hover over the upper right side of the page to activate the menu, and from the Actions menu, select Add New Asset.
5. Enter asset details and then click Launch.
   If you've entered assumptions for Insurance% or Maintenance%, those values are filled in by default but you can override them at the asset level.
6. Click the Funding Assumptions horizontal tab to enter funding assumptions for your assets.
   If you've entered funding assumptions, those values are filled in by default but you can override them at the asset level.
7. Click the Other Expenses horizontal tab to enter other asset expenses.
   If you've entered assumptions for other expenses, those values are filled in by default but you can override them at the asset level.
8. Click the Detailed Justification horizontal tab to enter a text-based description and justification for the new capital asset.
9. When you're done adding assets, on the Asset Details page, hover over the upper right side of the page to activate the menu, and from the Actions menu, select Calculate Intangible. Select Roll Up. This aggregates data for Total Entity, Total Fixed Asset, and any custom dimensions that are enabled.
   You'll see the new assets reflected in the graphs on the bottom of the page.

Removing Intangibles

You can remove a new intangible:

On the Asset Detail page, select the asset, and then from the Actions menu, select Remove Asset.

Managing Existing Intangibles

You can manage existing intangibles.

1. Click Intangibles and then click Existing Intangibles.
2. Manage assets using these options.
• **Impair Asset**—When an asset is worth less on the market than the value listed on the Balance Sheet, you can impair it, which results in a write-down of the asset account to the stated market price. Only intangible assets can be impaired. Enter details about the asset to be impaired including the impair date and the fair market value, and the impairment option:
  – **Expensed**—The asset value will be expensed.
  – **Capitalized**—The asset value will be capitalized. If you select the capitalize option, the impairment value is posted to capital reserve.
  – **Partially Capitalized**—Part of the asset value will be capitalized. If you select Partially Capitalized, the impairment value is apportioned to the capital reserve, based on Capitalized %. Amortization is reduced from the month of impairment.

• **Retire Asset**—When assets are retired, asset balances are terminated as of the retirement date, and losses or gains on sales or write-offs are calculated. Also, asset-related expenses are not calculated for a retired asset after the retirement date.

• **Transfer Asset**—To ensure optimum use of assets, facilities managers and cost center managers can transfer fixed asset resources across departments. When planning transfers, ensure that users have access permissions to the source and destination entities.

3. After making changes to existing intangibles, from the **Actions** menu, select **Calculate Intangible** and **Roll Up**. This aggregates data for Total Entity, Total Fixed Asset, and any custom dimensions that are enabled.

## Analyzing Capital Financials with Dashboards

Predefined dashboards give you insight into overall capital asset financials, including capital expenditures, and cash flow and balance sheet impacts. You can drill in to members in dashboard charts to see the level of detail you want.

1. Click **Investments**, **Existing Assets**, or **Intangibles**.

2. Click **Overview**.

3. For **Investments** and **Existing Assets**, click the horizontal tab for the type of dashboard you want to see.

4. Use the Point of View bar to select different dimension members to display in the form, for example to select a different project or entity.

## Analyzing Capital Asset Financials

The **Capital Analysis** component provides predefined analysis dashboards that give you insight into the impact of capital assets on your overall financial performance.
Table 6-4 Analyzing Capital Asset Financials

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Expenses Summary</td>
<td>See an overview of Capital expenses in a dashboard format. See an Expenses Summary and an Asset Summary in grid format.</td>
</tr>
<tr>
<td>Financial Statements</td>
<td>Review the balance sheet, cash flow impacts, and profit and loss impacts of capital assets.</td>
</tr>
<tr>
<td>Asset Usage</td>
<td>Review asset usage summary and asset usage across projects, if you've integrated Capital with Projects.</td>
</tr>
</tbody>
</table>

To analyze Capital financials click Analysis and then select the type of analysis to review.

You can drill in to members in dashboard charts to see the level of detail you want. Change members to review by selecting different members from the Point of View.
## Related Topics

- Task Overview
- Working with Templates
- Working with Models
- Working with Reports
- Creating and Running Consolidations

## Task Overview

Review the tasks you'll perform in Strategic Modeling. In general, you'll perform tasks in this order:

1. Open an application, review the templates used to create models, and then create a model or open an existing model. See Working with Templates and Creating a Strategic Modeling Model.

2. Check out a model, if required. You can also open a copy of a model. See Opening, Checking Out, and Deleting Models.

3. Perform strategic analysis tasks such as:
   - Manage accounts and subaccounts.
   - Define the forecast method for accounts.
   - Identify a target value for an account.
   - Perform what-if analysis using the Scenario Manager.
   - Determine how values are calculated.
   - Calculate the model.
   - Improve your forecast accuracy using simulations.
   - Work with time periods.
   - Work with funding options.
   See Working with Models.

4. Review built-in and custom reports. Working with Reports.

5. Build and run consolidations to roll up data. See Creating and Running Consolidations.
**Note:**

You might not see all the features you see described in this section, depending on the access your Administrator has given you to models and features.

To get started, click **Strategic Modeling** and then select a component:

### Table 7-1  Strategic Modeling Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model View</td>
<td>• Create, check out, and open models.</td>
<td>Working with Models</td>
</tr>
<tr>
<td></td>
<td>• Work in the Account View.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Work with Account Groups.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manage accounts and subaccounts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Define the forecast method for accounts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Identify a target value for an account.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Perform what-if analysis using the <strong>Scenario Manager</strong>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Improve your forecast accuracy using simulations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Determine how values are calculated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Manage time periods.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Work with funding options.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review built-in reports such as Income Statement, Balance Sheet, Funds Flow.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Review custom reports that were designed in Oracle Smart View for Office.</td>
<td></td>
</tr>
<tr>
<td>Consolidation</td>
<td>• Create consolidations.</td>
<td>Creating and Running Consolida</td>
</tr>
<tr>
<td></td>
<td>• Specify model characteristics.</td>
<td>tions</td>
</tr>
<tr>
<td></td>
<td>• Build a business case.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Run consolidations.</td>
<td></td>
</tr>
</tbody>
</table>

Additionally, you can review the status of consolidations in the Job Console.
Table 7-1  (Cont.) Strategic Modeling Tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Perform These Tasks</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Templates</td>
<td>Review templates used to create models.</td>
<td>Working with Templates</td>
</tr>
</tbody>
</table>

Additionally, you can perform these tasks in the Strategic Modeling Smart View extension:

- Work with local models
- Edit a worksheet, or add new worksheets
- Add and modify user defined accounts
- Modify account input status
- Use the Depreciation Scheduler
- Use Sensitivity Analysis
- Modify the Time structure and settings
- Add and edit Debt Schedules
- Change funding options
- Perform currency translations
- Work with tax and valuation options
- Design a custom report or modify a standard report
- Save a model as a template
- Generate or assign custom dimensions
- Modify a template and upload it for use on the Web
- Convert and upload reports from the on premise version of Oracle Hyperion Strategic Finance to Strategic Modeling on the Web
- Upload templates you created from the on premise version of Strategic Finance to Strategic Modeling on the Web

See Working with Strategic Modeling in Smart View.

Working with Templates

Use templates to quickly create a model. Templates include a hierarchical set of accounts without time periods or data.

Strategic Modeling includes templates for commonly used account structures. You can use one of the provided templates, or create and upload custom templates.

Oracle provides these templates:

- Standard
- Utility
These templates are available when you enable Strategic Modeling so you can get up and running quickly. You can't modify the templates provided by Oracle, but you can save a copy of a template and modify it for your business use case.

To review the account structure of the provided templates and any custom templates you've uploaded:

1. From the Home page, click **Strategic Modeling** and then click **Templates**.
2. From the **Actions** menu for the template you want to review, click **Open**.
3. Change the **Scenario**, **Dataview**, or **Account Groups** to show different sets of accounts.

You can also review and edit the account structure in the templates provided by Oracle using Strategic Modeling in Oracle Smart View for Office.

**Working with Models**

The **Strategic Modeling Model View** component provides several options to help you work with models and perform strategic analysis.
### Table 7-2  Working with Models

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account View</td>
<td>- Open a model.</td>
<td>- Opening, Checking Out, and Deleting Models</td>
</tr>
<tr>
<td></td>
<td>- Work in the Account View.</td>
<td>- Working in the Account View</td>
</tr>
<tr>
<td></td>
<td>- Add and delete account members.</td>
<td>- Adding and Deleting Subaccount Members</td>
</tr>
<tr>
<td></td>
<td>- Define the forecast method for accounts.</td>
<td>- Defining the Forecast Method for Accounts</td>
</tr>
<tr>
<td></td>
<td>- Manage accounts and subaccounts.</td>
<td>- Managing and Editing Subaccounts</td>
</tr>
<tr>
<td></td>
<td>- Identify a target value for an account.</td>
<td>- Specifying a Target Value for an Account</td>
</tr>
<tr>
<td></td>
<td>- Perform what-if analysis.</td>
<td>- Performing What-If Analysis with Scenarios</td>
</tr>
<tr>
<td></td>
<td>- Determine how values are calculated.</td>
<td>- Determining How Values are Calculated</td>
</tr>
<tr>
<td></td>
<td>- Review built-in reports such as Income Statement, Balance Sheet, Funds Flow.</td>
<td>- Reviewing Reports</td>
</tr>
<tr>
<td>Custom Reports</td>
<td>Review custom reports that were designed in Oracle Smart View for Office:</td>
<td></td>
</tr>
</tbody>
</table>

### Managing Models

You can create, check out, modify and delete models. You can also view templates used to create models.

