Oracle Fusion Cloud SCM

Using Sales and Operations Planning

25A

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Get Help

There are a number of ways to learn more about your product and interact with Oracle and other users.

Get Help in the Applications

Some application pages have help icons to give you access to contextual help. If you don't see any help icons on your page, click your user image or name in the global header and select Show Help Icons. If the page has contextual help, help icons will appear.

Get Support

You can get support at *My Oracle Support*. For accessible support, visit *Oracle Accessibility Learning and Support*.

Get Training

Increase your knowledge of Oracle Cloud by taking courses at *Oracle University*.

Join Our Community

Use *Cloud Customer Connect* to get information from industry experts at Oracle and in the partner community. You can join forums to connect with other customers, post questions, suggest *ideas* for product enhancements, and watch events.

Learn About Accessibility

For information about Oracle's commitment to accessibility, visit the *Oracle Accessibility Program*. Videos included in this guide are provided as a media alternative for text-based topics also available in this guide.

Share Your Feedback

We welcome your feedback about Oracle Applications user assistance. If you need clarification, find an error, or just want to tell us what you found helpful, we'd like to hear from you.

You can email your feedback to *oracle_fusion_applications_help_ww_grp@oracle.com*.

Thanks for helping us improve our user assistance!

1 Sales and Operations Planning Overview

Overview of Sales and Operations Planning

Oracle Sales and Operations Planning aligns organizations around an integrated operating plan to meet strategic business goals. You can align the enterprise, analyze plan performance, and act to create and execute new plans.

By aligning the enterprise, you can:

- Adopt a step-by-step best practice approach.
- Harness collective knowledge by using the enterprise social collaboration.
- Collaborate on plans or planning cycles.
- Ensure continuity and provide accountability by using planning notes.
- Arrive at a consensus enterprise operating plan.

By analyzing the plan to make better decisions, you can:

- Analyze plan performance with preconfigured dashboards, layouts, and reports.
- Configure analytics to meet your unique needs.
- Manage by exception to focus on what is most important.
- Integrate with Microsoft Excel.
- Demonstrate how plans have changed by using plan archives and waterfall charts.

By creating plans to act, you can:

- Plan at an aggregate level for strategic time horizons.
- Run quick simulations within Sales and Operations Planning to evaluate new plans.
- Select the best plan after comparing with other plans.
- Link tactical planning with Sales and Operations Planning and execute on strategic decisions.

In summary, Sales and Operations Planning enables you to implement a continuous and forward-looking process. The Sales and Operations Planning process profitably aligns product, demand, and supply plans at an aggregate level with your strategic and financial objectives.

Business Flows for Sales and Operations Planning

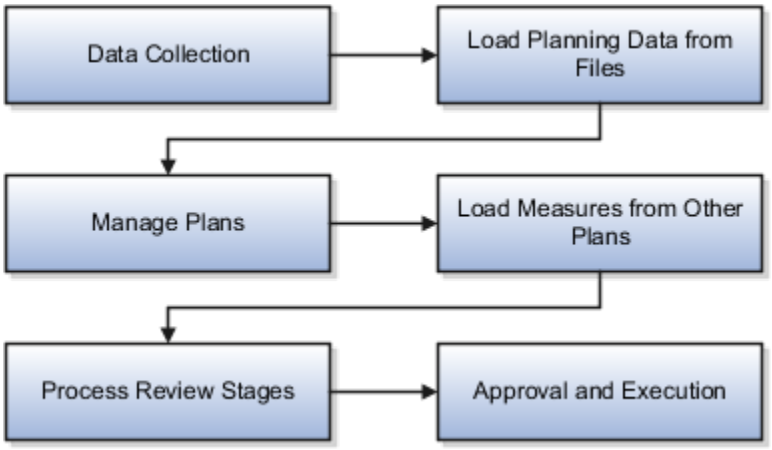
Use Sales and Operations Planning, a modern planning cloud solution, to manage your sales and operations planning process.

You can perform the following in the Sales and Operations Planning work area:

- Process data collection and load planning data from external sources

- Create and manage plans
- Conduct the Product Review, Demand Review, Supply Review, Financial Review, and Executive Review stages
- Automate a portion of the planning processes or run a subset of the processes
- Analyze and adjust your data at any stage

The following figure illustrates the Sales and Operations Planning business flow steps.



Data Collection

Data collection is the first step of the planning business flow. You can collect and transform the data from various Oracle Fusion Cloud Supply Chain & Manufacturing (SCM) applications to the Supply Chain Planning repository. The data that you collect can be of three types:

- Master data: Primarily sourced from Oracle Supply Chain Management Cloud.
- Demand data: Two potential sources of demand data are:
  - Sales order data that flow from the Oracle Order Management Cloud.
  - Shipment history from the Oracle Materials Management Cloud.
- Supply data: Supply data is collected from three sources:
  - Oracle Inventory Management Cloud
  - Oracle Manufacturing Cloud
  - Oracle Purchasing Cloud

Load Planning Data from Files

Apart from collecting data from an Oracle Fusion source system, you can also collect data from an external source system. Use the predefined collection templates (XLSM files) to collect data from an external source system.

Use these collection templates to collect bills of resources and planning measures data from external sources by using the file-based data import (FBDI) template: ScpBillOfResourcesImportTemplate.xlsm and ScpMeasuresImportTemplate.xlsm. Or, use the Create Bills of Resources scheduled process to automatically create bills of resources for planning assembly items in a sales and operations plan.

> **Note:** To create bills of resources at the category level, you must use the FBDI template, ScpBillOfResourcesImportTemplate.xlsm

Manage Plans

In the Manage Plan stage, you create and manage sales and operations plans. You can create a plan and then define the plan based on your business requirement.

The Manage Plans page is for integrated plan management. The following are some of the tasks that you can perform from the Manage Plans page:

- Create and define plans
- Create a copy of existing plans
- Open an existing plan
- Run plans in batch mode
- Perform data refresh on your plans
- Approve plans

Load Measures from Other Plans

Loading measures from other plans is an optional step. If you have a valid supply plan, demand plan, or demand and supply plan, you can load measures from these plans to a sales and operations plan. The plans can be from the Demand Management, Supply Planning, Demand and Supply Planning, or Planning Central work area. For example, if the shipment forecast is managed in Demand Management or Planning Central, you can use the Load Measures from Other Plans task to load the shipment forecast in Sales and Operations Planning.

Process Review Stages

During the process review stages, you work with stakeholders to manage the product life cycle, balance demand and supply, and review the financial feasibility to execute the plan. The process review includes the following stages:

- Product Review
- Demand Review
- Supply Review
- Financial Review
- Executive Review

Note: For more information about each of the process review stages, see the Manage Planning Cycles chapter in the Using Sales and Operations Planning guide.

Approval and Execution

In the approval and execution stage, you decide upon the best plan among alternative simulation plans using plan comparison. After you get an approval for the consensus operating plan from all stakeholders, you execute the plan in your tactical planning process.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Overview of Sales and Operations Plans
- How You Collect Different Data Types for Supply Chain Planning
- How You Load Planning Data from Files

Overview of Supply Chain Planning Work Areas

The Oracle Fusion Cloud Supply Chain Planning solution is composed of products designed for specific supply chain planning business processes and tasks.

You perform these processes and tasks by using work areas. Each of the Oracle Supply Chain Planning products provides access to one or more work areas.

The Supply Chain Planning work areas that you can use are determined by these factors:

- The products that your enterprise has licensed and configured
- The security privileges assigned to your user account

To use the Supply Chain Planning work areas, you must be aware of these points:

- Navigation to work areas
- List of Supply Chain Planning work areas and the products to which they're applicable

Navigation to Work Areas

You can use different paths to navigate to a specific work area including:

- From the Navigator: Click the Navigator icon to see the work areas that you have access to. The Supply Chain Planning work areas are listed within the Supply Chain Planning heading. The work area names are links. Click a specific work area link to access that work area.
- From the Springboard: On your home page you might have one or more springboard icons that represent a group of work areas, such as the group of Supply Chain Planning work areas. Click on the Supply Chain Planning springboard to access a set of icons, each of which represents a specific Supply Chain Planning work area. Click a specific icon to access that work area.

List of Supply Chain Planning Work Areas

The following table lists the Supply Chain Planning work areas and the Oracle Fusion Cloud Supply Chain Planning modules that are applicable to each of the work areas.

Work Area	Modules
Demand Management	Oracle Demand Management
Supply Planning	Oracle Supply Planning

Work Area	Modules
Demand and Supply Planning	Both of these products must be configured: • Oracle Demand Management • Oracle Supply Planning
Planning Central	Oracle Planning Central
Sales and Operations Planning	Oracle Sales and Operations Planning
Backlog Management	Oracle Backlog Management
Production Scheduling	Oracle Production Scheduling
Replenishment Planning	Oracle Replenishment Planning
Plan Inputs	Use the Plan Inputs work area to perform tasks that don't require creating or accessing a plan. This work area can also be opened from other Supply Chain Planning work areas.

Note: If a plan that has been created in the Planning Central work area is opened from either the Supply Planning or the Demand and Supply Planning work area, then that plan will no longer be accessible from the Planning Central work area.

The Global Order Promising work area is bundled within the Oracle Fusion Cloud Order Management solution.

Related Topics

- Overview of the Sales and Operations Planning Work Area
- Overview of the Supply Planning Work Area
- Overview of the Demand Management Work Area
- Overview of the Order Promising Work Area
- Overview of the Replenishment Planning Work Area

Overview of the Sales and Operations Planning Work Area

Use the Sales and Operations Planning work area to configure, view, and analyze your real world business processes.

You can use the Sales and Operations Planning work area to do the following:

- View multiple plans and plan inputs simultaneously.

- Use predefined page layouts or create page layouts to view plan data tailored for your organization.

To access the Sales and Operations Planning work area and open a plan:

1. In the Navigator, click the **Sales and Operations Planning** link.
2. In the Sales and Operations work area, click **Manage Plans** from the **Tasks** drawer.
3. On the Manage Plans page, use the search feature to locate an existing plan.
4. Select the plan and click **Actions**.
5. Select Open to open the Edit Plan page for your plan. Your plan name appears in the Edit Plan page header.

The Edit Plan page consists of two main areas:

- Header
- Configurable pane

Header

The header area contains the page layout information and actionable buttons, such as **Save Layout**, **Change**, **Open**, **Actions**, **Save**, and **Cancel**. The header area displays the plans, simulation sets, and plan inputs that are currently opened.

You can create your own page layout or use the predefined layout. The Executive Review Summary tile set is the default layout for Sales and Operations Planning when you open or edit a plan. You can also save a layout so that every time you open the Edit Plan page, the saved layout opens.

Configurable Pane

You can display the content of your plan in the configurable pane area, which is located below the header area. You can add multiple panes on the page to display your content. The Page Layout drop-down list in the header area determines the number of panes in your planning interface page.

Access Tasks as Quick Actions on a Home Page

Some tasks that are accessible by using the tasks panel drawer in a supply chain planning work area are also available from the home page as quick actions.

Click the **Show More** link on the home page to display all of the available quick actions for which you have access. You don't have to first navigate to a supply chain planning work area to take an action. For example, use quick actions to create a sourcing rule to purchase components from a new supplier without having to first select a planning work area.

In addition, there are work area-specific preferences that enable you to change your default page layout without having to first launch the work area. These preferences are useful if you configured a content-heavy default page layout that's taking too long to load. In such cases, you can change your default page to a different page layout that opens quicker and then edit the content-heavy page layout to make it perform better.

Here's some additional information about quick actions on a home page:

- You must have the applicable privileges associated with the task to see the task as a quick action on the home page. Each quick action is secured by its related privilege or privileges. For example, if you have the Manage Planning Sourcing privilege, then you should see the Manage Sourcing Rules task in the tasks panel drawer in the work area. You should also see the task as a quick action on the Supply Chain Planning or Order Management (in the case of Global Order Promising) home pages.

- You must have access to the work area to see the associated manage preferences quick actions. For example, you must have access to the Supply Planning work area to see the Edit Supply Planning Preferences quick action.
- You can't navigate to any other UI or open other tabs. When you click a quick access link, the UI opens in the page, but you aren't in a work area.
- You can only return to the Supply Chain Planning home page when you close out of a task that you initiated from the Supply Chain Planning home page.

Manage Page Layouts

You can create and manage your page layouts. Use the Manage Page Layout action to modify the properties of your existing page layouts.

You access a plan interface page by opening a plan from the Manage Plans page in the Sales and Operations Planning work area.

This topic discusses how to do the following:

- Create a page layout
- Edit a page layout
- Manage a page layout
- Use the Plan Summary page layout

Create a Page Layout

Page layouts are reusable across plans, simulation sets, and plan inputs. You can create page layouts or copy and then edit a page layout to create page layouts that are tailored to specific business needs.

To create a page layout:

1. In the **Navigator**, click the **Sales and Operations Planning** work area.
2. Click the **Plans** panel tab.
3. In the Plans panel drawer, expand the **Plans** list.
   Open a plan for which you want to create a page layout.
4. From the Page Layout drop-down list, click **Create**.
5. Specify the following details and click **Save and Close**:
   - Enter a page layout name and description.
   - Select the access level as Public or Private.
     - Select **Public** to make the plan accessible for all users.
     - Select **Private** to restrict the plan accessible to you and to a list of users that you want to provide access.

   This creates an empty pane page layout.
6. Click the **Change** drop-down list and select any layout.
   For example, select a two pane horizontal layout.
7. Click **Open** and select the pane and add the content using the **Open Table, Graph, or Tile Set** dialog.

8. Click **Save** Layout.

Edit a Page Layout

You can edit an existing page layout in two ways:

- Use the **Save** button to save the current page layout as it's currently displayed. For example, you can change the current page layout from a one pane layout to two pane layout. The next time you use this page, the layout appears as a two pane layout.
- You can also change a page layout using the **Manage** action from the page layout drop-down list.
- You can't edit the predefined page layouts. You can copy and then edit the copy.