### Creating a Strategic Modeling Model

Administrators and Modelers can create Strategic Modeling models using templates—financial model frameworks that contain predefined reporting and modeling standards. Oracle includes several pre-defined templates to get you up and running quickly. You can also create a model that is based on an existing model.

Users check out models to work with them, or they can work with a copy of the model. When users work with a copy of a model, they can't save changes to the data or to the model.

When you create a model, the model is populated with a hierarchical chart of accounts, a time structure, reports, dataviews, account groups, and all the metadata from the template or the model it was created from.

You must have already created an application and enabled Strategic Modeling. If you want to use a custom template (customized using Oracle Smart View for Office) to create the model, it must already be uploaded.

Watch this tutorial video to learn more about creating a Strategic Modeling model.
To create a Strategic Modeling model:

1. From the Home page, click **Strategic Modeling** and then click **Model View**.
2. Click **Create**.
3. On the **General** page, specify the following options and then click **Next**.
   - Specify a model name and description.
   - Select whether to create the model from a template, from an existing model in the current application, or from a local .alc file, and then select the template, model, or file.
     - If you are creating a model from a local .alc file, the file must have already been converted in Smart View for use on the Cloud.
     - To integrate Strategic Modeling data with Financials, select the **Financial** template.
   - Select **Place at Root** to create a standalone model or a model that will be the parent of another model, or to create a hierarchical structure, clear **Place at Root** and select a parent model.
   - Creating a hierarchical model structure can be useful for consolidations and managing access control, or for visually organizing models.
   - Select a base currency and units.
     - Each model can have its own currency and units, independent of the application.
     - If you create a model from a local .alc file or from an existing file if you keep source data, these options are not available; the model is created using the units and currency of the original model.

   **Note:**
   You set up currency conversions in Smart View. See “Translating Currencies” in *Working with Strategic Modeling in Smart View*.

   - If you created the model from an existing model, select **Keep Time Structure** if you want the new model to use the same time period structure as the existing model.
     - If you selected **Keep Time Structure**, you can select **Keep Source Model Data** to include the source model's data values in the accounts.
     - If you select **Keep Time Structure**, skip to step 5.
   - If you created a model using the **Financial** template for integration with Financials, in **Select Entity**, select a Financials Entity dimension member. The model will be mapped to the selected Entity dimension member.
This option is available only when creating a model from the Financial template. For more information, see Integrating Data Between Strategic Modeling and Financials.

4. On the Calendar, Time Period, and Configure Years pages, specify the options for building the calendar for this model.

5. Review the model creation options, and then click Create Model.

The model is created with a chart of accounts and a calendar structure based on the options you selected.

You can convert an Oracle Hyperion Strategic Finance model to a Strategic Modeling model in Smart View. See Working with Strategic Modeling in Smart View.

Opening, Checking Out, and Deleting Models

You can check out a model, or work with a copy.

To open or check out a model:

1. From the Home page, click Strategic Modeling, and then click Model View.

2. Click the model you want to open, and from the Actions menu, select Open-Checkout or Open As Copy.

   When you check out a model, you can save changes to the data and the model. When you work with a copy of a model, you can't save changes to the data or the model.

   If you checked out the model, after you make changes to it and save the changes, click Close to close the model, and then select Check In to save the changes to the server, or Discard to discard the changes.

   If you selected Open as Copy, you can save your changes temporarily, but when you close the model, the changes are not saved to the server.

To delete a single model, select it from the Models list, and then from the Actions menu, click Delete. To delete a parent model and all of its descendants, select the parent model from the Models list, and then from the Actions menu, click Delete Hierarchy.

Working in the Account View

When you open a model, it opens in the Account View, where you can view and manage the accounts and subaccounts in a model.

About Accounts, Subaccounts, and Account Groups

Account types include:

- **Input accounts**—Manually enter financial data into Input accounts for historical and forecast periods. In forecast periods, use forecast methods or freeform formulas to calculate values. The forecast method you specify determines the
format for the input data 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.
For details about entering data in input accounts, see Entering Account Data.

- **Calculated accounts**—Calculates values with formulas using output from other accounts. You can't edit formulas in calculated accounts; they are fixed to retain accounting integrity.

- **User-Defined Accounts**—Defined in Oracle Smart View for Office. Includes Memo Accounts to create additional detail in the financial accounts, Custom Ratio accounts to create additional ratios for analysis, and Debt Covenant accounts to define measures within Custom Ratios testing against performance standards (debt covenants).

**Subaccounts** are used for additional input detail in main accounts. Subaccounts inherit attributes of main accounts in both historical and forecast periods. You can distinguish subaccounts because they have a colon in their account key.

**Account groups** are used to group accounts together to make them easy to find and display when doing data entry. Default account groups are inherited from the template. Administrators and modelers can create additional account groups. See Working with Account Groups.

**Dataviews** are used to filter the type of accounts that are displayed. Administrators and modelers can create and edit dataviews. See Working with Dataviews.

Strategic Modeling account numbers have up to three segments, separated by a decimal point or, for subaccounts, a colon:

- Main account number (vxxxx). These accounts drive the accounting integrity of the model.
- Related account number (vxxxx.xx)
- Subaccount number (vxxxx.xx:xxxx or for a subaccount of a main account: vxxxx:xxxx)

For descriptions of the accounts, see Strategic Modeling Account Definitions.

**About the Account View**

In the Account View, you can:

- Change the point of view: Select from the **Scenario**, **Dataview**, or **Account Groups** lists and then click **Refresh**.
- Add and delete subaccount members in the account hierarchy. See Adding and Deleting Subaccount Members.
- Calculate and save a model.
- Perform analysis tasks using the actions available on the **Actions** menu.

**Working with Account Groups**

Use **Account Groups** to manage accounts in bulk. For example, you can create a group containing all Income Statement accounts that shows data input rows only. You also use Account Groups to select the accounts to display on the **Account View**.
Administrators and Modelers can create and edit account groups. All users can use Account Groups to select the accounts to display on the Account View.

To create and edit account groups:

1. Open a model.
2. In the Account View, from the Actions menu, click Account Groups.
3. In the left pane, click Add Account Groups, and then select a type to add:
   - Add List of Accounts—Creates groups of accounts.
   - Add List of Groups—Creates groups of account groups.
   - Add a Separator—Creates a line to separate groups in a list. If you add a separator, reorder the Separator as needed, and then click OK. You can skip the remaining steps in this procedure.
4. Enter a name and then click OK.
5. Click Add Accounts to add accounts or account groups to the list.
6. Select the accounts or account groups to add to the list, click Select Accounts, and then click OK.
   You can use Search to easily find the account or group you want.
7. For a list of accounts, select options for how to display the accounts:
   - Subaccounts—Specify how to display subaccounts.
   - Dimensions—Specify how to display dimensions when adding main accounts. Available only when All subaccounts are selected.
   - Default View—Specify the default view to display accounts.
8. Select whether to hide this group from the Account Group list, and for account lists, select whether to include subaccounts for user-defined accounts and whether to include accounts that have been turned off.
9. Click OK.

The new Account Group is available in the Account Groups list in the Account View.

Additionally, in the Account Groups dialog box you can:

- Edit, rename, and delete account groups. Note that you can't edit, rename or delete the default account groups that are provided with Strategic Modeling.
- Reorder the account groups by dragging and dropping or by using the arrows, which affects the display order in the Account Groups list in the Account View.

Working with Dataviews

Use dataviews to filter the accounts and manage the display of data in the Account View. Models include default dataviews:

- Standard
- Input Only
- Output Only

Administrators and modelers can create and edit dataviews to customize the display in the Account View.
To create a dataview:

1. Open a model.
2. In the **Account View**, from the **Actions** menu, click **Dataviews**.
3. In the left pane, click **Add Dataview**.
4. Enter a name and then click **OK**.
5. Specify the properties and attributes for the new dataview, and then click **OK**.
   - **Display Options**
     - **Display Group Headers as Titles**—displays Account Group headings.
     - **Hide Input Row if a Calc Account**—hides input rows for calculated accounts.
     - **Hide Calculated Time Period Column**—hides calculated time period details.
   - **Attributes**—Select whether to display input rows, output rows, or both, and specify the row order.
   - **Time Period**—Specify the time period to display. If you select **Set Time Range**, specify the **Beginning Boundary** and **Ending Boundary** using functions or by entering values.

The new dataview is available in the **Dataview** list in the **Account View**.

Additionally, in the **Dataviews** dialog box you can:

- Edit, rename, and delete dataviews.
- Reorder the dataviews by dragging and dropping or by using the arrows, which affects the display order in the **Dataviews** list in the **Account View**.

**Entering Account Data**

You enter account data (historical values, project forecast assumptions, and estimate valuation assumptions) in the Accounts view.

Tips for entering data:

- To enter negative values, start the value with a minus sign (-).
- Enter ‘#’ or ‘##’ into a cell to override current values. The ‘#’ and ‘##’ overrides are not valid for use within historical time periods unless those periods are calculated using Freeform Formulas.
- Strategic Modeling stores numbers up to 16 significant digits, before and/or after the decimal point. You can change the number of decimal places displayed.

**Adding and Deleting Subaccount Members**

You can add subaccount members to the account hierarchy by adding a child or sibling member to the selected account.

You can also add children or sibling subaccount members in bulk.

For information about editing subaccounts, see **Managing and Editing Subaccounts**.

Watch this tutorial video to learn more about working with subaccounts.
Adding Subaccounts One at a Time

To add a subaccount one at a time:

1. In the **Account View**, right-click an account, and from the context menu select **Add Sibling** or **Add Child**, depending on where you want to add the new member in the account hierarchy.

   **Tip:**
   To quickly find an account, from the **Actions** menu, click **Find Account**, and then enter the name or the subaccount identifier number.

   A new subaccount is added, with the name **NewNN** appended to the account ID.
   - You can't add siblings to main accounts.
   - The subaccount ID must be unique within this group of subaccounts.

2. Enter a name in the **Account Names** column.

3. To make further edits to the new account, right-click the account and select **Edit**. See **Managing and Editing Subaccounts**.

Adding Subaccounts in Bulk

To add subaccounts in bulk:

1. Prepare a file that contains the subaccount member names to be added, and then copy the subaccount member names. You can prepare the file in Microsoft Excel or in any editor. The subaccount delimiter is a new line character. For example, copy a column in Excel that includes all the subaccounts.

2. In the **Account View**, right-click the row header for the account or subaccount to which you want to add children or siblings, and then click **Paste Children** or **Paste Sibling**. **Paste Sibling** is available only when you select a subaccount row.

3. In the **Paste** window, paste the copied subaccounts. You can edit the pasted text, or add additional subaccounts to the list.

4. Click **Paste**. The subaccounts are added as children or siblings of the currently selected account.

   For **Paste Children**, the subaccounts are pasted at the end of the currently selected subaccount's children list.

   For **Paste Siblings**, the subaccounts are pasted above the currently selected subaccount row as siblings.

   The pasted text is used as the descriptions for the newly created subaccounts. Subaccounts keys are automatically generated.
Deleting Accounts

To delete an account, in the Account View, right-click an account, and from the context menu select **Delete**. When you delete an account, its children are also deleted.

**Note:**
Because main accounts drive the accounting integrity of the model, you can’t delete them. Main accounts are recognizable by an account ID of vxxxx.

Managing and Editing Subaccounts

To edit a subaccount:

1. In the **Account View**, select the subaccount you want to edit, and then from the Actions menu, select **Subaccounts**. You can also right-click a cell and click **Subaccounts**.
2. Edit the member name (subaccount ID) and the description, if needed.

**Note:**
If the fields are not available (greyed out), it means that the subaccount is not editable, for example if you don’t have access permissions to edit it. For main accounts, to maintain the accounting integrity of the model, you can edit the name but not other fields.

3. In **Type**, select the rollup option for this subaccount.
4. To edit related accounts:
   a. Click **Edit** next to **Related Accounts**.
   b. In the list of related accounts, click **Edit**.
   c. You can make changes to a group of accounts all at one time. Enter search text in the **Find** box, and then: Click **Find and Replace**, enter the replacement text, and then click **Replace All**. Or, click **Append**, enter the text to append, select whether to append at the **Front** or **End** of the name, and then click **Append All**.
   d. Make changes to one account at a time by clicking or tapping the account name in the right-hand panel of **Related Accounts** and making the changes in the **Name** box.
   e. Click **Save**.
5. Click **Apply** to save the changes.
Defining the Forecast Method for Accounts

Every account uses a unique forecast method to project account values in future (forecast) time periods. Use Account Forecast to review or define the forecast method for accounts. You can use pre-built forecasting methods, or build your own freeform formula. Many of the accounts in the template have a pre-defined forecast method; you can revise the method if required for your business. (All the accounts that accept input do have a default forecast method defined.)

Watch this tutorial video to learn more about defining the forecast method for accounts.

![Tutorial Video](https://example.com/tutorial)

To define a forecast method for accounts.

1. Open a model.
2. In the Account View, click the cell for the account you want to review or change.

   **Tip:**
   
   To quickly find an account, from the Actions menu, click Find Account, and then enter the name or the subaccount identifier number.

3. From the Actions menu, click Account Forecast. The Forecast panel shows the calculation used to calculate the forecast value. You can also right-click a cell and click Account Forecast.

   In this example, Product Price uses a standard formula:
In this example, Product Sales uses a freeform formula:

4. Edit the standard formula options, or edit the freeform formula and options, and then click **Apply**. Click **Apply** to apply the formula to selected subaccounts or children of the current account.
Creating a Standard Formula for the Account Forecast Method

To edit a standard formula:

1. In the Account Forecast panel, for Type, select Standard.
2. Specify values for these options:

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast As</td>
<td>Select the account to forecast. Typically you use the name of the selected account, but in some cases you select a related account. For example, if you are forecasting cash, you can choose to forecast increase in cash, rather than cash.</td>
</tr>
</tbody>
</table>
### Table 7-3 (Cont.) Options for Defining a Standard Formula for the Forecast Method

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>Select the forecast method to use. The method determines the format of your input data.</td>
</tr>
<tr>
<td></td>
<td>* As Actual Value—Enter data as the actual value as defined by the default currency units. This is the default method, using the base currency.</td>
</tr>
<tr>
<td></td>
<td>* Growth Rate—Enter an annual or a periodic growth rate. For example, for Sales growth of 10% per year, enter 10 for the forecast period input.</td>
</tr>
<tr>
<td></td>
<td>* Growth Rate (Year over Year)—Enter data as a growth rate over the same period one year prior. For example, if January 2020 Sales are to be 5% higher than January 2019 Sales, enter 5 in January.</td>
</tr>
<tr>
<td></td>
<td>* % of Another Account—Enter data for one account as a percentage of another account (Associated Account) in the same period. If you select this option, you must specify the Associated Account.</td>
</tr>
<tr>
<td></td>
<td>* Days—Enter data for an account as the number of days (typically of sales or cost of goods sold) that this item represents. It is most commonly used for working capital balances, such as receivables and payables forecasting. If you select this option, you must specify the Associated Account.</td>
</tr>
<tr>
<td></td>
<td>* 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. If you select this option, you must specify the Associated Account.</td>
</tr>
<tr>
<td>Absolute Multiple of Another Account</td>
<td>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.</td>
</tr>
<tr>
<td>Default Multiple of Another Account</td>
<td>Enter data for one account as a default currency unit multiple of another account.</td>
</tr>
</tbody>
</table>
Table 7-3  (Cont.) Options for Defining a Standard Formula for the Forecast Method

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input</td>
<td>Select the input method; available options depend on the forecast method you selected.</td>
</tr>
<tr>
<td>Associated Account - Account</td>
<td>Select the account to use for methods that require an associated account.</td>
</tr>
<tr>
<td>Take Output Value From</td>
<td>If the forecast method requires an associated account, select the value to use for the Associated Account's output—Current Period, Prior Period, Change In, or Average.</td>
</tr>
<tr>
<td>Match Dimensions</td>
<td>If the forecast method requires an associated account, select <strong>Match Dimensions</strong> 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 <strong>Match Dimensions</strong>.</td>
</tr>
<tr>
<td>Lag to Prior Input Period</td>
<td>If the forecast method requires an associated account, and you are forecasting a balance account, you can forecast the ending balance or the change in the ending balance from the prior period. Use this option when you don't want to use the prior period's value. This option finds the previous period that has input values (rather than calculated values) and uses that value. For example, if you have year-to-date values through July, but actuals only for January, if you want to forecast July, choosing this option would use the value from January because it has an actual value.</td>
</tr>
</tbody>
</table>
Table 7-3  (Cont.) Options for Defining a Standard Formula for the Forecast Method

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>Depending on the forecast method, select an appropriate value:</td>
</tr>
<tr>
<td>· <strong>Unadjusted</strong>—Make no changes</td>
<td></td>
</tr>
<tr>
<td>· <strong>Annualized</strong>—Take the value and annualize it</td>
<td></td>
</tr>
<tr>
<td>· <strong>Normalized</strong>—Take an existing previous value and normalize for a time period of a different length</td>
<td></td>
</tr>
<tr>
<td>Input Period Values</td>
<td>If the forecast method requires an associated account, select from:</td>
</tr>
<tr>
<td>· <strong>Variable in each period</strong>—You can enter different values in each period</td>
<td></td>
</tr>
<tr>
<td>· <strong>Constant for all periods</strong>—All forecast periods use the same value</td>
<td></td>
</tr>
<tr>
<td>· <strong>Equal to the historical average</strong>—No input is required; the historical average is applied to all forecast periods</td>
<td></td>
</tr>
<tr>
<td>Grid Pricing</td>
<td>Indicates that the input for this field varies—input values adjust depending on the value of another account. For example, you can increment or decrement a contract interest rate based on selected criteria. Click <strong>Add</strong> and then specify the grid pricing options and pricing criteria. You define the criteria for when the values change and how they should change (usually additive or multiplicative).</td>
</tr>
<tr>
<td>Spread Over Another Account</td>
<td>Adds the input value to another account’s output value to compute the final input value. Select the check box and then select the account over which to spread. Usually used for forecasting interest rates.</td>
</tr>
</tbody>
</table>

Creating a Freeform Forecast Formula for the Account Forecast Method

To edit a freeform formula:

1. In the **Account Forecast** panel, for **Type**, select **Free Form**.

2. To edit a freeform formula, type in the text box, or click **Edit** to open the Formula Builder.

3. In the Formula Builder, select from accounts, functions, and operators to build the formula to calculate output values for selected accounts, and then click **Save**. See “Using Freeform Formulas” in *Working with Strategic Modeling in Smart View* for a description of functions and arguments. The formula is validated when you save it.