Manage a Page Layout

You can use Manage Page Layout to perform the following:

- Edit the page layouts that you created. You can move one pane to other using Manage page layouts. However, if you're using a public page layout, where you're not the owner, then you can't make changes to the layout. You can only set the layout to your default layout.
- Change the layout that's used as your default layout when you initially open a plan, simulation set, or plan inputs.
- Delete layouts that you created, but are no longer needed.

Use a Page Layout

The default page layout in Sales and Operations Planning is the Executive Review Summary. It contains a set of infotiles and high-level graphics that you can use to review the business value of a plan. Using tiles, you can view the key metrics of your plan. You can further drill to the predefined analytics from the tables or graphs displayed in this layout.

The Executive Review Summary page layout is the Executive Review Summary tile set report presented in a single pane layout. There are other predefined tile set reports, which are also known as plan summary dashboards. Sales and Operations Planning has a summary dashboard for each of the five standard stages of the sales and operations planning process:

- Product Review Summary
- Demand Review Summary
- Supply Review Summary
- Financial Review Summary
- Executive Review Summary

Using a summary dashboard, you can do the following:

- Measure the performance of a plan.
- Review plan information through the individual Key Performance Indicators (KPIs).
- Perform plan analysis using the contextual based navigation.
- Copy and configure the components of a plan summary layout for your specific need.

You also have the predefined Product Lifecycle Management page layout that you can use to manage product introductions and retirements.

You can use a page layout in an open plan by using the Page Layout drop down list.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning

Planners for Supply Chain Planning

How You Define Planners for Supply Chain Planning

Planners are the people in your organization who are responsible for a set of items, their inventory levels, supply and demand, and so forth. For example, some typical titles of planners are Material Planner, Supply Chain Planner, and Demand Planner.

All supply chain planning products use planners. You can define a specific person as a supply chain planner for the Oracle Fusion source system or for any other source system. You can also associate a planner to an item at the organization level.

Use the ScpPlannersImportTemplate.xlsm import template to create the CSV file for the **Load Planning Data from Files** task for planners. You can also use the Manage Planners page to define supply chain planners for each source system. Access the Manage Planners page from a Supply Chain Planning work area. Click the **Tasks** panel drawer and then click the **Manage Planners** link.

For Oracle Fusion source systems, associate the employee identification number with the planner name because Oracle Purchasing requires a valid employee identification number. When a planner releases a planned order, purchasing checks the employee identification number before creating the purchase requisition.

For external source systems, determine if the employee identification number is required when releasing planned orders. If required, use the Manage Planners page to associate the planner with their employee identification number. Or, you can use the ScpPlannersImportTemplate.xlsm template to associate the employee identification number with the planner name.

Use Oracle Product Hub to assign planners at the item-organization level. During data collections, the planning processes collect the planner-item-organization assignment. Planners can then use the planner name to search the data on most of the demand and supply planning pages.

Update Planner Data with New Employee Information

If a planner's employee information (such as employee number, employee name, or email) changes, then that information can be updated in the planners table in several ways.

For external source systems, the collection process looks for the employee number in the data managed by Oracle Fusion Cloud Human Capital Management.

- If the employee number is available in the employee data managed by Oracle Fusion Cloud Human Capital Management, then its respective details (employee name and email) are extracted and populated in the planners table.

- If the employee number isn't available in the employee data managed by Oracle Fusion Cloud Human Capital Management, then the collection process populates the employee number as provided in the comma-separated values (CSV) file in the planners table.

Employee details are updatable only once during the initial collection process. For example, in the first collection run, 123456 is provided for an employee number. If you change the employee number to 100100 on the second collection run, then the latest employee details aren't reflected in the planners table. To change a planner's employee information, you can select a different employee by using the Manage Planners UI or you can mass update planners.

There are two methods to mass update planners. They both involve removing planner data and then collecting the planner data again with any changes.

Method A

1. In one of the Supply Chain Planning work areas, select the **Manage Planners** task.
2. Delete all the planners who need their employee information updated.
3. Collect the planner data again by using the Load Planning Data from Files scheduled process.

Method B

Note: Method B will purge planner data for all planners.

1. In the Scheduled Processes work area, click **Schedule New Process**.
2. In the Schedule New Process dialog box, search for and select the **Purge Data Repository** process.
3. In the Process Details dialog box:
    a. Select the **Source System**.
    b. Set **Purge Global Entities** = **Yes**.
    c. In the Reference Data tab, move **Planners** to Selected Entities.
    d. Click **Submit**.

    The scheduled process purges the planner data.
4. Collect the planner data again by using the Load Planning Data from Files scheduled process.

How You Reassign Item Definitions to a Different Planner

When a planner leaves an organization and that planner's items need to be reassigned, there are two ways you can reassign the planner's item definitions.

- Don't change the planner code but instead reassign the existing code to a different employee on the Manage Planners page. In this case, there's no need to change the planner codes for the item.
- Create one or more new planner codes (or use an existing one) and then either:
    - Manually reassign the items to those one or more new planners individually.
    - Use the item mass changes feature in the Product Information Management work area.

Overview of Supply Chain Planning Plan Types

When you create a plan, plan type is the first choice that you make. After you run a plan, you can't edit the plan type.

Oracle Fusion Cloud Supply Chain Planning provides these types of plans, which you can create, edit, run, and so on, depending on the work area that you have access to:

Plan Type	Use This Plan Type	Work Areas the Plan Type is Available
Demand Plan	• When you want to perform collaborative and statistical demand forecasting. • When you want to use a demand plan as a demand schedule for a supply plan or replenishment plan.	Demand and Supply Planning Demand Management Planning Central Replenishment Planning
Supply Plan	When you want to generate a supply schedule.	Demand and Supply Planning Planning Central Supply Planning
Demand and Supply Plan	For an integrated demand and supply planning.	Demand and Supply Planning Planning Central
Sales and Operations Plan	For aggregate planning.	Sales and Operations Planning
Backlog Plan	For backlog management.	Backlog Management
Replenishment Plan	For replenishment planning.	Replenishment Planning

Related Topics

- Actions to Manage Your Plans

Manage Notes

Use Notes in Supply Chain Planning to document and communicate important information about your plan.

You can use notes to provide reasons for any changes made to a plan or to record decisions and assumptions that led to those changes. You can save these notes for future reference or to provide details to other users. Participants in the plan management process can annotate the data with notes to document changes and assumptions.

The notes functionality is available in the Demand Management, Supply Planning, Planning Central, and Sales and Operations work areas. You can create notes for the following:

- Plans
- Planning level members, such as items, organization, and customers
- Planning combinations, such as a specific item-organization-date-measure combination

- Exceptions

When you create a note, you must specify a note type. Note types enable notes to be categorized, which you can use as search criteria. The following lists the predefined note types:

- General
- Assumption
- Decision
- Issue
- Possibility
- Risk
- Reference
- Special

You also specify whether the note is private or public. Private notes are visible only to the user who created the note. Public notes are visible to all the users with whom the object is associated.

From the Demand Management or the Sales and Operations work area, you can access the Notes table to display planning level members for Product hierarchies. You can create a layout to view the Notes table as part of the layout instead of as a dialog box. The Notes table is not available for Supply Planning or Planning Central.

Notes for Plans

You can create notes for plans. When you copy a plan, any notes associated with the plan are copied into the new plan.

To create a note for a plan, do the following:

1. Open the Plan Options page for your plan, and click the **Manage Notes** icon.
2. In the Manage Notes dialog box, click **Actions** > **Create**.
3. In the Create Note dialog box, add your notes.
4. Click **OK**.
5. Click **Save and Close**.

Notes for Planning Level Members

You can associate notes with planning-level members, such as items, organizations, and customers. You can create notes at any level of the hierarchy, such as on an individual item, on a brand, or on a product category.

Notes that you create on planning level members at lower levels in the hierarchy are visible when you open Manage Notes from an aggregate level. Notes that you create on level members aren't plan-specific. This means that a note associated with a level member is visible from any plan that contains that member.

To create a note on a level member, select the level member, and select **Create Note** from the **Actions** menu.

To view, edit, or delete an existing note, select the level member, and select **Manage Notes** from the **Actions** menu.

Notes for Planning Combinations

You can associate notes for the planning combinations, such as a specific item, organization, date, and measure combination. Planning combinations appear as cells within a table.

You can create a note at any level; however, they are only visible at the level at which they are created. For example, if you create a note at a brand, month, and measure combination, you can't view that note at the item, day, and measure level.

If you copy a plan, then any plan-specific notes on planning combinations are also copied.

To create a note for the planning combinations, do the following:

1. Select the cell in the table.
2. Select **Create Note** from the **Actions** menu.
3. Add your notes.
4. Click **Save and Close**.

To view, edit or delete an existing note on a planning combination, do the following:

1. Select the **Note** icon from the table's cell level.
2. Select **Manage Notes** from the **Actions** menu.

> **Note:** If you create a note on a planning combination, and the associated measure is shared across plans, then the note isn't plan-specific. In this case, the note is visible across all plans. If you create a note on a planning combination, and the associated measure isn't shared across plans, then the note is plan-specific. In this case, the note is visible within the plan in which you created it.

Notes for Exceptions

You can associate notes with exceptions. Notes on exceptions persist across plan runs. If an exception still exists after a plan is run again, then any notes associated with the exception are retained. When an exception is resolved, the exception is removed from the application. In that case, any notes associated with the exception are also removed.

To create notes for an exception, do the following:

1. Click the **Note** icon on the table row of the exception.
2. Add your notes.
3. Click **Save and Close**.

2 Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Manage Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

You can configure the entities for tables, graphs, analysis sets, tiles (also referred to as infotiles), or tile sets by using the Selector Tool.

You can also create and manage groups on the Selector Tool page and associate your tables and graphs with the group. Navigate to the Selector Tool from an open plan or from the **Actions** menu on a table or graph toolbar.

To create a table, graph, analysis set, tile set, or tile, open the Selector Tool:

1. From an open plan, click **Actions** and then select **Manage Tables, Graphs, and Analysis Sets**.
2. In the Manage Tables, Graphs, and Analysis Sets dialog box, click **Actions** and then select **Create**.
3. Select one of the following to open the Selector Tool:
    - Table
    - Graph
    - Analysis Set
    - Tile Set
    - Tile
4. Depending on your selection, the Selector Tool dialog box opens with the following tabs:

Tab	Table	Graph	Analysis Set	Tile
Measures	Yes	Yes	Yes	Yes
Hierarchies	Yes	Yes	No	Yes
Members	Yes	Yes	Yes	Yes
Measure Filters	Yes	Yes	No	Yes
Layout	Yes	Yes	No	Yes

Tab	Table	Graph	Analysis Set	Tile
Comparison Options	Yes	Yes	No	No
Details	No	No	Yes	No

Note: In the Selector Tool, the member values displayed are based on what's configured in the **Member Identifier to Display** column on the Configure Planning Analytics page, Levels and Attributes tab. For example, for item, you can configure your tables and graphs to show the item description instead of the item name, which is what also appears when you're in the Selector Tool.

Measures

Use the Measures tab to select measures for a table or graph by moving measures from the Available Measures pane to the Selected Measures pane. The measures that you select determine the content of the other tabs. The dimensions of the measures determine the dimensions available on the Hierarchies tab and the dimension members on the Members tab. For example, if a measure has the Product, Organization, and Time dimensions, those dimensions and their hierarchies are visible on the other tabs. You can display the available measures by measure group or alphabetically by using the **Tree View** or **List View** icon.

A measure is usually a named time series of values that represent the following at a particular intersection of the Customer, Organization, Product, Supplier, and Resource dimensions:

- Historical performance (Bookings History). This measure isn't applicable for supply planning.
- Future projections (Shipments Forecast)
- A key performance indicator (KPI), such as Gross Margin Percentage, or a derived calculation, such as Projected Available Balance

The planning process aggregates measure data from lower levels to higher levels or computes KPIs and derives calculations from other values at the same level as needed. The planning process can also allocate or spread updates made at an aggregate level to the affected cells at lower levels. Measures can be expressed in different units of measure, such as inches, dollars, kilos, or liters. Depending on the context, you can display, update, or compare measures that are in different units. The planning process can convert values among different units and among different currencies (for monetary values).

When plans are archived, you can retrieve measures from the archived time periods and show them on a plan table. See the *View Planning Measures from Archived Time Periods* topic to learn more. However, for Demand and Supply Plans, the Demand History Buckets option determines whether the archived period is shown or not.

Note: Text-based measures aren't supported in graphs and aren't displayed in the Available Measures pane on the Measures tab of the Selector Tool during the configuration of graphs.

Hierarchies

Use the Hierarchies tab to select the dimensions, hierarchies, and levels to include or exclude in the table or graph.

For each dimension, select the hierarchies and levels that you want to include in the graph or table. Checking the box in the **Display** column includes that dimension in the table or graph. Expand the dimension to view the available hierarchies. Expand the hierarchy to view the levels of the hierarchy. Checking a level includes it in the table or graph. If

multiple levels are checked, the top level is displayed in the table or graph by default. Each level in the table or graph can be expanded until all checked levels are visible. The **Show Unassociated** check box determines whether the measure values that aren't associated with a specific dimension in the table or graph are hidden or displayed. For example, a table could include Shipments Forecast and Net Resource Availability. Shipments Forecast has product, organization, and time as dimensions. Net Resource Availability has resource, organization, and time as dimensions. With the check box selected, the Resource column displays the word Unassociated when you view Shipments Forecast rows.

For a demand plan that uses a hybrid time hierarchy, only the hierarchy that was selected as the planning calendar on the Scope tab on the Plan Options page is displayed for the Time dimension along with the other, corresponding hybrid time hierarchies that were created when the Create Hybrid Time Hierarchies scheduled process was run.

You can select the levels of only one hybrid time hierarchy.

Members

You use the Members tab to manually select dimension members by moving members from the Available Members pane to the Selected Members pane. If no selections are made on this tab for a dimension, the graph or table displays the dimension starting at the top level checked on the Hierarchies tab. For example, if you selected the Gregorian Calendar hierarchy with Quarter and Month on the Hierarchies tab, the graph or table displays all quarters; each quarter has an icon to drill to its months.