4. Specify values for these options:
Table 7-4  Options for Defining a Freeform Formula for the Forecast Method

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast As</td>
<td>Select the account to forecast. Typically you use the name of the selected account, but in some cases you select a related account.</td>
</tr>
<tr>
<td>Method Description</td>
<td>Enter a description of the formula.</td>
</tr>
<tr>
<td>Input</td>
<td><strong>Optional:</strong> For formulas using @input, from <strong>Input</strong> select the format of the input data.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Currency</strong>—Enter input data using the option set in <strong>Units</strong>.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Items</strong>— Enter input data using option set in <strong>Units</strong>.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Percent</strong>—Enter input data as a percentage. Useful for tax rate formulas.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Ratio</strong>—Enter input data as a ratio.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Days</strong>—Enter input data as a number of days. The input must be multiplied by another account to produce the output value.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Turns</strong>— Enter the input data as the number of turns. The input must be multiplied by another account to produce the output value.</td>
</tr>
<tr>
<td>Units</td>
<td>For formulas using @input, select the input data unit (thousands, or millions, for example).</td>
</tr>
<tr>
<td>Use in History</td>
<td>Select to use freeform formulas in historical periods.</td>
</tr>
<tr>
<td></td>
<td>For example, you might want to calculate Sales as Price x Quantity in both historical and forecast periods.</td>
</tr>
<tr>
<td></td>
<td>If this option is not selected, the freeform formula is used only in forecast periods and historical data must be input separately.</td>
</tr>
<tr>
<td>Lag to Prior Input Period</td>
<td>For formulas using lag time periods.</td>
</tr>
<tr>
<td>Allow Override</td>
<td>Select to allow users to input values instead of using the formula.</td>
</tr>
<tr>
<td></td>
<td>In input periods, you can override the selected input method 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.</td>
</tr>
</tbody>
</table>

5. Click **Apply**.

Specifying a Target Value for an Account

Use **Goal Seek** to specify a target value for an account and determine the values that are needed to drive that result. To use goal seek, you select the account value you want to change, an associated account to drive the change, and a time range over which to make the changes.
For example, suppose your total payroll percentage of budget is 16.69% in 2017 and you want to reduce it to 16.18%. You decide to reduce payroll percentage by changing the Selling Hours Productivity in the time range January through December 2017. When you select **Seek** in the **Goal Seek** panel, Strategic Modeling calculates the changes required in Selling Hours Productivity to reach the Total Payroll Percentage target for 2017, spreading the adjustment in Selling Hours Productivity between January and December 2017 (by a percentage or an amount, depending on your selection) to achieve the target value. When you use Goal Seek, you don't have to make manual adjustments to accounts or write complex business rules to see how to reach your target.

Watch this tutorial video to learn more about **Goal Seek**.

![Tutorial Video](image)

To specify a target value for an account:

1. Open a model.
2. In the **Account View**, click the cell for the account you want to change.
3. From the **Actions** menu, click **Goal Seek**.
   You can also right-click a cell and click **Goal Seek**.
4. In the **Set Goal** area, change the Account, Scenario, or Time Period if needed, and then enter the target value for this account in **Goal**.
5. In the **Adjust By** area, specify the account you want to adjust to meet the goal in the target account, the time periods over which to make the change, and whether to adjust by a percentage or an amount.
   The change account must be related to the goal account through a formula, or the goal seek will fail.

For example, in this image, the current value for Product Sales in 2020 is 819.3. Suppose you want to increase that to 900. Product Sales is calculated from several accounts, including Unit Volume. You want to reach the product sales goal by adjusting the Unit Volume by the same percentage for each time period between 2017 and 2020. When you use Goal Seek, the unit sales are adjusted to meet the product sales target of 900 in 2020.
6. Click **Seek**.
   The change account values are recalculated and updated by the same amount or percentage for the time periods you specified in order to reach the target in the goal account. The model is updated and calculated with the new values, so you can see the result across the chart of accounts.

7. Review the resulting changes to the goal account and the change account in the **Goal Seek Results** panel. You can also see the adjusted percentage or amount in the **Goal Seek** panel.
   In this example, you can see that Unit Volume was adjusted by 49.96% between 2017 and 2020 to reach the Product Sales goal of 900 in 2020.

8. Click **Apply** in the Goal Seek Results panel to save the changes in the model, or click **Cancel** to discard the goal seek results.
Performing What-If Analysis with Scenarios

You can model different business outcomes and evaluate different sets of forecast assumptions by defining scenarios. Use Scenario Manager to create scenarios and define the accounts to include—the entire chart of accounts, a subset of accounts, or just a single account. All accounts are in the Base scenario; you add an account to a scenario because you want the values to come from your new scenario rather than from the Base scenario (or other standalone scenario).

Perform what-if analysis by creating different scenarios and changing the input values (including the forecast method) for different accounts in the scenario. Then, see how these changes affect the output in the account.

All models include two scenarios by default:

- **Base**—Includes all accounts and contains the original inputs of each account. It does not inherit any values from any other scenarios. All inherited scenarios end their inheritance order with the base scenario, or another standalone scenario; Base is always the ultimate source of data if no other scenario supplies it.

- **Actuals**—Contains actuals values

You can't remove the accounts from Base and Actual scenarios.

About Scenario Inheritance

You can define a scenario that inherits accounts, input values, and the forecast methods from other scenarios. For any values not in the current scenario, Strategic Modeling uses values from the scenario it inherits from. You can also set up a multiple inheritance scenario, where your scenario first looks for values in the lowest level scenario in the inheritance order. For any values not in that scenario, it searches in the next scenario in the inheritance order, and so on, until it reaches a standalone scenario, such as Base. Inherited scenarios save time in data entry and let you experiment with changing values in a scenario without breaking relationships in the model. With multiple inheritance, you can mix and match the sets of changes without breaking the relationships.

Creating a New Scenario

When you define a new scenario, you create it from an existing scenario.

To define a new scenario for what-if analysis:

1. Open a model, either by checking it out or opening it as a copy.
2. In the Account View, select the scenario to use as a basis for the new scenario. When you create a new scenario, the properties and account selection are based on the currently active scenario in the model, with the exception of inheritance order.
3. From the Actions menu, click Scenario Manager. You can also right-click a cell and click Scenario Manager.
4. Click New Scenario.
5. Enter a name and description for the scenario.
6. Select the type of scenario to create:
• **Standalone**—Creates a scenario that does not inherit values from any child scenarios and includes all the accounts in the model.

• **Inherits**—Specifies that the current scenario inherits values and forecast methods from the Inherit From scenario or scenarios if the values do not exist in the current scenario.

• **Input Only**—Creates a scenario of input-only accounts that doesn't generate any output. This option is useful for consolidation when you want the parent to contribute data to the consolidation instead of getting the data from the child for the accounts specified in the input only scenario. By adding an account to the input only scenario, it is blocked from getting data from a child node during consolidation. For more details about using input only scenarios in consolidations, see About Using Input Only Scenarios in Consolidations.

7. If you selected Inherit From, select the scenario or scenarios from which this scenario should inherit values and forecast methods.
   
   If you select multiple scenarios, drag and drop the scenarios to indicate the inheritance order. Note that inheritance order doesn't matter if the values from the inheriting scenarios don't overlap.

8. For **Use Actuals**, select when to use actual values:
   
   • **Never**
   
   • **When Available**—If there's an actual value for this period, use it.
   
   • **In History**—Use actual values in historical periods.

   For example, your budget stays static, so you would select In History for a budget scenario. But for actuals, you would want to select When Available to use the actual values as they become available over time.

9. In **Accounts**, click **Add** to select the accounts to include in this scenario, select the accounts, and then click **Add**.
   
   You can filter the list of accounts by using the **Search** box. Use Ctrl-click to select more than one account.

10. Click **Apply**.

   The scenario is added to the model.

   After creating a scenario, update values or forecast methods as needed and then calculate the model.

   **Managing Scenarios**

   You can edit or delete scenarios, filter the display of scenarios, or change the scenario order.

   To delete a scenario, click the scenario and then click **Delete**.

   To filter the scenario display (by default, all scenarios are displayed), click **All Scenarios**, and then select the scenarios to display: **Inheriting Scenarios**, **Standalone Scenarios**, **Input Only Scenarios**, **Output Only Scenarios** (from currency translations).

   To change the order of scenarios in the Scenario Manager panel, drag and drop the scenarios to reposition them in the list. You can reorder scenarios only when **All Scenarios** are displayed. The Base and Actual scenarios can't be re-ordered and are always the first and second scenarios in the list. Changing the order of scenarios affects the order of scenarios in the Scenario list in the POV in Account View.
Watch this tutorial video to learn more about working with scenarios.

**Tutorial Video**

**Determining How Values are Calculated**

To determine how a value is calculated, use **Audit Trail**. From any cell, you can drill to see the values that contributed to the cell value.

Watch this tutorial video to learn more about determining how values are calculated using **Audit Trail**.

**Tutorial Video**

To determine how a cell's value is calculated:

1. From the **Account View**, click an output cell, and then from the **Actions** menu, click **Audit Trail**. You can also right-click a cell and click **Audit Trail**. The Audit Trail for the cell value shows the formula that was used to calculate the value.

2. Perform any of these tasks in the **Audit Trail** window:
   - Drill down in elements of the formula to get more details about the value. Values that can be drilled display as blue hyperlinks.
   - Change the time period or scenario to show the audit trail for a different cell value.
   - Click the arrow next to **Audit Trail** to see a history of audit steps. Click one of the steps to go back to that point in your audit. The audit trail is cleared and restarted when you change the time period, scenario, or account.

3. To change an input value to see how it affects the data:
   a. Change the input value. Affected cells are highlighted in yellow.
   b. Click **Update** to save the updated values, or click **Discard**.
   c. Click **Save** to save the data in the model.

**Improving Forecast Accuracy Using Simulations**

Simulations allow you to perform automated what-if analysis on your Strategic Modeling models, optimizing your decision making.

Simulation allows you to assign a range of possible values to inputs that are uncertain and analyze how that uncertainty affects related accounts. You can:

- Quickly calculate and review hundreds of possible outcomes and the likelihood they will occur
- Analyze best and worst case scenarios
- Assess the likelihood of meeting target goals
• See how key uncertain inputs affect your bottom line

For example, you can use simulations to evaluate an expansion scenario for a Sales division. As part of forecasting overall sales in the upcoming year and identifying the likelihood of reaching targets, you can investigate the profitability of the Expansion scenario in which more retail stores are added. Without a simulation, you’re limited to performing a simple and error-prone what if analysis by entering best guess estimates one cell at a time for uncertain input accounts such as Unit Volume, Services Revenue, and Maintenance Revenue and evaluating their impact on Total Sales Revenue. By running a simulation using a range of assumptions for these input accounts, the model is calculated hundreds of times using random scenarios created from the input assumptions. The simulation results show the range of forecast sales and their likelihood.

Strategic Modeling uses Monte Carlo simulation to randomly generate a range of values for assumptions that you define. For more information about Monte Carlo simulation, see About Monte Carlo Simulation and Simulation Accuracy.

Overview of steps to define and run a simulation:

1. From the Home page, click **Strategic Modeling**, then **Model View** and then open and check out the model you want to analyze.
2. In the **Account View**, from the **Actions** menu, click **Simulation**. Users with Modeler permissions can run simulations.
3. Determine your key input cells and define them as assumptions. See Defining Assumptions.
4. Select output cells that are the target of your analysis and define them as forecasts. See Defining Forecasts.
5. Optionally, adjust the simulation settings. See Adjusting Simulation Settings.
6. Click **Run** to run the simulation.

    **Note:**

    • The model is calculated hundreds of times using random scenarios created from the input assumptions.
    • For each trial of the simulation, the values within assumption and forecast cells are recalculated.
    • Assumptions and forecasts in the model are simulated, not just those in the current account view.
    • Only one simulation can run on a server at a time.

7. Review the results. The simulation chart shows the range and likelihood of possible results.
Simulation results are available as long as the model is open and the session hasn't expired.

Simulations are associated with a model, not with a specific scenario.

8. To review other metrics, click Add Metric under the information panels, click the metric to add, and then enter the required parameters. An information box is added, along with the certainty of achieving the metric. For example, to add a target value, click Target Value and then enter a label, such as Stretch Goal, and a target value. The information box is updated to show the certainty of meeting the target value. The forecast chart is updated to include a vertical line representing the target value, and is shaded to emphasize the values that meet or exceed the target value.

To adjust parameters for a metric, change the label for an information box, or change the order of the information box display, click Metric Item Menu in an information box.

You can also work at a later time with a simulation you previously defined. Note that forecasts and assumptions are saved, but simulation results are not saved when you save the model or check it in. See Working with Simulation Objects.

Watch this overview video to learn more about using simulations in Strategic Modeling.

Overview Video

Defining Assumptions

To define a simulation, first determine your key input cells and define them as assumptions.

An assumption is a probability distribution that describes a range of results for an uncertain input and their likelihood of occurring.

1. Select a cell on an input row in the Account View. The cell should contain a value that you are uncertain of that drives the values of accounts you want to evaluate. For example you might want to define Unit Volume as an assumption to evaluate its impact on Total Sales Revenue.

2. On the Simulation panel, click Set Assumption.

3. Click the distribution type you want to use for your assumption. Select the distribution type that best represents your knowledge about the uncertain input.

   Tip:

   Hover over the distribution to learn more about it. For more information, see Probability Distribution Descriptions for Strategic Modeling Simulations.

4. Enter the required parameters for your selected distribution type. The current cell value is used as a starting point.

5. Define assumptions for as many input cells as you need.
Defining Forecasts

Forecast cells are output cells that contain formulas that refer to one or more assumption cells. These are the accounts that you want to see the effects of uncertainty on.

1. Select an output row in the Account View.
2. On the Simulation panel, click Set Forecast.

After you run a simulation, the Forecast results area displays the results of the simulation for cells you defined as forecast cells.

Adjusting Simulation Settings

You can adjust the settings for simulations.

1. From the Simulation Main Menu menu on the Simulation panel, click Settings.
2. Enter the number of trials to run. You can enter up to 1,000. The more trials you run, the more accurate the results.
3. Under Random Numbers, specify the options you want to use for sequence and method.
   - Sequence—Defines how to set the random number generator.
     - Same Sequence Each Time—Generates the same set of random numbers each time you run a simulation so you can repeat simulation results.
     - Vary Sequence Each Time—Varies the set of random numbers that are generated.
   - Method—Defines the sampling method.
     - Monte Carlo—More random. Uses random numbers to measure the effects of uncertainty in a model. The default. Use Monte Carlo sampling to simulate “real world” what-if scenarios for your model.
     - Latin Hypercube—More even. Samples more evenly using bins by dividing an assumption’s probability distribution into intervals of equal probability. It generates values more evenly and consistently across the distribution and produces a smoother, more even results chart. Use Latin Hypercube sampling when you are concerned primarily with the accuracy of the simulation statistics.

Working with Simulation Objects

You can work with simulations you’ve previously defined.

Simulations that you previously defined are stored with the model, so you can work with them later.

To work with existing simulation objects:
1. From the Home page, click **Strategic Modeling** and then **Model View** and then open and check out the model you want to analyze.

2. From the **Actions** menu, click **Simulation**.
   When the **Simulation** panel is open, any cells with forecasts or assumptions defined are outlined in blue (forecasts) or green (assumptions).

3. In the **Account View**, from the **Simulation Main Menu** menu on the **Simulation** panel, click **Select Simulation Object**.

4. Select from existing forecasts or assumptions by selecting from the list or entering an account number or name in the **Search** box.
   Only simulation objects from the current account group are displayed.

5. For an existing assumption, click the **Assumption** menu to change assumption options:
   - **Delete Assumption**—Deletes the assumption definition from the selected cell.
   - **Show Gallery**—Review or change the distribution type for the assumption.
   - **Overlay Data**—Select to show the simulation trials overlaid on top of the distribution on the forecast chart.

6. For an existing forecast, click the **Forecast** menu to change forecast options:
   - **Delete Forecast**—Deletes the forecast definition from the selected cell.
   - **Expense Item**—For forecast cells, determines whether cells are treated as expense or revenue accounts, and controls how the results of the simulation are interpreted. This option is automatically selected based on the account type but you can override this setting to handle special accounts.

### About Monte Carlo Simulation and Simulation Accuracy

Strategic Modeling uses Monte Carlo simulation to randomly generate a range of values for assumptions that you define.

After you've defined input cells as assumptions and output cells as forecasts, you run a simulation. Strategic Modeling uses Monte Carlo simulation, which uses random numbers to measure the effects of uncertainty in a model.

A simulation iteratively performs these steps:

1. For every assumption cell, a random number is generated according to the range you defined and is placed in the model.
   Strategic Modeling generates random numbers using the Multiplicative Congruential Generator method.

2. The model is recalculated.

3. A value is retrieved from every forecast cell and added to the chart in the forecast results area.
This is an iterative process that continues until either the number of trials is reached or you stop the simulation.

The final forecast chart reflects the combined uncertainty of the assumption cells on the forecast cells.

The accuracy of the simulation is primarily governed by two factors:

- The number of trials, or length, of the simulation—Generally speaking, the more trials you run in a simulation, the greater the accuracy of the statistics and percentiles information. For a given number of trials, the accuracy of the statistics and percentiles greatly depends on the shape and nature of the forecast distribution.
- The sampling method—Monte Carlo sampling generates natural, “what-if” type scenarios while Latin Hypercube’s sampling is constrained, but more accurate.

**Working with Time Periods**

You can manage time periods to include the detail required for your financial models.

When you create a model, the model is populated with a hierarchical chart of accounts, a time structure, reports, data views, account groups, and all the metadata from the template or the model it was created from.

The model’s time structure can be defined based on different levels of granularity for different years. For example, you can set the years toward the end of your forecast period to show only annual values while years within a five year forecast can be set to show more granular details such as quarterly or monthly.

After creating your model, you can modify time period structure and settings. See [Managing Time Period Details](#).

You can create deal periods in which the balance sheet is restated to reflect merger and acquisition activities. See [Working with Deal Periods](#).

You can also change the actual period and fiscal year end. See [Changing the Actual Period and Fiscal Year End](#).

Watch this tutorial video to learn more about managing time periods.

[Tutorial Video](#)  

**Managing Time Period Details**

You can define the start and end year, last historical period, years for historical average, and base period for a model. You can also configure time periods to include the detail required for your financial models.

To manage time period details:

1. Open a model.
2. In the **Account View**, from the **Actions** menu, click **Time Period**, and then click **Manage Details**.
3. Perform a task:
   - Define time period parameters. See [Defining Time Period Parameters](#).
• Configure time periods. See Configuring Time Periods.
• Add sub periods. See Adding Sub Periods.
• Add trailing periods. See Adding Trailing Periods.
• Add periods to date. See Adding Periods to Date.

4. When you finish managing time periods, click Apply in Manage Time Period Details.

5. When you apply your changes, you can select whether to calculate inputs for all scenarios, only for the current scenario, or to not calculate any inputs. Select a calculation option, and then click OK. Calculated data is displayed based on updated time periods.

Tip:
To view time period properties, in the Account View, from the Actions menu, click Time Period and then click View Properties. Time Period Properties displays the model's smallest time periods available, the calendar type, the number of months per year, and the end month for the fiscal year.

Defining Time Period Parameters
To define time period parameters for a model:

1. In Manage Time Period Details, in the Parameters section, click Edit.
2. Define the parameters, and then click OK.
   a. Select a Start Year and End Year to add or remove years from the model.
   b. In Last Historical Period, select a year to be the last historical year of the model.
   c. In Years For Historical Average, enter a number to define the number of historical years in the model.
   d. In Base Period, select a year to be the base period of the model.
   e. Click Apply.