Measure Filters

Use the Measure Filters tab to filter results based on measure values across dimension member combinations that meet the criteria that you specify. You can filter your measure data to return only multidimensional combinations that meet the measure criteria for selected dimensions of the measure.

> **Note:** The measures listed are those that are of data type number, currency, or percent that aren't dimensioned by time. Measures that are time dimensioned and of data types date and text are excluded from the list. If the table contains any configure-to-order (CTO) measures, then the Measure Filters tab is disabled.

When you create or edit a table or graph, make your selections on the Measures, Hierarchies, and Members tabs. Next, on the Measure Filters tab, specify the measure criteria to apply across combinations of your dimension selections, such as Item and Customer. The table or graph displays only the combinations that meet your specified measure criteria.

You can compare measures to fixed values or to other measures, and you can apply multiple measure conditions:

- Multiple AND conditions are allowed
- Multiple OR conditions are allowed
- Combinations of AND and OR conditions aren't allowed.

You can apply the measure filters in a table or graph to a linked table or graph in the Manage Links dialog box. On the To Table, Graph, or Layout tab, select the **Include measure filters** check box. This check box is enabled after you select the **Pass user-specified parameters** check box.

Layout

Use the Layout tab to format tables, graphs, or tiles. The following are the key layout options for tables, graphs, and tiles:

- Tables: Use table layout options to drag and drop dimensions to change the table layout and configure drill settings.

- Graphs: Use the graph layout options to select the graph type and the formatting options for the graph type that you select. In the Filters section, you can specify the filter criteria that you want displayed in the graph.
- Tiles: Use the tile layout options to select the graph type and add tables and graphs to the content area of the tile you're creating.

Comparison Options

The Comparison Options tab is applicable only for tables and graphs. On the Comparison Options tab, you can compare your current plan with an archived version or an alternate plan. Use this tab to compare how specific measures have varied over time. The Comparison Options tab contains three sections: Waterfall Analysis, Trend Analysis, and Plan Comparison.

Note: The Comparison Options tab isn't available in the Oracle Planning Central work area.

- In the Waterfall Analysis section, you can compare selected measures in a table or a graph with an archived plan.

  Select the **Use MAPE calculations** check box if you have scheduled your plan archival process. Mean absolute percentage error (MAPE) calculations use the system administrator archive and not an on-demand archive.

  In the **Measure Archives to Use** list, select one or more archives to reference. The number of weeks refers to how long ago the archive was created. The planning process uses the following logic for when to use an archive:

  - Match the exact dates. If multiple versions of an archive are within the waterfall time frame, use the closest, most current version.
  - If no match is found on the exact date, use the match closest inside the range, which is +3/-3 days of a selected weekly waterfall time frame, or +15/-15 days for a monthly archive.
  - If no match is found within +3/-3 days of a selected weekly waterfall time frame, or +15/-15 days for a monthly archive, then nothing is returned.

  For example, if you select **4 weeks ago**, the planning process searches for the archive 4 weeks prior to today's date, for instance, March 6. If your archives are stored at the month level and nothing is found on February 5, the planning process searches for the most recent archive within +15/-15 days.
- In the Trend Analysis section, you can provide the number of archives that you want to reference. The planning process selects the latest archives. For example, you have five archives, where number five is the latest archive and you have selected 3 in the **Number of Previous Versions to Include** field. The planning process selects archive number five, four, and three for the comparison. The difference between Waterfall Analysis and Trend Analysis is that in Waterfall Analysis you can choose an archive created within each selected time frame that you want to compare. In Trend Analysis, you can select the number of archives that you want to compare, and only the latest archives are used for comparison.
- The Plan Comparison section pertains to both archived plans and alternate plans that you consider for comparison. You can select the type of difference to display in tables or graphs for comparison. For example, you can choose to view the difference in percentage or absolute percentage.

Related Topics

- Use Advanced Options in the Selector Tool
- Use Table Drilling
- Create a Tile in Supply Chain Planning
- Create a Tile Set in Supply Chain Planning
- How You Use Levels and Attributes in Supply Chain Planning

Use Advanced Options in the Selector Tool

You can use the Advanced Filter dialog box to filter data and select specific members that fulfill some criteria.

Click the **Advanced Filter** icon on the Members tab to open the Advanced Filter dialog box. You can use the following filter criteria tools:

- **Levels**: Select by level. Select the members in a level such as Customer Site for the Customer dimension, or Period for the Time dimension.
- **Family**: Select parent or child of a dimension member. Select members based on a parent or child relationship, such as selecting the Days in a Week.
- **Attributes**: Select based on name. For example, select members based on items whose name contains Economy.
- **Measure Criteria**: Select based on meeting measure criteria. Select members that meet the criteria, such as Products for which the gross margin is greater than a particular value.
- **Time Range**: Select a range of dates. Select time periods based on a range, a start date, or today's date.

The advanced filter criteria tools are used in conjunction with action keywords to refine selections. The following four actions determine how to apply the criteria:

- **Replace with**: Replace the current selection, if any, with members meeting the criteria.
- **Add**: Add members meeting the criteria to the current selection.
- **Keep**: Keep only the members in the current selection that meet the criteria.
- **Remove**: Remove the members from the current selection that meet the criteria.

You can apply filter criteria tools sequentially to refine your selection. For example, select all the items for a category, and then keep the top 10 items based on sales.

Click the **Show Results** button to see the filtered list of members based on the criteria. Removed members are shown below the filtered list. You have the option of accepting the results or resetting to the previous members.

When you accept the results, the criteria used to retrieve the accepted members appear in the Criteria Steps section on the tab. These criteria are evaluated when the table or graph is displayed. You can remove criteria steps.

> **Note:** Ensure that the criteria steps defined for each dimension are needed and relevant. Remove all unwanted or unnecessary criteria steps so that your table or graph displays the correct information.

- To remove a step, click the **Remove** icon in a row.
- To view the result of removing a criteria, click **Show Criteria Change**.
- To accept the Show Criteria Change results, click **Accept** and then **OK**.

- To make the change permanent, click **Save** or **Save and Close**.
- To view the results without making the change permanent, click **Apply** and **Close**.

Related Topics
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Create an Analysis Set

An analysis set is a named set of criteria that can contain selected measures, dimension members, or both measures and dimension members.

Use the **Apply Analysis Set** and **Save as Analysis Set** buttons to apply previously made selections or to save the selections made in the Selector Tool.

Applying an existing analysis set to a table or graph is a quick way to select the measures and dimension members that you frequently use.

You have the option to save measures and dimension members. You can save the dimension members as a list or as a script. For example, you can select the top 10 items based on sales for January. If saved as a list, the same 10 items would always be displayed in the table or graph, regardless of the current month. However, as sales data changes over time, you would want to see the top items in the current month in your table or graph. To accomplish this, save the dimension members in a script that would evaluate the criteria whenever the table or graph is displayed.

Related Topics
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Create a Tile in Supply Chain Planning

A tile is a component used to present a graphical summary of the data. A tile is also referred to as an infotile in Oracle Fusion Cloud Supply Chain Planning.

Each tile has one or more related tables or graphs with predefined drill-to actions to display additional information about that key performance indicator (KPI).

To create a tile:

1. In a Supply Chain Planning work area, open a plan.
2. Click **Actions** > **Manage Tables, Graphs, and Analysis Sets**.
3. In the Manage Tables, Graphs, and Analysis Sets dialog box, in the Search Results region, click **Actions** and then select **Create** > **Tile**.
4. In the Selector Tool - Create Tile dialog box, on the Measures tab, select the required measures and move them from the Available Measures pane to the Selected Measures pane.
5. On the Hierarchies tab, select the dimensions, hierarchies, and levels to include or exclude in the tile.
6. On the Members tab, select the required dimension members and move them from the Available Members pane to the Selected Members pane. If you don't select a dimension member, the tile displays the dimension starting at the top level selected in the Hierarchies tab.
7. On the Layout tab, do the following:
    - Select the graph type for the infotile.

- Expand the **Content Area** panel, and then click the **Add Row** button. You can add up to four tables or graphs to display them in the content area for that tile.

8. Click **Save and Close**.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Create a Tile Set in Supply Chain Planning

Set Measure Targets for Use in Tiles

You can enter or update goals for a measure to track performance against the goals. Set targets by editing a measure and updating the measure goal. When the plan summary displays the measure, the goal or target for that measure is visible.

You can define goals only for measures that are of data type currency, number, or percent.

For global goals, you can provide a low range or a high range. The ranges are displayed on the user interface when you view a measure in comparison with its goal. Global goals are measure level parameters and aren't defined specifically for a data population.

To enter or update measure target goals, follow these steps:

1. Open the Manage Planning Measures page:
   a. In a Supply Chain Planning work area, open a plan.
   b. On the Edit Plan page, click the Tasks panel tab.
   c. In the Tasks panel drawer, click the Manage Planning Measures link.
2. On the Manage Planning Measures page, select the measure and click the Edit icon.
3. On the Edit Measure page, navigate to the Advanced tab, Goals subtab.
4. In the Goals subtab, select whether low values or high values are better.
   For example, high values are better for Gross Margin, but low values are better for Demand at Risk.
5. In the Global Goals section, provide a low range or a high range.
6. Click Save and Close.

Create a Tile Set in Supply Chain Planning

You can create a tile set to group individual tiles.

Tiles are also referred to as infotiles in Oracle Supply Chain Planning. Creating tile sets can be useful in cases where you want to track various metrics on a single page. You can add tile sets to a pane in a page layout.

> **Tip:** Before you create a tile set, check whether you need to create the tiles that you will be adding to the tile set.

To create a tile set:

1. In a Supply Chain Planning work area, open a plan.
2. Click **Actions** > **Manage Table, Graphs, and Analysis Sets**.
3. On the Search table toolbar, from the **Actions** menu, select **Create** > **Tile Set**.
4. In the Selector Tool - Create Tile Set dialog box, specify these details:

- Enter a name and description for the tile set.
- Select a group for the tile set.

5. From the Available Tiles pane, select the tiles to include in the tile set and move them to the Selected Tiles pane.
6. Click **Save and Close**.

Related Topics

- Create a Tile in Supply Chain Planning

Use Table Drilling

After you create a table, use drilling in the table to expand and collapse the levels within the hierarchy by which you can view different levels of aggregation.

When viewing a table or graph, the dimensions and hierarchies selected on the Hierarchies tab are visible. The top selected level is visible; use drilling to view lower levels.

To drill across hierarchies or dimensions, the levels must be adjacent. Drilling is automatically available for the levels within the predefined hierarchies, but you can also configure drill pairs to drill across hierarchies or dimensions.

To display a table showing Final Shipments History with the ability to drill from customer to item, the columns Customer and Item must be adjacent:

1. On the Layout tab, use the **View** menu to select **Configure Drill Settings**.
2. Click the **Add Row** icon to add a new drill pair.
3. In the **Drill From** column, select Customer. In the **Drill To** column, select Item.

With this configuration, you can view the shipments history values by item for each customer in the table.

Note: Drilling is only active between the adjacent levels in the table.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Use Advanced Options in the Selector Tool
- Use Table Linking

Use Table Linking

You can link a table or graph to another table or graph or a page layout by selecting Manage Links from the Actions menu on the toolbar.

The links enable you to pass the context of a table or graph to another table or graph or a page layout.

In the Manage Links dialog box, you can use these tabs:

- To Table, Graph, or Page Layout: Create a link to another table or graph or to a page layout.
- From Table or Graph: Link to the open table or graph from another table or graph.

Use the **Add Row** icon to add a link.

- Enable dynamic linking: Select this check box to enable dynamic linking. If selected, then the target table or graph is refreshed when the selections in the source table or graph change.
- Pass highlighted selections and selected members: If you select this option, then whatever you highlight in the current table or graph is passed as the context along with the filters in the Selector Tool to the target table, graph, or page layout.
- Pass user-specified parameters: If you select this option, then you can select the level and context of the source table or graph to pass as link parameters to the target table, graph, or page layout.
- Include measure filters: Select this check box to apply measure filters that you defined on the Measure Filters tab in the Selector Tool to a linked table or graph. This check box is enabled:
    - After you select the **Pass user-specified parameters** option.
    - If the From Table contains measure filters.

Note: If you're linking a summary table that lists configure-to-order (CTO) items to a detail table that lists the CTO items along with their option classes and options, select the **Pass highlighted selections and selected members** option.

After you define the link, use the Drill icon on the toolbar to drill to the linked table, graph, or page layout.

Dynamic linking is supported only from a pivot table displaying measures to another pivot table or graph displaying measures. It's not supported from the entity tables such as items, item structures, and so on.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Use Advanced Options in the Selector Tool
- Use Table Drilling

Link to External Systems

Overview of Linking to External Systems with Context

You can link a table or graph in your Oracle Fusion Cloud Supply Chain Planning module to supporting information in an external system to gain a deep understanding of your data and aid your decision making.

Note: You can create links to external systems from only pivot tables and not regular tables.

When you're analyzing data in a table or graph in the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area, you might need to view additional information that resides in an external system. Using this functionality, you can link your table or graph to an object in the external system. For example, you can link your table or graph to a predefined or user-defined analysis or report in Oracle Transactional Business Intelligence (OTBI), Oracle Analytics Cloud, or Oracle Analytics Publisher.

While specifying the link, you can pass dimensions, levels, and level members in your table or graph along with the link so that it opens the external system object with the context of the data in your table or graph. You can also pass the plan name or ID along with the link to restrict the displayed data in OTBI, Analytics Cloud, or Analytics Publisher.

How You Set Up Links to External Systems

To set up links to an external system, you must do the following:

1. Set up the application integration for the external system.
2. Configure a table or graph with a link to the external system.

Additional Points About Links to External Systems

Note these additional points about links to external systems:

- Any link that you create from a table or graph to an external system is tied to that table or graph and your user credentials.
  When you log on to an Oracle Supply Chain Planning module, you can use the link in the table or graph from all plans that include the table or graph. Others with the required role and privileges can also use the link in the table or graph from all plans that include the table or graph.
  However, you can edit or delete the link only if you created it.
- During data migration, when you export a table that contains a link to an external system and subsequently import the table, the link is available in the table.
- When you duplicate the table or graph, you can choose to include the links to the external system in the copy.

Related Topics

- Structure of a Link to an External System
- Set Up the Application Integration for an External System
- Create a Link to an External System
- Use a Link to an External System

Structure of a Link to an External System

This topic explains the structure of a link to an external system from a table or graph in an Oracle Fusion Cloud Supply Chain Planning module. The topic also provides examples of such links.

A link to an external system consists of these parts:

- Base URL: You supply this part of the link in the **Full URL** field on the Create Application Integration page. The link must include the host information and can also include the port details. This part is displayed in the **Base URL** field in the Create Link to External System dialog box and can't be modified.
  For example, the base URL could be as follows: https://...oracle.com
- Page or report path: You supply this part of the link in the **Page Path** field in the Create Link to External System dialog box. This path is appended to the base URL and contains details about the page or report in the external system to which you're creating the link.
  Along with the page path, you can also pass the name or ID of the Oracle Supply Chain Planning plan you're in to restrict the displayed information in the linked, predefined or user-defined analysis or report in Oracle Transactional Business Intelligence (OTBI), Oracle Analytics Cloud, or Oracle Analytics Publisher.
  An example of the report path without the plan context is as follows: /analytics/saw.dll?Dashboard&PortalPath=%2Fshared%2FCustom%2FSCP%2FSalesOrders_Booking_Rpt%2FSO_Bookings_Rpt4&Page=page%201&Action=Navigate, where SO_Bookings_Rpt4 is the name of the report.

An example of the report path with the plan context is as follows: /analytics/saw.dll?Dashboard&PortalPath=%2Fshared%2FCustom%2FSCP%2FPL_OTBI_report2%2FDM_Plan_Details&Page=page%201&Action=Navigate&col3=%22Plan%22.%22Plan%20Name%22&val3=#PlanName#

You must provide the plan context only when the page or report in the external system has a filter for the plan context, and you want to review the information by plans. For example, a link to an external web page doesn't require plan context.

- Linking parameters: You supply this part of the link in the Linking Parameters section on the To External System tab in the Manage Links dialog box. The linking parameters contain details about the dimensions, levels, and level members in the table or graph. This information is appended to a combination of a base URL and page or report path and opens the external system object with the context of the data in your table or graph.

  For example, the linking parameters could be as follows: "Distributed Order Orchestration - Fulfillment Lines Real Time"."Order Header Detail"."Ordered Date"&op1=bet&val1=timestamp '#StartDate# 00:00:00' timestamp '#EndDate# 23:59:00'

  After the link is encoded, when it's accessed from a table or graph, and the runtime values for the contextual parameters are passed, the linking parameters would look as follows: &col1=%22Distributed%20Order%20Orchestration%20-%20Fulfillment%20Lines%20Real%20Time%22.%22Order%20Header%20Detail%22.%22Ordered%20Date%22&op1=bet&val1=%22timestamp%20%272022-06-01%2000%3A00%3A00%27%22+%22timestamp%20%272022-06-30%2000%3A00%3A00%27%22

The resulting, concatenated link opens the external system object with the context of the selected data in your table or graph.

Example of a Link to an OTBI or Analytics Cloud Report or Analysis

You must meet these requirements while creating a link from a table or graph to a report or analysis in OTBI or Analytics Cloud:

- In the **Parameter** field on the To External System tab in the Manage Links dialog box, enter the names in the col<number> format. For example, the parameter names could be col1, col2, col3, and so on.
- In the **Value** field on the To External System tab, enter the names for the subject areas and columns to which you're passing tokens, and enclose this information in quotation marks.

  Then, enter the tokens in the val<number> =<token name> format. The token names mustn't be within double quotation marks.

  If required, include operators, which you must preface in the op<number> format (for example, op2=bet).

This example depicts how the linking parameters would look before the link is encoded:

col1="Submitted Date (Booked Date) - UTC"."Submitted Date"&val1=timestamp '#MemberName# 00:00:00'

col2="Fulfillment Line Details"."Demand Class Meaning"&val2=#MemberName#

col3="Product"."Product Number"&val3=#MemberName#

col4="Planning Date 1"."Period Start Date"&op4=bet&val4=#StartDate# #EndDate#

After the link is encoded, the linking parameters would look as follows: &col1=%22Submitted+Date+%28Booked+Date%29+-+UTC%22.%22Submitted+Date%22&val1=%22timestamp+%27<date from selection context>+00%3A00%3A00%27%22&col2=%22Fulfillment+Line+Details%22.%22Demand+Class+Meaning%22&val2=%22<member name from selection context>%22&col3=%22Product%22.%22Product+Number%22&val3=

%22<member name from selection context>%22&col4=%22Planning%20Date%201%22.%22Period%20Start%20Date%22&op4=bet&val4=%22<start date from selection context>%22+%22<end date from selection context>%22

> **Note:** Ensure that the numbers for the parameter, value, and operator names are the same for a combination of a parameter and value.

Example of a Link to an Analytics Publisher Report

You must meet these requirements while creating a link from a table or graph to a report in Analytics Publisher:

- In the **Parameter** field on the To External System tab in the Manage Links dialog box, enter the access parameters for Analytics Publisher.

  Some examples of access parameters are as follows:

  - _paramsp_itemname
  - _paramsp_fromdate
  - _paramsp_todate
  - _paramsp_customer

- In the **Value** field on the To External System tab, enter the token names.

  Match the access parameters for Analytics Publisher to the available token names for links to external systems.

This example depicts how the linking parameters would look before the link is encoded:

_paramsp_itemname=#MemberName#

_paramsp_fromdate=#StartDate#

_paramsp_todate=#EndDate#

_paramsp_customer=#MemberName#

After the link is encoded, the linking parameters would look as follows: &_paramsp_itemname=<member name from selection context>&_paramsp_fromdate=<start date from selection context>&_paramsp_todate=<end date from selection context>&_paramsp_customer=<member name from selection context>

Related Topics

- Overview of Linking to External Systems with Context
- Set Up the Application Integration for an External System
- Create a Link to an External System
- Use a Link to an External System

Set Up the Application Integration for an External System

You must specify the application integration for an external system before you can link to it from a table or graph in your Oracle Fusion Cloud Supply Chain Planning module. You must have administrator privileges to perform this procedure.

1. In the Setup and Maintenance work area, on the Tasks panel tab, select **Manage Setup Content**.
   The Manage Setup Content page opens.
2. Under Topology Definition, select **Manage Integration of Additional Applications.**

The Manage Integration of Additional Applications page opens.

3. Click **Actions** > **Create**.
   The Create Application Integration page opens.
4. In **Application Name**, enter the name of the external system.

   > **Note:** The name must start with "SCP_EXT_LINK_". Otherwise, you can't select the application integration in the **Application Name** field in the Create Link to External System dialog box.

5. In **Full URL**, enter the base portion of the URL to the external system. The URL must include the host information and can also include the port details. The page path and linking parameters are appended as context to this URL.
   For example, you can enter "https://...oracle.com" in the field.
   When you create the link for the table or graph, this URL is displayed in the **Base URL** field in the Create Link to External System dialog box and can't be modified. The information you specify in the **Page Path** field in the dialog box and on the To External System tab in the Manage Links dialog box is appended to this base URL.
6. In **Partner Name**, enter any value you require.
7. In **Security Policy**, ensure that **None** is selected.
8. Click **Save and Close**.

Related Topics

- Overview of Linking to External Systems with Context
- Structure of a Link to an External System
- Edit the Application Integration for an External System
- Create a Link to an External System

Edit the Application Integration for an External System

You can edit or delete the application integration for an external system to which you're linking tables or graphs from your Oracle Fusion Cloud Supply Chain Planning module. You must have administrator privileges to perform this procedure.

1. In the Setup and Maintenance work area, on the Tasks panel tab, select **Manage Setup Content**.
   The Manage Setup Content page opens.
2. Under Topology Definition, select **Manage Integration of Additional Applications**.
   The Manage Integration of Additional Applications page opens.
3. Search for your application integration, and select it.

4. Do one of the following:
    - To edit the application integration, follow these steps:
        i. Click **Actions** > **Edit**.

           The Edit Application Integration page opens.

           You can't edit the application and partner names.
        ii. Edit the value in the **Full URL** field.

            The URL must include the host information and can also include the port details.
        iii. In **Security Policy**, ensure that **None** is selected.
        iv. Click **Save and Close**.
    - To delete the application integration, follow these steps:
        i. Click **Actions** > **Delete**.

           A dialog box is displayed.
        ii. Click **Yes**.

What to do next

After editing or deleting the application integration, you must modify the external links that use the application integration. Otherwise, the external links won't work.

Related Topics

- Overview of Linking to External Systems with Context
- Structure of a Link to an External System
- Set Up the Application Integration for an External System
- Create a Link to an External System
- Edit a Link to an External System

Create a Link to an External System

After specifying an external system's application integration, you can create a link to the system from a table or graph in your Oracle Fusion Cloud Supply Chain Planning module by supplying the page path and linking parameters.

> **Tip:** To create a link to a page or report in an external system, examine the target URL. Then, enter the required information for the base URL, page or report path, and linking parameters so that the rendered link meets the external system's requirements. Use supported tokens instead of actual values in the linking parameters to pass contextual values during runtime.

1. In your table or graph in the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area, click **Actions** > **Manage Links**.

   The Manage Links dialog box opens.

   > **Note:** You can create links to external systems from only pivot tables and not regular tables.

2. On the To External System tab, click the **Create** icon.

   The Create Link to External System dialog box opens.

3. In **Name**, enter a unique name for the combination of the application integration and page path for which you're creating the link.

   This name is displayed when you click **Actions** > **Drill To** > **External Links** in the table or graph.
4. In **Description**, enter the link description.
5. In **Application Name**, select the application integration that was previously specified on the Create Application Integration page.

   The base URL that you entered on the page is displayed in the **Base URL** field and can't be changed.

   > **Tip:** You can reuse the same application integration in links to external systems so long as you don't need to change the base URL.

6. In **Page Path**, enter the path to the page or report in the external system.

   To restrict the displayed data to the current plan in the linked, predefined or user-defined analysis or report in Oracle Transactional Business Intelligence (OTBI), Oracle Analytics Cloud, or Oracle Analytics Publisher, specify these tokens:

   - #PlanName#: Append this token to the page path to pass the name of the current plan in the Oracle Supply Chain Planning work area.
   - #PlanId#: Append this token to the page path to pass the ID of the current plan in the Oracle Supply Chain Planning work area.

   Ensure that the path doesn't contain the host or port details because they're derived from the application integration.
7. Click **OK**.

   The link is displayed on the To External System tab in the Manage Links dialog box.
8. With the link name selected, in the Linking Parameters section, click the **Add Row** icon.

   A blank row appears in the Linking Parameters section.

   You can save the link only when it has at least one valid combination of a parameter and value.
9. In **Dimension**, select a dimension that you want to pass along with the link to the external system.

   The available dimensions are those selected for the table or graph on the Hierarchies tab in the Selector Tool.

   The **Level** field becomes available.

   If you selected the Time dimension, the **Date Format** field is enabled.
10. Select a level that you want to pass along with the link to the external system.

    The available levels are those selected for the table or graph on the Hierarchies tab in the Selector Tool.
11. In **Parameter**, enter a unique name for the parameter through which you want to pass the dimension, level, and value to the external system page or report.

    Ensure that the name meets the external system's nomenclature rules for parameters.

12. In **Value**, enter a token for passing the selected level member in the table or graph. The information in this field should be in the decoded format for URLs.

    You can specify these tokens:

    - #MemberName#: Use this token to pass the member name. For example, the token can contain the name of the item, organization, customer, week, or month.
    - #MemberId#: Use this token to pass the internal ID of the member.
    - #StartDate#: Use this token to pass the start date of the time bucket for your selection in the table or graph.
    - #EndDate#: Use this token to pass the end date of the time bucket for your selection in the table or graph.

    When you use the link, the tokens are replaced by the actual values for your selection in the table or graph.

13. In **Date Format**, select the format in which the value for the Time dimension must be passed to the external system page or report.
14. Configure additional parameters by repeating Steps 8 through 13.
15. Click **Save and Close**.

    The link is added to the External Links group that's available when you click **Actions** > **Drill To** > **External Links** for the table or graph.

Related Topics

- Overview of Linking to External Systems with Context
- Structure of a Link to an External System
- Edit a Link to an External System
- Set Up the Application Integration for an External System

Edit a Link to an External System

You can edit or delete a link to an external system from a report or graph in your Oracle Fusion Cloud Supply Chain Planning module.

Before you start

You can edit or delete the link only if you created it.

Here's what to do

1. In your table or graph in the Demand Management, Demand or Supply Planning, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area, click **Actions** > **Manage Links**.

   The Manage Links dialog box opens.
2. On the To External System tab, select the link that you want to edit.

   The linking parameters for the link are displayed.

3. To edit the link, follow these steps:
    a. Click the **Edit** icon on the toolbar above the link name.

       The Edit Link to External System dialog box opens.
    b. Change the name, description, application integration, and page path.

       Ensure that the link name is unique.

       The value in the **Base URL** field is populated according to the selected application integration and can't be changed.

       Ensure that the page path doesn't contain the host or port details because they're derived from the application integration.
    c. Click **OK**.
4. To edit the linking parameters, follow these steps:
    - To add a parameter, click the **Add Row** icon for the linking parameters.

      In the new row that appears, specify the dimension, level, parameter name, value, and date format.

      Ensure that the parameter name is unique.
    - To modify a parameter, click it, and change the values for the dimension, level, parameter name, value, and date format.

      Ensure that the parameter name is unique.
    - To delete a parameter, select it, and click the **Delete** icon for the linking parameters.

      You can delete the parameter only if at least one valid combination of a parameter and value remains for the link.
5. To delete the link, follow these steps:
    a. Click the **Delete** icon on the toolbar above the link name.
    b. Click **Yes** in the displayed dialog box.
6. Click **Save and Close**.