Configuring Time Periods
To configure time periods for a model:

1. In Manage Time Period Details, in the Configure Period section, in the Period column, click the year you want to configure.
2. Click the level of detail to include in the time period—weeks, months, quarters, or halves, and then click Apply in the Configure Period section.
   • All years have Yearly selected by default.
   • For any year other than the beginning balance year, you can select and combine periods of years, halves, quarters, months, and weeks (if the model was created with weekly enabled) for historical and forecast data.
• The Input option is cleared for upper level time periods when you add time detail, because the time period becomes an aggregate.

3. Click Apply.

4. Each period, other than the beginning balance year, allows for additional customization from the Actions menu 🛠. You can add sub periods, trailing periods, and periods to date.

Adding Sub Periods

Define sub periods for input periods when transactions such as acquisitions or leveraged buyouts occur. For example, for a leveraged buyout that took place on April 15 in a yearly period, the sub-period length is 105 days.

To add sub periods:

1. In Manage Time Period Details, in the Configure Period section, in the Period column, click the time period for which you want to add sub periods.
   • Expand the time periods to see the level of detail you want.
   • You can add sub periods only to the lowest level time period. For example, if you’ve defined a year to include Halves, Quarters, and Months, you can add sub periods only to months.

2. From the Actions menu 🛠, click Sub Period.

3. Click Add Period, enter a name for the sub period, and then enter the number of days in the sub period.

4. Continue adding sub periods until Unallocated days is zero.
   • To remove a sub period, click Delete ✗ next to the sub period.
   • Sub-periods must be at least one day long.

5. Click Apply.

Adding Trailing Periods

Trailing periods are time periods that collect the most recent number of time periods. You can set up trailing periods to occur in either a historical or a forecast period. With trailing time periods, you can measure business performance over a specific time duration.

To add trailing periods:

1. In Manage Time Period Details, in the Configure Period section, in the Period column, click the time period for which you want to add trailing periods.
   • Expand the time periods to see the level of detail you want.
   • You can add trailing periods only to the lowest level time period. For example, if you've defined a year to include Halves, Quarters, and Months, you can add trailing periods only to months.

2. From the Actions menu 🛠, click Trailing Period.

3. Click Add Trailing Period, enter the length of the trailing period, and then click OK.
4. Enter as many trailing periods as you need.
   To remove a trailing period, click Delete next to the trailing period.

5. Click Apply.

Adding Periods to Date

Use period to date to create year-to-date, half-year-to-date, quarter-to-date, or month-to-date periods. You can create a period to date on any period other than year. For example, if the time period detail for 2020 is months, you can create a period to date on months.

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

To add a period to date:

1. In Manage Time Period Details, in the Configure Period section, in the Period column, click the time period for which you want to add a period to date.

   **Tip:** Expand the time periods to see the level of detail you want.

2. From the Actions menu, click Period to Date.

3. Click Add Period to Date.

   Period to dates are created for the current period and every upper level time period defined except Year. For example, if you've defined a year to include Halves, Quarters, and Months, if you add a period to date on a month, then Quarter to Date, Half to Date, and Year to Date are created.

   • Enter period to date names if you want.

   • To remove a period to date, click Delete next to the period to date.

   • To add a period to date, click Add Period to Date.

4. Click Apply.

Working with Deal Periods

You can create a deal period in which the balance sheet is restated to reflect merger and acquisition activities. By adding a deal period, you can simulate the effects that mergers, acquisitions, or divestitures have on the organization based on the timing of the transactions. A deal period is a zero-day period that is used for transaction analysis.

To work with deal periods:

1. Open a model.

2. In the Account View, from the Actions menu, click Time Period, and then click Add Deal Period.

3. Select the time period to which you want to add a deal period and then click Save and Close.
When you add a deal period, the original period is split into three periods: closing, deal, and a calculated total of the two.

The closing period contains the data from the original input time period.

The deal period is an additional input column strictly for recording deal information.

4. To move a deal period, from the Actions menu, click Time Period, click Move Deal Period, select the time period to move the deal period to, and then click Save and Close.

5. To delete a deal period, from the Actions menu, click Time Period, click Delete Deal Period, select an option for deleting or keeping deal period data, and then click OK.

Changing the Actual Period and Fiscal Year End

You can change the last actual period and the fiscal year ending month.

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 model. Partial-year data is discarded during conversion. To retain the data, add a year at the end and/or beginning of the model.

• 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 such as year-to-date or trailing periods, make sure there is enough time detail in each year.

1. Open a model.

2. In the Account View, from the Actions menu, click Time Period, and then click Change Actual Period. Select the last actual period, select whether to use the current scenario’s data, and then click Apply.

3. In the Account View, from the Actions menu, click Time Period, and then click Change Fiscal Year End. Select the new fiscal year end month and then click Apply.

Working with Funding Options

Funding Options enables you to specify how a model will behave as it attempts to balance the balance sheet in the forecast periods for a model.

You pay off debt accounts with cash from surplus accounts. You specify which surplus accounts go to which debt accounts, and the order in which 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.

Items that can be used to balance the model are called Funds. There are a number of different types of Funds:

• Dividends
• Assets
• Contra-Equity
• Debt (Term and Revolving)
• Preferred
• Equity

Increases in Dividends, Assets, and Contra-Equity are uses of funds, while increases in Debt, Preferred, and Equity are sources of funds. The reverse is true of decreases in the various types of Funds, so decreases in Dividends, Assets, and Contra-Equity are sources of funds; decreases in Debt, Preferred, and Equity are uses of funds.

When balancing, if there is a surplus of funds, the model looks for available uses of funds to balance; if there is a deficit of funds, then the model looks for available sources of funds to balance.

In order to guarantee that balancing can succeed (if required), a model must provide at least one source and one use of funds that has no maximum value and that can provide as large of a funding source or as large of a funding use as is required to balance. In the provided templates, these accounts are Excess Debt and Excess Marketable Securities.

For more information about the accounts used for funding options, see Funding Options Accounts, Types of Debt Accounts, and Types of Asset Accounts.

Overview of the process:

1. Set options for funding accounts. See Setting Options for Funding Accounts.
2. Set up a funding method. See Using Funding Methods.
   • Standard funding method
   • Target Capital Structure funding method

Watch this tutorial video to learn more about funding options.

Tutorial Video

Setting Options for Funding Accounts

Set funding options to identify funding account information before setting up a Standard or Target Capital Structure funding method.

Use funding options to change the type for some accounts and identify funding account attributes such as whether the account is zero-based, has an unlimited maximum, a minimum funding requirement, or a minimum change amount.

To set the options for funding accounts:

1. Open a model.
2. In the Account View, from the Actions menu, click Funding Options, and then on the Funding Options page click Open Settings.
3. Select or clear Actual Override Defeats Funding to determine how ‘##’ overrides function during data entry:
   • Cleared—‘##’ overrides the account maximum.
   • Selected—‘##’ overrides the account balance.
4. In the Type column, click a cell to change the account type (Term Debt or Revolving Debt) for debt accounts and subaccounts, if needed.
5. Select **Zero Based** for an account to be set to zero before the funding sequence begins.

6. Select **No Max** for an account to accept or fund with no cap or maximum.

7. Select **Specify Min** to indicate whether this funding item has a minimum value that the user can enter. If not, the minimum value is 0.

8. In **Min Change**, enter a minimum amount for the account that is required before it can be used as a source or use of funds.

   If the minimum change is not met, the account is not utilized for 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.

   This option allows you to prevent balancing from tapping certain funding items (for example, Equity) where the transaction costs would be prohibitively high for a small amount of required funding.

9. Click ‹ to go back to **Funding Options**.

10. After you've set options, set up a funding method. See **Using Funding Methods**.

### Using Funding Methods

You can use the standard funding method or the target capital structure funding method.

Before using a funding method, make sure you set options for funding accounts. See **Setting Options for Funding Accounts**.

For more information about funding plans, see Funding Options Strategies.

To use a funding method:

1. Open a model.

2. In the **Account View**, from the **Actions** menu, click **Funding Options**.

3. Select a funding method to use. By default, the funding method is **Standard**.

   - **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.

   - **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 Modeling calculates each category target level and applies surpluses to deficits in each category based on priority.

   **Apply Cash Surplus to** and **Fund Cash Deficit with** columns display the order in which accounts are processed.

   Within each set of funds (cash surplus and cash deficit), you see **First**, **Next**, and **Last**:

   - **First** lists zero-based accounts, for which a decrease to zero is a Use (for Surplus) or Source (for Deficit) of fund.
• **Next** lists user-added accounts.
• **Last** lists excess accounts.

4. If you selected **Target Capital Structure**, select the funding account category: **Debt**, **Equity**, or **Preferred**. If you select **Allocate Preferred as Debt**, all preferred accounts are debt, and **Preferred** is unavailable from the list.

5. In the **Apply Cash Surplus to** and **Fund Cash Deficit** sections, add, re-order, or delete accounts in the **Next** category to indicate the order in which to process accounts. For more information, see **Order of Repayment and Funding**.

   • To add an account, click **+,** select the account, and then click **Add**.

   • To delete an account, select it from the list and click ****.

   • To reorder accounts, select the account and click **↑ or ↓**.

6. Click **Save and Close**.

7. From **Account Groups**, select **Funding Options** to see the funding accounts.

8. Click **Calculate**.

9. Use the **Funding Analysis** report to review the results of your funding strategy.

---

**Note:**

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.

---

**Order of Repayment and Funding**

In the **Funding Options** dialog box, you can reorder accounts in **Apply Cash Surplus to** and **Fund Cash Deficit with** to specify the order of account use, in the event of cash surpluses or deficits.