Related Topics

- Overview of Linking to External Systems with Context
- Structure of a Link to an External System
- Create a Link to an External System
- Set Up the Application Integration for an External System

Use a Link to an External System

This topic explains how you can use a link to an external system from a table or graph in your Oracle Fusion Cloud Supply Chain Planning module.

Prerequisites for Using Links to an External System

You can use the link to an external system if these conditions are met:

- You must have the privileges to view the data in the external system.

  Otherwise, you can't view the data in the external system when you click the link.
- The application integration for the external link must exist.

- You can open the link only if it has at least one valid combination of a parameter and value.

  After the link is configured, if the underlying table or graph is edited, and dimensions are removed, the affected combinations of parameters and values are automatically deleted. Consequently, the link might become invalid.
- You must select a cell, column, or row of the table or an area of the graph before clicking the link.
- You must select values for the levels that have been configured in the link.

  Otherwise, an error message is displayed.

  > **Tip:** To identify the required levels, examine the configuration of the link on the To External System tab in the Manage Links dialog box.

- You must select a value that's associated with or assigned to a level and then click the link.
- You can select multiple values only if they're contiguous.

1. In the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area, open your table or graph.
2. Make a selection.
3. Click **Actions** > **Drill To** > **External Links**, and select a link.

   The external link opens on a new tab of your web browser.

What to do next

Note these additional points while using links to external systems:

- Every time you click the link to the external system, it opens on a new tab of your web browser.
- After clicking the link, if you change the selection in your table or graph, the data on the page or report in the external system isn't refreshed.

  You must click the link anew to view the external system data on a new tab of your web browser according to the changed context in your table or graph.

Related Topics

- Overview of Linking to External Systems with Context
- Structure of a Link to an External System
- Set Up the Application Integration for an External System
- Create a Link to an External System

Graph Layout Options

The graph layout option is available in the Selector Tool dialog box, on the Layout tab when you create or edit a graph using the Manage Tables, Graphs, and Analysis Sets option.

In the Graph Layout Options section, you can define the type of graph and configure layouts and the dimension of axes. In the Filters section you can specify the filter criteria that you want displayed in the graph.

The layout options vary according to the type of graph. For example, a bar graph has X and Y-axis layout options whereas a Pie chart doesn't have any X or Y axis. General Options is common for all layout options and includes generic information for a graph such as title, font, and position of the graph. You can also preview a graph from the Layout

tab before you save the graph. In the preview mode, you can format measures, change the layout, and modify the drill settings.

The following types of graphs are available:

- X and Y axes graphs
  - Vertical bar
  - Horizontal bar
  - Line graph
- X and Y axes graphs with additional parameters
  - Area graph
  - Combination graph
  - Bubble graph
- Pie graph
- Sunburst graph and Treemap graph
- Funnel graph and Radar graph
- Gauge graph

For graphs with an X, Y, or dual Y axes, you can select up to three entities in total: measures are mandatory, and you can select one or two dimension hierarchies. A dual Y-axis graph requires the measures on the Y axis. You must select one measure for the Y2 axis in the Y2 -Axis panel. Axis title and tick label rotation options are available for all axes. Tick label options are also available for the X-axis. For example, skip a certain number of labels for legibility. The Formatting panel contains visual effect options for the graph, such as 2 dimension or 3 dimension, and bar or line style.

Here's additional information about some of the graphs:

Graph Type	Comments
Combination	A Combination graph includes an area, bar, and line. The measures represented by each of these options are specified in the Formatting panel.
Bubble	A Bubble graph requires selections for the bubble component of the graph in addition to the X and Y axes options. Select the hierarchy and the bubble sizing measure in the Bubble panel.
Sunburst	A Sunburst graph is comprised of rings. Select the number of rings to display. Each ring represents a level of the hierarchy. The rings are divided into sectors for each member of the level. The size and color of the sector is determined by the measures selected for those options.
Treemap	A Treemap graph is comprised of rectangles. Select the depth of the rectangles for a hierarchy. The rectangles for a level of the hierarchy are nested within the parent level rectangle. The size and color of the rectangles are determined by the measures selected for those options.
Funnel and Radar	Funnel and Radar graphs require only a hierarchy and measure selection.
Gauge	Gauge graphs, which are used in infotiles, require measures with goals defined.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Configure Filters for Graphs

You can configure graphs that specify filter criteria that enables you to page through data in the graph by one or more hierarchy levels. For example, you might want to filter for product category when analyzing your plan.

After you analyze one product category, you can select another product category to review from the filter bar above the graph. Specify the filter criteria in the Selector Tool dialog box, Layout tab, Filters section.

The hierarchy levels that you selected on the Hierarchies tab are available to select as filters. You can select one or more levels of a hierarchy for a filter. However, if you also selected the hierarchy for the X-axis or Y-axis, then you can't select all of the hierarchy levels for filters. At least one hierarchy level must be used for the X-axis or Y-axis.

The members of the levels that you select are used to filter the data shown in your graph. You can select the level member value of interest from a set of values in the filter bar above the graph.

Let's work through an example of setting up filters for a graph:

1. In the Selector Tool dialog box, on the Hierarchies tab, select the **Time**, **Product**, **Organization**, and **Customer** dimensions.
   All levels are selected by default. The levels that you select for the dimensions become visible in the Filters section.
2. On the Layout tab, in the X-Axis section, select **Gregorian Calendar**.
3. In the Y-Axis section select the **Product** hierarchy and **Measures**.
4. In the Filters section, select to filter on **Quarter** and **Zone**.
5. Click **Apply and Close**.

When you display the graph, you can see the Quarter and Zone filters above the graph. Months are on the X-Axis and items are on the Y-Axis. The months shown are determined by the selected quarter, based on the Gregorian calendar. So, for Quarter 1, the graph displays January, February, and March on the X-Axis. Levels not selected on the axes or in the Filters section, such as Organization, aren't included in the graph.

For the X-axis and Y-axis, if one or more levels are selected on the Hierarchies tab, such as Year, Quarter, and Month, the graph displays with the highest level. You can drill to lower levels that aren't selected in the Filters section.

> **Note:** Filters for graphs are similar to filters for tables. However, you can't drag and drop filters onto the X-axis or Y-axis of the graph.

Set Your Axis Scale

Use Axis Scale Options to refine your scale.

- Axis Scale Options applies to the Y axis and Y2 axis and you can use it only for bar, line, area, or combination graphs.
- Minimum is the starting point of the axis.
- Maximum is the ending point of the axis.

- Increment is the increase in values between maximum and minimum.

Specify the behavior.

- **Automatic**. Global Order Promising automatically adjusts the scale for the Y axis and the Y2 axis.
- **Manual**. You have to manually specify the scale for the Y axis and the Y2 axis.

Assume you set Minimum to 3, Maximum to 10, and Increment to 2. The graph will display 3 as the lowest value, 10 as the highest value, and 5, 7, and 9 as incremental values for the Y axis or the Y2 axis.

Format How Measures Are Displayed in Tables and Graphs

You can make measure formatting changes to tables and graphs to reflect your individual preferences or requirements for how you want the tables or graphs to display.

For example, you can override the name of a measure and its measure of unit. When you format measures in a planning table or graph, your measure formatting can't be overridden by another user. Any formatting changes done by other users, including the owner of the table or graph, don't take precedence over your changes. To make user-specific measure formatting changes, open a table or graph and select **View** > **Format Measures** to open the Format Measures dialog box.

If you're the owner of the table or graph, then your formatting changes are visible to you and to other users who haven't defined their own formatting. These changes can include overriding the measure label, applying conditional formatting, or changing the unit of measure that you want displayed in your table or graph. Formatting changes made by others won't impact your specific measure formatting.

If you're not the owner of the table or graph, then any measure formatting you define takes precedence over the owner's measure formatting and is visible only to you. For example, if you change decimal positions to 0 (zero) for all measures in a table, you're the only user that sees those changes. When you save your measure formatting, you'll no longer see future formatting changes made by the table or graph owner. For example, if you save measure formatting and then the table owner adds conditional formatting on a measure, you won't see that conditional formatting.

Use the **Reset to Default** button in the Format Measures dialog box to remove your user-specific measure formatting.

- If you're the owner of the table or graph, then your measure formatting is removed. Any measure formatting by non-owners won't be impacted.
- If you're not the owner of the table or graph, then all of your measure formatting is removed. The table or graph displays all existing measure formatting saved by the owner of the table or graph.

If you duplicate a measure, the duplicated measure is added as the last measure in the table. For example, you can duplicate a measure with a different currency or unit of measure. If you're the owner of the table, the duplicated measure is visible to you and to other users who haven't defined their own formatting. If you're not the owner of the table, the duplicated measure is visible only to you. You can reorder the duplicated measures, but you must save your layout to preserve the measure order.

You can make user-specific measure formatting changes in the following work areas:

- Demand Management
- Demand and Supply Planning
- Planning Central

- Replenishment Planning
- Sales and Operations Planning
- Supply Planning

Configure Color by Measure to Display in Graphs

You can configure the color by measure and then use that color for every graph that the measure appears in. For example, always show Final Shipments Forecast in blue and Final Sales Forecast in green.

This functionality is helpful when viewing a specific measure in several graphs in one layout. You can also specify the color to display for a measure in a specific graph.

The configure color by measure to display in graphs functionality is available in the following Supply Chain Planning work areas:

- Demand Management
- Demand and Supply Planning
- Planning Central
- Replenishment Planning
- Sales and Operations Planning
- Supply Planning

Configure Color by Measure for All Graphs

When you configure graphs, you can have a consistent color for a specific measure in your graphs. For example, you have multiple graphs that display the forecast. You can quickly identify the forecast measure by using the same color for the measure in all of your graphs.

To configure a graph color for a specific measure to use in all graphs, select the graph color for the measure in the Edit Measure dialog box.

1. In a Supply Chain Planning work area, click the **Tasks** panel tab.
2. In the Tasks panel drawer, click the **Manage Planning Measures** link in the Configuration section.
3. On the Manage Planning Measures page, select a measure, click Actions, and then select Edit.
4. In the Edit Measure dialog box, click the Advanced tab.
5. In the Properties subtab, click the **Graph Color** drop down arrow and select a color to use for the measure in all graphs.

Configure Color by Measure for a Specific Graph

You can configure a color for a measure in a specific graph, which overrides the color configured for the measure in the Edit Measure dialog box.

To configure a graph color for a specific measure for a specific graph, select the graph color for the measure in the Format Measures dialog box.

1. In an open table or graph, click View and then select Format Measures.
2. In the Format Measures dialog box, in the **Graph Color** column, click the drop down arrow and select a color to use.

Automatically Assign Graph Color

If a graph color is already configured for a measure for all graphs, but you want the graph color assigned automatically for that measure for a specific graph, then select the Assign Graph Color Automatically check box on the Format Measures page.

1. In an open table or graph, click View and then select Format Measures.
2. In the Format Measures dialog box, in the **Assign Graph Color Automatically** column, click the check box in the row for the measure.

Tips and Considerations for Assigning Graph Colors to Measures

The following is additional information about the configure color by measure to display in graphs functionality:

- Duplicate Colors: You might have a situation where you have two measures with the same color in a graph. If the color you configure for a measure is the same color as one of the colors automatically assigned to a measure in a specific graph, then you must select a different color for the measure you're configuring.
- Predefined measures: By default, predefined measures initially don't have a graph color selected on the Manage Planning Measures page. In this case, when used in a graph the planning process automatically assigns a color for the measure.
- Bar, line, and radar graphs: Only measures located in the Y-axis display the graph color settings. This is only in case the measures aren't combined with one or more hierarchies in the Y-axis. Automatically-assigned colors are used in this case.
- Plan Comparison: When comparing plans, the configured measure color in the graph is honored only for the measure itself. The measures that represent the compared plans get an automatically-assigned color, selected randomly by the planning process.
- Archive Plan: When archiving a plan and using Waterfall Analysis or Trend Analysis graphs, the configured measure color is honored only for the measure itself. The measures that represent the archive get an automatically-assigned color, selected randomly by the planning process.
- Export and Import: When exporting and importing measure settings from one environment to another, the export and import keeps the graph color settings in Manage Planning Measures and Format Measures.
- Graph Types: The graph color functionality isn't available for the following graph types:
    - Pie
    - Sunburst
    - Treemap
    - Gauge
    - Funnel
    - Bubble

Related Topics

- How You Manage Planning Measures
- Predefined Measures in Supply Chain Planning

How You Can Edit Measures at an Aggregate Time Level

This topic explains how you can edit measures at an aggregate time level in tables in demand, demand and supply, replenishment, sales and operations, and supply plans.

You can edit a measure with an edit range that's set to only the future at an aggregate time level in only those table cells that don't contain time periods for the past. For example, if the current date is Wednesday, August 11, 2021, and you're viewing the data at a weekly level, you can't edit the forecast for the week starting August 09 or any aggregate level such as the year 2021. Instead, you can edit the forecasts for the days of August 11 and later as well as the weeks starting August 16 and later.

You can edit a measure with an edit range that's set to only the history at an aggregate time level in only those table cells that don't contain time periods for the future. For example, if the current date is Wednesday, August 11, 2021, and you're viewing the data at a weekly level, you can't edit the history for the year 2021. Instead, you can edit the history for the days before August 11 and the weeks starting August 02 and earlier.

The same behavior applies when you summarize data across time in tables. For example, the Adjusted Shipments Forecast measure has an edit range that's set to only the future. If you summarize the measure by time in a table, the summarized value is editable only if all the included values are editable. If the current month is August 2021, you can't edit the summary for 2021, but you can edit the summary for 2022.

The same behavior also applies to plans with aggregate planning time levels. For example, if the planning time level is week, and the current month is August 2021, you can't edit measures at aggregate time levels such as quarter and year if the underlying weeks aren't editable. Instead, you can view the data at the weekly level to update the values for editable weeks.

The edit ranges of measures are enforced at the Hybrid time level in demand plans. For example, for the week starting Monday, December 31, 2029, there are two Hybrid time level members, one starting on Monday, December 31, 2029, and the other starting on Tuesday, January 01, 2030. If the forecasting time level is set to week, and the plan is run on Wednesday, January 02, the forecast would begin on Monday, December 31. But, the first Hybrid time level member is before the plan run date and considered as history. Therefore, any measure with an edit range that's set to the future, such as Adjusted Shipments Forecast, isn't editable for the first Hybrid time level member.

Thus, data integrity is ensured because you can't make changes to the values of measures outside of their configured edit ranges.

How Time Periods Are Calculated and Displayed in Tables, Graphs, and the Selector Tool

This topic explains how time periods are calculated and displayed in tables, graphs, and the Selector Tool in the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, and Sales and Operations Planning work areas.

Settings That Affect the Calculation and Display of Time Periods

The following settings affect the calculation and display of time periods in tables and graphs for a demand, demand and supply, replenishment planning, or sales and operations plan:

- The value in the **Demand History Days** field in the Demand: Advanced Options dialog box that you open from the Demand tab on the Plan Options page
- The selection on the Time Range tab of the Advanced Filter dialog box that's available on the Members tab in the Selector Tool
- The selected members for the Time dimension on the Members tab in the Selector Tool
- Shared measures

The following settings affect the calculation and display of available members for the Time dimension on the Members tab in the Selector Tool for the plan:

- The value in the **Demand History Days** field
- The planning horizon

The default value for the **Demand History Days** field is 182 days.

> **Note:** If data isn't available, blank rows are displayed for the time periods included in tables and graphs. Also, the amount of historical data that's considered for the forecast depends on the value in the **Historical Buckets** field on the Demand tab on the Plan Options page.

How Time Periods Are Calculated and Displayed

Time periods are calculated and displayed in a table or graph as follows:

- If you select members of the Time dimension on the Members tab in the Selector Tool, they're displayed in the table or graph.
- If you don't select members of the Time dimension on the Members tab in the Selector Tool, time periods are displayed as follows:
    - If the table or graph has shared measures, time periods are displayed for the combination of the demand history days and planning horizon.
    - If the table or graph doesn't have shared measures, time periods are displayed for the planning horizon.

The display of available members for the Time dimension on the Members tab in the Selector Tool is for the combination of the demand history days and planning horizon.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Measure Data in Tables

How You Can Edit Measure Data

While working in one of the Supply Chain Planning work areas, you might be editing measure data in a table.

The following table provides a list of some features you can use when doing so, and where each feature is located:

Feature	Location
Configure Summaries	View menu
Data Calculation Options	Table toolbar
Lock and Unlock Cells	If at least one summary is configured: Action menu, table toolbar, right-click in cell

Related Topics

- Manage Data Calculations When Editing Measure Data in a Supply Chain Planning Table
- How You Lock Cells While Editing Measure Data or Allocating Values in a Table

Copy and Paste Values in Tables

Use the Copy and Paste options in the Actions menu for a table to copy cell values and paste them in editable cells. You can also copy values from one table to another within the same plan.

Pasting overwrites any existing values, and any measures that are dependent on the overwritten measures are recalculated.

If your data is in an external application such as Microsoft Excel, you can use the following procedure to copy and paste your data:

1. Copy your data from the external application.
2. In your work area table, click the first editable cell from which you want the data to be pasted, and select **Actions** > **Paste from Clipboard**. The Paste from Clipboard dialog box opens.
3. Press Ctrl+V to paste your content in the dialog box. You can further edit your data in the dialog box.
4. Click **Paste and Close**. The copied content is pasted into the editable cells of the table.

Alternatively, you can export your table data to Microsoft Excel using the **Export** icon, work with your data in that application, copy your data, and bring it back into your table by using the **Paste from Clipboard** option. To copy data between plans, export the table data to Microsoft Excel from one plan, and use the **Paste from Clipboard** option to copy data into the other plan.

Note: You can paste values in only those cells that fall within your plan horizon. The number and orientation of the cells from which data is copied and the cells into which data is pasted must match. Only numeric data can be copied and pasted. Non-editable cells that are within a range of editable cells are skipped when data is pasted, and a warning is displayed to this effect.

Related Topics

- How can I highlight editable cells in a table?

Manage Data Calculation Options When Editing Measure Data in a Table

When you are working in a Supply Chain Planning work area, you might be editing measure data in tables that include dependent measures.

You can use the **Data Calculation Options** menu to determine when calculations are performed. You access the **Data Calculation Options** menu from the table toolbar for the table you are editing.

The Data Calculation Options choices are:

- Enable Automatic Calculations
- Calculate Now

Enable Automatic Calculations

When you edit data with this option selected, each time you edit a value, calculations are performed for any applicable summaries or other measures that include an expression. The Enable Automatic Calculations choice is the default selection.

Calculate Now

To choose when calculations are performed, you must first deselect Enable Automatic Calculations. When you make edits with the Enable Automatic Calculations choice deselected, you must click the Calculate Now choice when you want calculations to be performed. Calculations will be performed for all edits made since the last time calculations were performed.

If you save a table after making edits, any needed calculations will be performed, but you must refresh the table to see the results.

How You Lock Cells While Editing Measure Data or Allocating Values in a Table

When you are working in a Supply Chain Planning work area, you might be editing measure data in a table.

When you have locked cells, edits, including those that spread allocations to other cells, do not change locked cells.

Note: You must configure at least one summary to enable the **Lock** and **Unlock** actions.

Lock cells by performing one of the following:

- Click the Lock action in the Actions menu.
- Click the Lock icon on the table toolbar.
- Right-click in an editable cell.

Related Topics

- How do I enable the Lock and Unlock actions for a table while editing measure data in a Supply Chain Planning table?
- Can I unlock all cells at once while editing measure data in a Supply Chain Planning table?

How do I enable the Lock and Unlock actions for a table when editing measure data?

Configure at least one summary to enable the Lock and Unlock actions. Use the View menu for the table to configure summaries.

Can I unlock all cells at once when editing measure data in a table?

Yes, you can unlock all cells at once by using the Unlock All action from the Actions menu. This action is available in the Actions menu only if you have configured summaries.

How can I highlight editable cells in a table?

In the View menu for a table, select Highlight Editable Cells to provide a background color for cells that contain editable measures.

Do note that any conditional formatting that has been applied to an editable measure or a table takes precedence over the highlight color. You can choose to save your page layout with this setting.

Export Data to Microsoft Excel

You can export data from various tables within Supply Chain Planning work areas to a Microsoft Excel spreadsheet. You can do this from a plan, from a simulation set, or from plan inputs.

To export data, click the **Export** icon at the top of a table or select the **Export** option from the **Actions** menu.

Some points to consider:

- Only columns that are shown in the table are included in the export. This includes columns that you need to scroll to view.
- The contents of notes aren't exported.
- If you've sorted the table, the export matches the sorted order. For example, if you've sorted by date, the export maintains that order in the exported spreadsheet.
- By default, the maximum number of rows that will be exported is 20,000 rows. This is to limit potential memory issues when exporting too much data in a single export. This doesn't apply to pivot tables; pivot tables don't use row limits.
    - If the export process reaches the row limit, the process adds a line at the end of the exported worksheet that not all rows were exported.
    - The row limit can be adjusted, up or down, by specifying a value in the FND_EXPORT_ROWLIMIT profile option. If no value is specified for FND_EXPORT_ROWLIMIT, the default limit of 20,000 rows is used.
    - The following tables use the FND_EXPORT_ROWLIMIT option. (Not all Supply Chain Planning work areas use all these tables.)
        - Attribute-Based Transfer Recommendations
        - Build Plan
        - Demand Fulfillment
        - Exceptions
        - Forecast Consumption
        - Item Relationships
        - Item Structures
        - Items
        - Order Comparison
        - Pegging Analysis
        - Resource Requirements
        - Resources
        - Routings
        - Suppliers
        - Supplies and Demands

Related Topics

- Export Supplies and Demands Data

3 Aggregation of Data for Non-Key Customers

Overview of Aggregating Data for Non-Key Customers

You can aggregate data for non-key customers in your demand, demand and supply, and sales and operations plans for Oracle Fusion Cloud Supply Chain Planning.

By doing so, you can have Customer Site-level data in your plans for only key customers who are relevant to your analysis.

You must use the file-based data import (FBDI) template named Supply Chain Planning Key Customer Options (ScpKeyCustomerOptionsImportTemplate.xlsm) to do the following:

- Identify a level of the predefined Customer or Customer Zone hierarchy of the Customer dimension.
- Identify level members for whom data must be maintained at the Customer Site level, which is the lowest level of the Customer dimension, in the MSC_MEASURE_DATA table.
- Specify whether data for other level members should be aggregated by zone to placeholder sites named <zone name>:All Other or a placeholder site named Default:All Other.

Benefits of Aggregating Data for Non-Key Customers

By aggregating data for non-key customers, you get these benefits:

- You can focus your analysis on the data for key customers in your plans.
- You can reduce the number of customers and customer sites and amount of data in your plans.

  While some customers are key to your analysis, most others aren't and only add to the volume of data in your plans.

More Points About Aggregating Data for Non-Key Customers

Note these points about aggregating data for non-key customers:

- When you collect or load data at the Customer Site level, the following are created:
  - Placeholder customer sites called <zone name>:All Other or Default:All Other
  - A placeholder customer called All Other, under which the placeholder customer sites are placed
  - A placeholder customer class called All Other, under which the placeholder customer is placed

  These placeholder members are created in the predefined Customer hierarchy.
- When you collect or load data at the Customer Site level without using the import template named Supply Chain Planning Key Customer Options, data is stored in MSC_MEASURE_DATA as follows:
  - Data is stored at the Customer Site level for all customers.
  - Data is aggregated for all customers to placeholder sites named <zone name>:All Other, where the zone refers to the underlying zone for a customer site. If a customer site doesn't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.

- When you collect or load data at the Customer Site level while using the import template named Supply Chain Planning Key Customer Options, data is stored in MSC_MEASURE_DATA as follows:
    - If you've defined key customers, their data is stored at the Customer Site level.
    - Depending on the aggregation level that you've chosen, data is stored in one of these ways:
        - For the aggregation level of 1, the data for non-key customers is stored at the Customer Site level, and the data is also aggregated to placeholder sites named <zone name>:All Other, where the zone refers to the underlying zone for a customer site. If a customer site doesn't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.
        - For the aggregation level of 2, the data for non-key customers isn't stored at the Customer Site level, and the data is aggregated to placeholder sites named <zone name>:All Other, where the zone refers to the underlying zone for a customer site. If a customer site doesn't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.
        - For the aggregation level of 3, the data for all customers is stored at only the Customer Site level.
- In your plan, on the Demand tab on the Plan Option page, you can use the **Aggregate non-key customer data to an All Other level member** checkbox to control your access to customer data in MSC_MEASURE_DATA through the plan tables and graphs.
- You can view and use the Customer Site-level data for key customers and aggregated data for non-key customers using predefined hierarchies for the Customer dimension in your plans.

  When you're using the functionality for aggregating data for non-key customers, you can't use user-defined hierarchies for the Customer dimension.
- You can't use the functionality for aggregating data for non-key customers in a demand plan to which you've attached a planning level profile. The **Aggregate non-key customer data to an All Other level member** checkbox isn't available if you've attached a planning level profile to the demand plan.
- When you collect or load data at an aggregated level of the Customer dimension, the functionality for aggregating data for non-key customers isn't used.

Related Topics

- How You Change Your Use of the Functionality for Aggregating Data for Non-Key Customers
- How You Use the Import Template Named Supply Chain Planning Key Customer Options
- Aggregate Data for Non-Key Customers or Use Planning Level Profiles
- Set Up and Use the Functionality for Aggregating Data for Non-Key Customers

Set Up and Use the Functionality for Aggregating Data for Non-Key Customers

This topic provides the steps for setting up and using the functionality for aggregating data for non-key customers and storing data at the Customer Site level for key customers in your demand, demand and supply, and sales and operations plans.

1. If required, enter data in the file-based data import (FBDI) template named Supply Chain Planning Key Customer Options (ScpKeyCustomerOptionsImportTemplate.xlsm).

   > **Note:** If you don't use the import template, by default, all customers are considered as non-key customers, and their data is aggregated to the placeholder <zone name>:All Other or Default:All Other sites. The data is also available at the Customer Site level. For more information, see *How You Use the Import Template Named Supply Chain Planning Key Customer Options*.

2. Generate the comma-separated values (.csv extension) files for the import template.
3. Prepare a compressed file (.zip extension) that contains the .csv files.
4. Perform a targeted collection.

   You must collect or load data at the Customer Site level of the Customer dimension.

   If you're using the Collect Planning Data page, follow these steps:

   a. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.
   b. Run the **Load Planning Data from Flat Files** scheduled process in the targeted mode to process the imported .zip file.
   c. Perform a targeted collection using the Collect Planning Data page.

   If you're using the **Load Planning Data from Flat Files** scheduled process, follow these steps:

   a. Use the import templates for importing all the data for the predefined and user-defined measures that include the Customer dimension.

      Generate the .csv files, and add them to the .zip file that you prepared earlier.
   b. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.
   c. Perform a targeted collection using the scheduled process.

5. In the Oracle Fusion Cloud Supply Chain Planning work area for your module, create your plan.

   On the Demand tab on the Plan Options page, if required, select the **Aggregate non-key customer data to an All Other level member** checkbox.

   > **Note:** Your selection of the checkbox depends on how you want to view the data in the plan tables and graphs. For more information, see *How You Use the Import Template Named Supply Chain Planning Key Customer Options*.

6. Run your plan.

   In the Run Plan dialog box, on the Parameters tab, select the **Refresh with current data** option.

7. After your plan has successfully run, open it, and view the tables and graphs.

   You can view data for key customers and non-key customers on the basis of your use of the import template and selection of the checkbox.

Related Topics

- Overview of Aggregating Data for Non-Key Customers
- How You Change Your Use of the Functionality for Aggregating Data for Non-Key Customers
- Aggregate Data for Non-Key Customers or Use Planning Level Profiles

How You Change Your Use of the Functionality for Aggregating Data for Non-Key Customers

This topic provides the high-level steps for changing your selections for use of the functionality for aggregating data for non-key customers.