<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 Marketable Securities</td>
</tr>
<tr>
<td>Next</td>
<td>Other Selected Surplus Accounts</td>
<td>Next</td>
<td>Other Selected Deficit Accounts</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 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.

About Importing Data to Strategic Modeling Model
You can now import data from a flat file into a Strategic Modeling model.

Working with Import Data
You can import data using a Strategic Modeling model page.

To import data:

1. Open a model.
2. In the Account View, from the Actions menu, click Import Data.
   The Import Data dialog appears.
3. Click Choose File
   Select a file to be imported.

   Note:
   Only *.csv format is supported.
4. Click Import.
   The Import Data Status dialog displays indicating the number of rows imported successfully and the number of rows rejected with the reason for rejection.
5. The successfully imported data is refreshed and displayed on the Account View.
Valid Flat File Format

The maximum of 100000 cells can be imported at a time. Files containing more than 100000 cells displays an error on import.

If any rows fail to import, an option is displayed to export a log of the failures to an Excel file.

The following fields are accepted in the header:

- **Account or Measure.** (Required) - the account key. For example, “v1080:010” or “v1000:020|Laptops|North” (if the account has custom dimensions applied).
- **Scenario** (Required) - the name of the scenario to which data is imported.
- **Values** (Optional) - either “input” or “output”, if not specified output is defaulted.
- **Period(s)** (Required) - For example, “2017” or “Q419”.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Account</td>
<td>Scenario</td>
<td>Values</td>
<td>2015</td>
</tr>
<tr>
<td>2</td>
<td>v1000:020</td>
<td>Laptops</td>
<td>North</td>
<td>Base</td>
</tr>
<tr>
<td>3</td>
<td>v2040</td>
<td>Base</td>
<td>Input</td>
<td>182400000</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

The header items are not case sensitive. If any of the required headers are missing the header validation fails. Irrespective of the default unit of the model (Ones, Thousands, Millions, etc.), the .csv file being imported should contain values expressed in Ones.

Working with Reports

You can work with built-in reports or with custom reports built in Oracle Smart View for Office.

**Table 7-5 Working with Reports**

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account View</td>
<td>Work with built-in reports. Built-in reports are provided with the templates.</td>
<td>Reviewing Reports</td>
</tr>
</tbody>
</table>
Table 7-5  (Cont.) Working with Reports

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>More Information</th>
</tr>
</thead>
</table>
| Custom Reports| Work with custom reports. You can create and customize reports in Smart View and upload them for use in Strategic Modeling on the Web. You can also convert reports from Oracle Hyperion Strategic Finance to Strategic Modeling using Smart View. | • Reviewing Reports  
• Working with Strategic Modeling in Smart View |

Reviewing Reports

To review reports:

1. From the Home page, click **Model View**, and then open a model. The model opens in Account View.
2. If you've made any changes to the model, click **Calculate**.
3. To review built-in reports, select a report from the horizontal tabs.
4. To review custom reports, click **Custom Reports**, and then select a report from the horizontal tabs.
5. Optionally, select a different scenario from the **Scenario** list, and then click **Refresh**.

Creating and Running Consolidations

Creating consolidations allows you to roll up data into a parent entity for analysis. For example, you might store data in multiple models such as geographic territories. You can roll up the geographic territories to a parent level to help you make business decisions at the enterprise level.

About Business Cases

A business case defines how child node data is rolled up into the parent. It is defined by selecting the scenario to use for rolling up data to the parent model during consolidation, and then defining model characteristics. By defining different consolidations that use different business cases and have different model characteristics, you can analyze how these different business cases affect the business at a more global, consolidated level.
Overview of Creating and Running Consolidations

Follow these overall steps for creating and running consolidations.

1. Create the consolidation and build the consolidation structure. See Creating a Consolidation.

2. Create and assign one or more business cases. See Defining Business Cases for Consolidations.

3. Define model characteristics. See Defining Model Characteristics.

4. Run the consolidation. See Running a Consolidation.

Watch this tutorial video to learn more about creating and running consolidations.

Creating a Consolidation

To create a new consolidation:

1. From the Home page, click Consolidation View.

2. Click Add and enter a name.

3. From the Actions menu, click Open to start building the consolidation structure.

4. Click to add models to the consolidation structure.

5. From the Available Models list, drag and drop a model to the consolidation structure.

6. To add an additional model, drag and drop a model from the Available Models list to the location you want in the Consolidation structure.

7. To delete a model from the consolidation structure, select the model, and from the Actions menu, click Remove Model. The selected model and all of its children and business cases are removed from the consolidation structure.

Tip:

You can also create a new consolidation based on a model hierarchy. In the Model View, from the Actions menu for the model you want to convert, click Convert to Consolidation and then enter a consolidation name. The selected model and its child models are converted to a consolidation with the same hierarchical structure.

If you delete a consolidation that you've already run, it deletes the associated business cases in all of the models in the structure.
After creating the consolidation structure, you must create a business case to define how child node data is rolled up to the parent. See Defining Business Cases for Consolidations.

About Valid Consolidation Structures

To ensure that your consolidation structure is valid, avoid these conditions that cause consolidations to fail:

• Fiscal years don't match
• Subperiods exist in the parent that don't exist in the child
• Deal period exists in the parent without a matching deal period in the child

These conditions won't stop a consolidation from running, but could cause meaningless data:

• The child has years that the parent doesn't have
• The parent and child have different historical boundaries
• There are matching periods in the parent and child but the number of days in the periods are not the same
• The actual period boundaries don't match
• The user-defined dimensions are not compatible
• The parent and child have a different number of months or weeks in a year or the end of the year falls on different days
• The parent has periods with more time detail than the child (for example, the parent has months but the child only has years)

Defining Business Cases for Consolidations

Once you've built a consolidation structure, you must create one or more business cases to complete the consolidation definition. A business case defines how child node data is rolled up into the parent.

To create a business case:

1. Select a model in the consolidation structure, and then click Add New Business Case.
2. Enter a business case name.
3. In Leaf Node Scenario to Contribute, select the default scenario to use for the leaf nodes in this structure for rolling up data to the parent model during consolidation, and then click Add.
   You can change the scenario associated with individual leaf nodes later in the Consolidation tree structure list in the Scenario column.

   The business case is added and becomes the currently active business case.
4. To add an additional business case, click the business case name next to Business Case, and then click Add Business Case. For example, you might want to add a business case that reflects a different default scenario or has different model characteristics.
5. To exclude a model from a business case during consolidation, but keep it in the consolidation structure, select the model, and from the Actions menu, click Exclude Model, and then select whether to exclude From the Parent Business Case or From All Parent Business Cases. When a model is excluded from the parent business case, [Excluded] is displayed next to the model name. When a model is excluded from all parent business cases, [Excluded from All] is displayed next to the model name.

For example, there could be a model where the additive process for consolidation does not apply. For example, non-currency accounts such as inflation rates and price/quantity relationships would not make sense to include in the consolidation.

6. To remove a business case, select the business case from the Business Case list, and from the Actions menu, click Remove Business Case.

**Note:**

If users are also working in Oracle Smart View for Office, click Refresh to get the changes from the database.

After adding business cases, you define model characteristics to further define your business case. See Defining Model Characteristics.

### Defining Model Characteristics

After you've added models to a consolidation and added a business case, you can further define the consolidation by defining the model characteristics.

1. To define model characteristics, select a model from the consolidation structure, and from the Actions menu, click Model Characteristics. The attributes available depend on whether the model is a child or parent in the consolidation structure.

2. To specify model characteristics for a child level model, see Specifying Child Model Attributes.

   To specify model characteristics for a parent level model, see Specifying Parent Model Attributes.

   For intermediate nodes in the consolidation structure, you define both child and parent characteristics.

### Specifying Child Model Attributes

To specify child model attributes:

1. In Method Used, specify the method for consolidating the entity to the parent: When you use the Cost, Equity, or Minority Interest Consolidation methods, the subaccount structures should be similar.
   - Full Consolidation—Use this method to consolidate 100% of all accounts.
   - Cost—Use this method when the amount of investment in a company is less than 20% and is held for at least one year.
• **Equity**—Use this 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.

• **Minority Interest**—Use this 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.

For more details about the calculations used for each method, see “Data Management” in Working with Strategic Modeling in Smart View.

2. If you specified **Equity** for the method, in **Target Subaccount**, specify which subaccount receives the child entities' values. This option is available if account v2420 in the parent entity was set up to include subaccounts. This method has calculations for v2420. If v2420 has subaccounts, specify which subaccount receives the child entities values.

3. If you specified **Equity** for the method, in **Equity Groups**, select an account group. Account groups you select here are consolidated into the parent.

4. In **Ownership**, enter the percentage of the entity to be consolidated. For example, if sales in the first forecast period of the child entity are $200 and ownership is 100%, $200 is consolidated. If ownership is 80%, $160 is consolidated.

5. In **Periods to Consolidate into Parent**, specify the **Start Period** and **End Period** across which the consolidation should run. The time period range must be within the range of the consolidated parent. Select a specific time period or one of the following:
   - **First Period in File**—Consolidates starting in the first time period in the model.
   - **<Deal Period>**—Consolidates starting in the deal period (defined in Time Periods in Oracle Smart View for Office).
   - **Residual value period**—Uses the last period in the model. Or, if ending periods don't match between child and parent, the residual value period is calculated.

6. Click **Apply** to apply changes for this node in the consolidation structure to the currently selected business case. Click **Apply All** to apply changes for this node in the consolidation structure to all business cases for this node.