You can change your use of the functionality for aggregating data for non-key customers by editing the following:

- The file-based data import (FBDI) template named Supply Chain Planning Key Customer Options (ScpKeyCustomerOptionsImportTemplate.xlsm)

  > **Note:** Whenever you make a change to the import template, ensure that the data in the imported files is the present and complete information for your key customers. Don't use the import template to import only your changes.

- Your selection of the **Aggregate non-key customer data to an All Other level member** checkbox on the Demand tab on the Plan Options page for your plans

Change the Aggregation Level

You can change the aggregation level on the KeyCusOptnHeader_ worksheet of the import template as explained in this table:

From Aggregation Level	To Aggregation Level	Checkbox Selected in Existing Plans?	Checkbox to Be Selected in New Plans?	Required Actions
2	3	Yes	No	1. Change the import template (ScpKeyCustomerOptionsImport and prepare the compressed (.zip extension) file. 2. Perform a targeted collection. You must collect or load data at the Customer Site level of the Customer dimension. If you're using the Collect Planning Data page, follow these steps: a. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.

From Aggregation Level	To Aggregation Level	Checkbox Selected in Existing Plans?	Checkbox to Be Selected in New Plans?	Required Actions
				b. Run the **Load Planning Data from Flat Files** scheduled process in the targeted mode to process the imported .zip file. c. Perform a targeted collection using the Collect Planning Data page. If you're using the **Load Planning Data from Flat Files** scheduled process, follow these steps: a. Use the import templates for importing all the data for the predefined and user-defined measures that include the Customer dimension. Generate the .csv files, and add them to the .zip file that you prepared earlier. b. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account. c. Perform a targeted collection using the scheduled process. 3. Create plans for which the checkbox isn't selected. 4. Run your new plans with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.
3	2	No	Yes	1. Change the import template (ScpKeyCustomerOptionsImport and prepare the compressed (.zip extension) file.

From Aggregation Level	To Aggregation Level	Checkbox Selected in Existing Plans?	Checkbox to Be Selected in New Plans?	Required Actions
				2. Perform a targeted collection. You must collect or load data at the Customer Site level of the Customer dimension. If you're using the Collect Planning Data page, follow these steps: a. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account. b. Run the **Load Planning Data from Flat Files** scheduled process in the targeted mode to process the imported .zip file. c. Perform a targeted collection using the Collect Planning Data page. If you're using the **Load Planning Data from Flat Files** scheduled process, follow these steps: a. Use the import templates for importing all the data for the predefined and user-defined measures that include the Customer dimension. Generate the .csv files, and add them to the .zip file that you prepared earlier. b. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account. c. Perform a targeted collection using the scheduled process.

From Aggregation Level	To Aggregation Level	Checkbox Selected in Existing Plans?	Checkbox to Be Selected in New Plans?	Required Actions
				3. Create plans for which the checkbox is selected. 4. Run your new plans with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box. **Note:** After you make this change, you won't have the data or forecast for non-key customers at the Customer Site level.
1	3	No	Not applicable	1. Change the import template (ScpKeyCustomerOptionsImport and prepare the compressed (.zip extension) file. 2. Using the File Import and Export page, import the compressed file to the scm/planningDataLoader/Import account. 3. Perform a targeted collection using the **Load Planning Data from Flat Files** scheduled process. 4. Optionally, to remove unwanted data from your database, do the following: a. Perform a targeted collection using the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process. You must collect or load data at the Customer Site level of the Customer dimension. If you're collecting measures using the scheduled process, use the import templates for importing all the data for the predefined and user-

From Aggregation Level	To Aggregation Level	Checkbox Selected in Existing Plans?	Checkbox to Be Selected in New Plans?	Required Actions
				defined measures that include the Customer dimension. b. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box. **Note:** You should change the aggregation level from 1 to 3 if you aren't using the feature for aggregating data for non-key customers.
1	2	Yes	Not applicable	1. Change the import template (ScpKeyCustomerOptionsImport and prepare the compressed (.zip extension) file. 2. Using the File Import and Export page, import the compressed file to the scm/planningDataLoader/Import account. 3. Perform a targeted collection using the **Load Planning Data from Flat Files** scheduled process. 4. Optionally, to remove unwanted data from your database, do the following: a. Perform a targeted collection using the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process. You must collect or load data at the Customer Site level of the Customer dimension. If you're collecting measures using the scheduled process, use the import templates for importing all the data for the

From Aggregation Level	To Aggregation Level	Checkbox Selected in Existing Plans?	Checkbox to Be Selected in New Plans?	Required Actions
				predefined and user-defined measures that include the Customer dimension. b. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box. **Note:** You should change the aggregation level from 1 to 2 if you've selected the **Aggregate non-key customer data to an All Other level member** checkbox in all your plans. After you make this change, you won't have the data or forecast for non-key customers at the Customer Site level.

Change Your Entry in the Ignore Zone Column

If you change the value for the Ignore Zone column on the KeyCusOptnHeader_ worksheet, you must do the following:

1. Change the import template (ScpKeyCustomerOptionsImportTemplate.xlsm), and prepare the compressed (.zip extension) file.
2. Perform a targeted collection.

   You must collect or load data at the Customer Site level of the Customer dimension.

   If you're using the Collect Planning Data page, follow these steps:

   a. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.
   b. Run the **Load Planning Data from Flat Files** scheduled process in the targeted mode to process the imported .zip file.
   c. Perform a targeted collection using the Collect Planning Data page.

   If you're using the **Load Planning Data from Flat Files** scheduled process, follow these steps:

   a. Use the import templates for importing all the data for the predefined and user-defined measures that include the Customer dimension.

      Generate the .csv files, and add them to the .zip file that you prepared earlier.
   b. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.
   c. Perform a targeted collection using the scheduled process.
3. Create plans for which the **Aggregate non-key customer data to an All Other level member** checkbox is selected on the Demand tab on the Plan Options page.

4. Run your new plans with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.

Add or Remove Key Customers

The following are the actions you need to take if you change the selected hierarchy level or level members (key customers) in the import template:

1. Change the import template (ScpKeyCustomerOptionsImportTemplate.xlsm), and prepare the compressed (.zip extension) file.
2. Perform a targeted collection.

   You must collect or load data at the Customer Site level of the Customer dimension.

   If you're using the Collect Planning Data page, follow these steps:

   a. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.
   b. Run the **Load Planning Data from Flat Files** scheduled process in the targeted mode to process the imported .zip file.
   c. Perform a targeted collection using the Collect Planning Data page.

   If you're using the **Load Planning Data from Flat Files** scheduled process, follow these steps:

   a. Use the import templates for importing all the data for the predefined and user-defined measures that include the Customer dimension.

      Generate the .csv files, and add them to the .zip file that you prepared earlier.
   b. On the File Import and Export page, import the .zip file to the scm/planningDataLoader/Import account.
   c. Perform a targeted collection using the scheduled process.
3. Run your plans with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.

Change Your Selection of the Checkbox

On the Demand tab on the Plan Options page for your plan, you should select the **Aggregate non-key customer data to an All Other level member** checkbox only while creating your plan and before running it for the first time. After you run your plan, you shouldn't select or deselect the checkbox. Otherwise, you might run into data-integrity issues.

If you need to change your selection of the checkbox, you should create plans with the required selection and then run and use the new plans.

To understand how you use the checkbox with the import template, see *How You Use the Import Template Named Supply Chain Planning Key Customer Options*.

Related Topics

- Overview of Aggregating Data for Non-Key Customers
- Aggregate Data for Non-Key Customers or Use Planning Level Profiles
- Set Up and Use the Functionality for Aggregating Data for Non-Key Customers
- Load Planning Data from Flat Files

How You Use the Import Template Named Supply Chain Planning Key Customer Options

You must use the file-based data import (FBDI) template named Supply Chain Planning Key Customer Options (ScpKeyCustomerOptionsImportTemplate.xlsm) to specify key customers and control the data aggregation for non-key customers in your demand, demand and supply, and sales and operations plans.

For accessing the import template, see the File-Based Data Import (FBDI) for SCM guide in the Oracle Help Center.

How You Enter Data in the Import Template

The import template has these worksheets:

- KeyCusOptnHeader_: Use the columns on this worksheet to specify the predefined Customer or Customer Zone hierarchy and its level. You can also specify the aggregation level and whether zone-level aggregation should be done.

  You must include only one hierarchy level on this worksheet.

  You can't specify a user-defined hierarchy, and the entered level must belong to a specified predefined hierarchy.
- KeyCusOptnMembers_: Use the columns on this worksheet to specify level members that must be treated as key customers and for whom data must be maintained at the Customer Site level (the lowest level of the Customer dimension) in the MSC_MEASURE_DATA table.

  For example, if you've entered the Zone level of the Customer Zone hierarchy, and you enter Zone A in the Level Member Name column, the data for all members in Zone A is maintained at the Customer Site level. Or, if you've entered the Customer level of the Customer hierarchy, and you enter Customer B in the Level Member Name column, the data for Customer B is maintained at the Customer Site level.

  If you don't enter any information on this worksheet for the hierarchy level for which you've entered 1 or 2 as the aggregation level on the KeyCusOptnHeader_ worksheet, then all the members of that hierarchy level are considered as key customers, and the aggregation of data for non-key customers won't happen. Similarly, if you specify a hierarchy and level on the KeyCusOptnMembers_ worksheet but no members, then all the members of that hierarchy level are considered as key customers.

  > **Note:** You must ensure that the values for the Hierarchy Name and Level Name columns on the KeyCusOptnMembers_ worksheet match the values for the same columns on the KeyCusOptnHeader_ worksheet.

How You Set Aggregation Levels

On the KeyCusOptnHeader_ worksheet of the import template, you must set one of these aggregation levels for the hierarchy level:

- 1: When you enter this value, these two sets of data are available in MSC_MEASURE_DATA:
  - Data is stored at the Customer Site level for your key customers and non-key customers.
  - Data is aggregated for your non-key customers to placeholder sites named <zone name>:All Other, where the zone refers to the underlying zone for a customer site. If a customer site doesn't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.

  > **Note:** Unless you want to create plans through which you access Customer Site-level data for non-key customers and create other plans through which you access aggregated data for non-key customers, you shouldn't use this aggregation level.

- 2: When you enter this value, these two sets of data are available in MSC_MEASURE_DATA:
  - Data is stored at the Customer Site level for your key customers.
  - Data is aggregated for your non-key customers to placeholder sites named <zone name>:All Other, where the zone refers to the underlying zone for a customer site. If a customer site doesn't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.
- 3: When you enter this value, no data aggregation happens, and the data for all customers is stored at the Customer Site level in MSC_MEASURE_DATA.

  Any previously aggregated data for non-key customers is lost after you collect data in the targeted mode using the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process.

  No customer is considered as a key customer.

Consider an example in which you've six customers, as depicted in the following table:

Customer Name	Key Customer?	Zone	Customer Site
Cust_1	Yes	Zone_1	site_1
Cust_2	Yes	Zone_1	site_2
Cust_3	No	Zone_2	site_3
Cust_4	No	Zone_2	site_4
Cust_5	No	Zone_3	site_5
Cust_6	No	Zone_3	site_6

The following table depicts the data for these customers:

Item	Organization	Customer	Customer Site	Zone	Time	Quantity
Item_1	Org_1	Cust_1	site_1	Zone_1	d1	10
Item_1	Org_1	Cust_2	site_2	Zone_1	d1	10

Item	Organization	Customer	Customer Site	Zone	Time	Quantity
Item_1	Org_1	Cust_3	site_3	Zone_2	d1	10
Item_2	Org_1	Cust_3	site_3	Zone_2	d1	10
Item_1	Org_1	Cust_4	site_4	Zone_2	d1	200
Item_1	Org_1	Cust_5	site_5	Zone_3	d1	10
Item_2	Org_1	Cust_5	site_5	Zone_3	d1	10
Item_1	Org_1	Cust_6	site_6	Zone_3	d1	200

The previously provided table also depicts how the data stored in MSC_MEASURE_DATA when the aggregation level is 3.

When the aggregation level is 1, and the data is aggregated by zone, the data is stored in MSC_MEASURE_DATA as follows:

Data	Item	Organization	Customer	Customer Site	Time	Quantity
Data for key customer	Item_1	Org_1	Cust_1	site_1	d1	10
Data for key customer	Item_1	Org_1	Cust_2	site_2	d1	10
Original data for non-key customer	Item_1	Org_1	Cust_3	site_3	d1	10
Original data for non-key customer	Item_2	Org_1	Cust_3	site_3	d1	10
Original data for non-key customer	Item_1	Org_1	Cust_4	site_4	d1	200
Original data for non-key customer	Item_1	Org_1	Cust_5	site_5	d1	10
Original data for non-key customer	Item_2	Org_1	Cust_5	site_5	d1	10
Original data for non-key customer	Item_1	Org_1	Cust_6	site_6	d1	200
Aggregated data for non-key customer	Item_1	Org_1	All Other	Zone_2:All Other	d1	210
Aggregated data for non-key customer	Item_2	Org_1	All Other	Zone_2:All Other	d1	10
Aggregated data for non-key customer	Item_1	Org_1	All Other	Zone_3:All Other	d1	210

Data	Item	Organization	Customer	Customer Site	Time	Quantity
Aggregated data for non-key customer	Item_2	Org_1	All Other	Zone_3:All Other	d1	10

Thus, data is available in MSC_MEASURE_DATA as follows:

- At the Customer Site level for the key customers (Cust_1 and Cust_2) and non-key customers (Cust_3, Cust_4, Cust_5, and Cust_6)
- At the aggregated level for the non-key customers (Cust_3, Cust_4, Cust_5, and Cust_6). In this case, the aggregated data is available under a placeholder customer named as All Other and in placeholder customer sites pertaining to the zones.