### Specifying Parent Model Attributes

To specify parent model attributes:

1. In **Contributing Scenarios**, if applicable, from the **Input Only Scenarios** list, select the input only scenario or scenarios that include accounts that you don't want rolled up to the parent. All input only scenarios in the parent model are listed. You can also define input only scenarios for parent models that are at an intermediate level in a nested consolidation. Use this option when you want the parent node to contribute data values to the consolidation instead of getting values from the child for the accounts specified in the input only scenario.
See About Using Input Only Scenarios in Consolidations.

2. In Elimination Groups Based On, select the source for elimination groups. Elimination groups define accounts to eliminate from consolidation. Select Current Model or Child Model, and then from the User Defined Elimination Groups, select account groups to eliminate from consolidation. Eliminated accounts are set to zero in the consolidation parent during processing.

3. For Data Preservation, define how data is used in non-consolidated time periods.
   - Don’t Preserve Data—Blocks data from non-consolidated time periods, resulting in zero values.
   - Preserve Inputs—Data recalculates using Input cells. Preserve Input does not work on these input accounts because Consolidation 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, add them to an input-only scenario that is used in the consolidation.
   - Preserve Outputs—Data recalculates using Output cells.

4. Click Apply to apply changes for this node in the consolidation structure to the currently selected business case. Click Apply All to apply changes for this node in the consolidation structure to all business cases for this node.

About Using Input Only Scenarios in Consolidations

If you've created an input only scenario in a model, and that model is a parent model in a consolidation, you can specify the input only scenario when you define the parent model attributes for the consolidation. When you run the consolidation, for the accounts specified in the input only scenario, the parent node contributes data values to the consolidation instead of getting values from the child.

For example, suppose you want to set up a scenario to define the financing for your business. Financing is typically defined at the parent level rather than at the business unit (child) level. You define accounts that have the data you want to contribute to financing the business plan in an input only scenario in the parent model. You can have more than one version of the data in different input only scenarios and contribute different input only scenarios to different business cases in the consolidation. When you consolidate, you can analyze different results depending on different finance options from the different business cases. The financing data always comes from the parent model during a consolidation for the accounts specified in the input only scenario.

If there is more than one input only scenario in a parent model, you can select one or more. For example, if you are modeling financing scenarios, but you also want to model operating scenarios, you can combine multiple scenarios that input values to different accounts so you can analyze different result sets.

**Note:**

If you select more than one input only scenario at the same time for a parent in a consolidation, ensure that each scenario contributes to different accounts in the consolidation.
About input only scenarios:

- They have no output values and cannot be calculated.
- They contain input values only for those accounts that are selected as members.
- They can be contributed as data to a business case in a consolidation. Multiple scenarios can be contributed to the same business case.
- Because data values and forecast methods are statically copied from the contributing input only scenario(s) to the business case at consolidation time, the data is refreshed from the original source each time you run the consolidation.
- Define member accounts that automatically block the consolidation of values for the business case that they were contributed to.

Running a Consolidation

Once you've defined your consolidation structure, business cases, and optionally model characteristics, you can run the consolidation.

To run a consolidation:

1. Select a model in the consolidation structure, and then click .
2. Select the business case or business cases to consolidate, or click All to consolidate all business cases, and then click Run. By default, the currently selected business case is selected.

The consolidation is submitted to the Job Console, where you can monitor the progress of the consolidation. From the Home page, click Application, and then Jobs.

When the consolidation is complete, you can open the parent model and see the data rolled up from child models.
A

Probability Distribution Descriptions for Strategic Modeling Simulations

This appendix explains probability and probability distributions to help you select the most appropriate probability distribution for your Strategic Modeling simulation.

For each uncertain input in a simulation, you define the possible values with a probability distribution. The type of distribution you select depends on the conditions surrounding the input. A simulation calculates numerous scenarios of a model by repeatedly picking values from the probability distribution for the uncertain inputs and using those values to calculate the model.

To select the correct probability distribution:

1. Evaluate the input in question. List everything you know about the conditions surrounding this input. For example, you can gather valuable information about the uncertain input from historical data.

2. Review the descriptions of the probability distributions. This appendix describes each distribution in detail, outlining the conditions underlying the distribution. As you review the descriptions, look for a distribution that features the conditions you have listed for this input.

3. Select the distribution that characterizes this input, where the conditions of the distribution match those of the input.

Normal

The Normal distribution describes many phenomena such as returns on equity or assets, inflation rates, or currency fluctuations.

Decision-makers can use the normal distribution to describe uncertain inputs such as the inflation rate or periodic returns on assets.

Parameters

- Mean
- Standard Deviation
Note:
Of the values of a normal distribution, approximately 68% are within 1 standard deviation on either side of the mean. The standard deviation is the square root of the average squared distance of values from the mean.

Conditions
Use the normal distribution under these conditions:
- Mean value is most likely.
- It is symmetrical about the mean.
- It is more likely to be close to the mean than far away.

Triangular

The Triangular distribution describes situations where you know the minimum, maximum, and most likely values. In the simulation, the minimum and maximum values will never actually occur because their probability is zero.

It is useful with limited data in situations such as sales estimates, inventory numbers, and marketing costs. For example, you could describe the number of cars sold per week when past sales show the minimum, maximum, and usual number of cars sold.

Parameters
- Minimum
- Likeliest
- Maximum

Conditions
Use the triangular distribution under these conditions:
- Minimum and maximum are fixed.
- It has a most likely value in this range, which forms a triangle with the minimum and maximum.

Uniform
The Uniform distribution describes situations where you know the minimum and maximum values and all values are equally likely to occur.

**Parameters**
- Minimum
- Maximum

**Conditions**
Use the uniform distribution under these conditions:
- Minimum is fixed.
- Maximum is fixed.
- All values in range are equally likely to occur.

**Lognormal**

The Lognormal distribution describes many situations where values are positively skewed (where most of the values occur near the minimum value) such as asset and security prices. Such quantities exhibit this trend because values cannot fall below zero but can increase without limit.

**Parameters**
- Location
- Mean
- Standard Deviation

**Note:**
If you have historical data available with which to define a lognormal distribution, it is important to calculate the mean and standard deviation of the logarithms of the data and then enter these log parameters. Calculating the mean and standard deviation directly on the raw data does not give you the correct lognormal distribution.

**Conditions**
Use the lognormal distribution under these conditions:
- Upper and lower limits are unlimited, but the uncertain input cannot fall below the value of the location parameter.
- Distribution is positively skewed, with most values near the lower limit.
- Natural logarithm of the distribution is a normal distribution.
BetaPERT

The BetaPERT distribution describes situations commonly used in project risk analysis for assigning probabilities to task durations and costs. It is also sometimes used as a smoother alternative to the triangular distribution.

It describes a situation where you know the minimum, maximum, and most likely values to occur. It is useful with limited data. For example, you could describe the number of cars sold per week when past sales show the minimum, maximum, and usual number of cars sold.

Parameters
- Minimum
- Likeliest
- Maximum

Conditions
Use the betaPERT distribution under these conditions:
- Minimum and maximum are fixed.
- It has a most likely value in this range, which forms a triangle with the minimum and maximum; betaPERT forms a smoothed curve on the underlying triangle.

Yes-No

The Yes-No distribution describes situations that can have only one of two values: for example, yes or no, success or failure, or true or false.

Parameters—Probability of Yes

Conditions
Use the yes no distribution under these conditions:
- For each trial, only 2 outcomes are possible, such as success or failure; the random input can have only one of two values, for example, 0 and 1.
- The mean is \( p \), or probability \( 0 < p < 1 \).
- Trials are independent. Probability is the same from trial to trial.
Simulation Sampling Methods

During each trial of a simulation, the sampling method selects a random value for each assumption in your model.

Strategic Modeling simulations use one of these sampling methods:

- Monte Carlo—Randomly selects any value from the defined distribution of each assumption.
- Latin Hypercube—Randomly selects values and spreads them evenly over the defined distribution of each assumption.

Monte Carlo Sampling

Monte Carlo simulation randomly and repeatedly generates values for uncertain variables to simulate a model. The values for each assumption's probability distribution are random and totally independent. In other words, the random value selected for one trial has no effect on the next random value generated.

Monte Carlo simulation was named for Monte Carlo, Monaco, whose casinos feature games of chance such as roulette, dice, and slot machines, all of which exhibit random behavior.

Such random behavior is similar to how Monte Carlo simulation selects variable values at random to simulate a model. When you roll a die, you know that a 1, 2, 3, 4, 5, or 6 will come up, but you do not know which for any particular trial. It's the same with the variables that have a known range of values and an uncertain value for any particular time or event (for example, interest rates, staffing needs, stock prices, inventory, phone calls per minute).

Using Monte Carlo sampling to approximate the true shape of the distribution requires more trials than Latin Hypercube.

Use Monte Carlo sampling to simulate real world what-if scenarios for your model.

Latin Hypercube Sampling

Latin Hypercube sampling divides each assumption's probability distribution into non-overlapping segments, each having equal probability.

While a simulation runs, Latin Hypercube selects a random assumption value for each segment according to the segment's probability distribution. This collection of values forms the Latin Hypercube sample. After has sampled each segment exactly once, the process repeats until the simulation stops.

Latin Hypercube sampling is generally more precise when calculating simulation statistics than is conventional Monte Carlo sampling, because the entire range of the distribution is sampled more evenly and consistently. Latin Hypercube sampling requires fewer trials to achieve the same level of statistical accuracy as Monte Carlo sampling. The added expense of this method is the extra memory required to track which segments have been sampled while the simulation runs. (Compared to most simulation results, this extra overhead is minor.)

Use Latin Hypercube sampling when you are concerned primarily with the accuracy of the simulation statistics.