When the aggregation level is 2, and the data is aggregated by zone, the data is stored in MSC_MEASURE_DATA as follows:

Data	Item	Organization	Customer	Customer Site	Time	Quantity
Data for key customer	Item_1	Org_1	Cust_1	site_1	d1	10
Data for key customer	Item_1	Org_1	Cust_2	site_2	d1	10
Aggregated data for non-key customer	Item_1	Org_1	All Other	Zone_2:All Other	d1	210
Aggregated data for non-key customer	Item_2	Org_1	All Other	Zone_2:All Other	d1	10
Aggregated data for non-key customer	Item_1	Org_1	All Other	Zone_3:All Other	d1	210
Aggregated data for non-key customer	Item_2	Org_1	All Other	Zone_3:All Other	d1	10

Thus, data is available in MSC_MEASURE_DATA as follows:

- At the Customer Site level for the key customers (Cust_1 and Cust_2)
- At the aggregated level for the non-key customers (Cust_3, Cust_4, Cust_5, and Cust_6). In this case, the aggregated data is available under a placeholder customer named as All Other and in placeholder customer sites pertaining to the zones.

When you don't use the import template, the data you collect or load at the Customer Site level is stored in MSC_MEASURE_DATA as is. Also, all the customers are considered as non-key customers, and their data is aggregated to the <zone name>:All Other sites, where the zone refers to the underlying zone for a customer site. If a customer site doesn't have an underlying zone, the data is aggregated to the Default:All Other site.

How You Use the Import Template with the Checkbox on the Plan Options Page

The following table explains how access to data from plan tables and graphs is controlled by the use of the import template and **Aggregate non-key customer data to an All Other level member** checkbox on the Demand tab on the Plan Options page:

Import Template Used?	Aggregation Level	Checkbox Selected?	Access to Data in Plan Tables and Graphs
No	Not applicable	Yes	You can access only the aggregated data, which is available for the placeholder All Other customer under the placeholder <zone name>:All Other sites. For customer sites that don't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.
No	Not applicable	No	You can access data at the Customer Site level for all customers.
Yes	1	Yes	• For key customers, you can access the data at the Customer Site level. • For non-key customers, you can access only the aggregated data, which is available for the placeholder All Other customer under the placeholder <zone name>:All Other sites. For customer sites that don't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.
Yes	1	No	You can access data at the Customer Site level for all customers.
Yes	2	Yes	• For key customers, you can access the data at the Customer Site level. • For non-key customers, you can access only the aggregated data, which is available for the placeholder All Other customer under the placeholder <zone name>:All Other sites. For customer sites that don't have an underlying zone, the data is aggregated to the placeholder Default:All Other site.

Import Template Used?	Aggregation Level	Checkbox Selected?	Access to Data in Plan Tables and Graphs
Yes	2	No	• For key customers, you can access the data at the Customer Site level. • For non-key customers, you can't access data. **Note:** This setup isn't recommended.
Yes	3	Yes	You can't access data for customers. **Note:** This setup isn't recommended.
Yes	3	No	You can access data at the Customer Site level for all customers.

How You Use the Ignore Zone Column

On the KeyCusOptnHeader_ worksheet, you must enter one of these values in the Ignore Zone column:

- Yes: When you enter this value, the data for non-key customers is aggregated to the placeholder Default:All Other site.
- No: When you enter this value, the data for non-key customers is aggregated to placeholder sites named in the <zone name>:All Other format, where the zone name refers to the underlying zone for a customer site. If there's no underlying zone for a customer site, the data is aggregated to the placeholder Default:All Other site.

  For example, if you've specified the Zone level of the Customer Zone hierarchy, the data for non-key customers is aggregated to sites named in the <zone name>:All Other format, where the zone names refer to the names of members of the Zone level. If the members are Zone1, Zone2, and Zone3, and only Zone1 is specified in the Level Member Name column on the KeyCusOptnMembers_ worksheet, then data for sites in Zone2 and Zone3 will be aggregated to the Zone2:All Other and Zone3:All Other sites.

  Or, if you've specified the Customer level of the Customer predefined hierarchy, the data for non-key customers is aggregated to sites named in the <zone name>:All Other format, where the zone names refer to the names of the underlying zones of sites for members of the Customer level. If the members are Customer1, Customer2, and Customer3, and only Customer1 is specified in the Level Member Name column on the KeyCusOptnMembers_ worksheet, then data for the sites for Customer2 and Customer3 will be aggregated to the <zone name>:All Other sites.

If you don't enter any value in this column, the value is considered as No.

Consider an example in which you've four customers, as depicted in the following table:

Customer	Key Customer?	Zone	Customer Sites
Customer_1	Yes	Zone_1	cust_site_1.1, cust_site_1.2

Customer	Key Customer?	Zone	Customer Sites
Customer_2	No	Zone_2	cust_site_2.1, cust_site_2.2
Customer_3	No	Zone_3	cust_site_3.1, cust_site_3.2
Customer_4	No	No zone specified	cust_site_4.1, cust_site_4.2

If you choose to ignore the zones while aggregating the data for non-key customers, the following table depicts how data for these customers is stored:

Item	Customer	Customer Site	Measure	W		
				Week 1	Week 2	W
Item_1	Customer_1	cust_site_1.1	Shipments History	11	23	
			Shipments Forecast			
			Measure 1	11	13	
		cust_site_1.2	Shipments History	11	23	
			Shipments Forecast			
			Measure 1	11	13	
	All Other	Default:All Other	Shipments History	66	138	
			Shipments Forecast			
			Measure 1	66	78	

If you choose to consider the zones while aggregating the data for non-key customers, the following table depicts how data for these customers is stored:

Item	Customer	Customer Site	Measure	W		
				Week 1	Week 2	W
Item_1	Customer_1	cust_site_1.1	Shipments History	11	23	
			Shipments Forecast			
			Measure 1	11	13	
		cust_site_1.2	Shipments History	11	23	
			Shipments Forecast			
			Measure 1	11	13	
		Zone_2:All Other	Shipments History	22	46	
			Shipments Forecast			
			Measure 1	22	26	
	All Other	Zone_3:All Other	Shipments History	22	46	
			Shipments Forecast			

Related Topics

- Overview of Aggregating Data for Non-Key Customers

Aggregate Data for Non-Key Customers or Use Planning Level Profiles

This topic helps you to decide whether you want to use the functionality for aggregating data for non-key customers or the functionality for planning level profiles.

Note: You can't use the functionality for aggregating data for non-key customers with the functionality for planning level profiles.

The following table compares the features:

Criterion	Functionality for Aggregating Data for Non-Key Customers	Functionality for Planning Level Profiles
Plan type	This functionality is available for demand, demand and supply, and sales and operations plans.	This functionality is available for only demand plans.
Hierarchy type	This functionality is applicable to only predefined hierarchies for the Customer dimension. You can view and use the Customer Site-level data for key customers and aggregated data for non-key customers using predefined hierarchies for the Customer dimension. You can't use user-defined hierarchies for the Customer dimension.	This functionality is applicable to predefined and user-defined hierarchies for the Customer dimension.
Availability of feature	This functionality is enabled by default if you collect or load data at the Customer Site level, which is the lowest level of the Customer dimension.	You need to explicitly create a planning level profile and attach it to your demand plan.
Key customers	You can identify certain customers as key customers, and Customer Site-level data is stored in the MSC_MEASURE_DATA table for these key customers.	You can't identify customers as key customers and store data for them at the Customer Site level in the MSC_MEASURE_DATA table.
Control over the aggregation level	The data for non-key customers is aggregated to the placeholder <zone name>:All Other sites or Default:All Other site.	You can plan at the level that's required by your business.
Applicability to different plans	Your choices regarding the aggregation level, zone-level aggregation, and key customers are applicable to all your plans. However, using the **Aggregate non-key customer data to an All Other level member** checkbox for a plan, you can control the access	You can create different planning level profiles for use in different demand plans.

Criterion	Functionality for Aggregating Data for Non-Key Customers	Functionality for Planning Level Profiles
	of the plan tables and graphs to customer data in MSC_MEASURE_DATA.	
Use of customer data	Your plan tables and graphs will contain data at the Customer Site level for key customers and aggregated level for non-key customers.	You can choose to completely ignore the Customer dimension in your plans.

Related Topics

- Overview of Aggregating Data for Non-Key Customers
- Overview of Planning Level Profiles

4 Planning Data Collections

Overview of Data Collections for Supply Chain Planning

Before running plans from one of the Oracle Fusion Cloud Supply Chain Planning work areas, you must collect data into the planning data repository. Order promising and order management processes also use the planning data repository to promise and manage orders.

To collect data into the planning data repository from one of the Supply Chain Planning work areas, you can do one of the following:

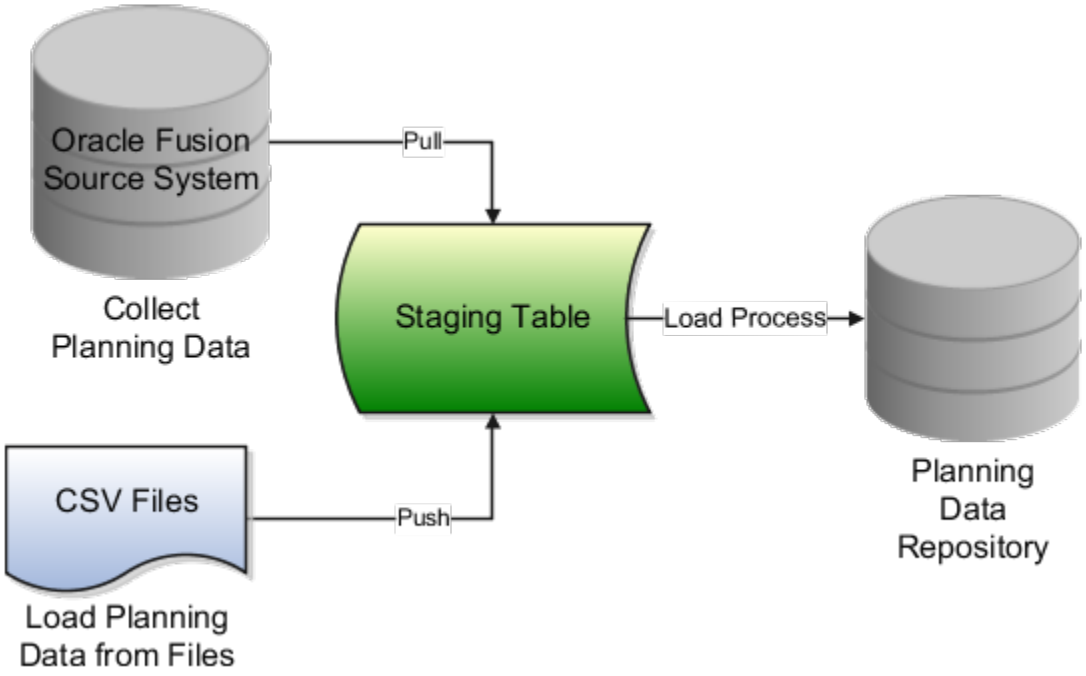
- Collect Planning Data: Use this page when you collect data from the source system for Fusion Applications.
- Load Planning Data from Flat Files: Use this scheduled process when you collect data from a completely external source system.

Depending on your security privileges, you might need to manually add these tasks. In the Setup and Maintenance work area, use the following:

- Offering: Supply Chain Planning
- Functional Area: Supply Chain Planning Configuration
- Task: Collect Planning Data

In the collections process flow, when you begin data collections from the Fusion Applications source system, the staging table pulls data from the source system. Similarly, when you begin data collections from comma-separated values (CSV) files, the data is pushed from files to the staging table. Then, the data from the staging table is loaded into the planning repository with the use of scheduled processes.

The following figure illustrates the collections processes that you can use to populate the planning data repository.



Collect Planning Data

There are two steps involved in the data collection process. The Collect Planning Data process first pulls data from the Fusion Applications source system into staging tables. The process then loads data from the staging tables into the planning data repository.

On the Collect Planning Data page, use the following tabs to select what data you want to collect:

- Reference Data
- Demand Planning Data
- Supply Planning Data

Most of the reference data are global entities. Global entities are common for all source systems. For example, Units of Measure (UOM) is common for all source systems. The supply planning and demand planning data are transactional data. Most of the transactional data are local entities. Local entities are specific to each source system. For example, on-hand quantity is specific for each source system.

> **Note:** You must have the Run Plan with Snapshot privilege to collect the item relationships preference data.

You can also select collection filters to further refine what data you want to collect. You can save your selections to collection templates.

> **Note:** If you're collecting information at the Customer Site level for a demand plan that uses a planning level profile, you must run the **Aggregate Collected Planning Data** scheduled process after data collection is over. Then, you must run the **Create Trees for Dimensions** scheduled process in the net change mode for the Customer dimension.

Load Planning Data from Flat Files

When you submit the **Load Planning Data from Flat Files** scheduled process, data from the CSV files is first pushed into the staging tables. The process then loads the data from the staging tables into the planning data repository.

To load the planning data using CSV files, follow this high-level process:

1. Create the CSV files. To create the CSV files, you can use a predefined set of file-based data import (FBDI) templates.
2. Import the CSV files. From the Navigator, click **File Import and Export**, and create a new import. Specify scm/planningDataLoader/Import for the account.
3. Submit the **Load Planning Data from Flat Files** scheduled process.

> **Note:** If you're collecting information at the Customer Site level or deleting customer-related information using the **Load Planning Data from Flat Files** scheduled process for a demand plan that uses a planning level profile, you must run the **Aggregate Collected Planning Data** scheduled process after data collection is over. Then, you must run the **Create Trees for Dimensions** scheduled process in the net change mode for the Customer dimension.

Related Topics

- How do I update existing setup data?
- Load Planning Data from Flat Files
- Overview of Planning Level Profiles

Global Entities

Within data collections, certain business entities in Oracle Fusion Cloud Supply Chain Planning are referred to as global entities.

Global entities are specific for each instance and are common for all source systems. They're common without regard to whether they're collected from the Oracle Fusion source system or from an external source system with the use of the file-based data import (FBDI) templates.

When data is collected for a global entity, the planning data repository stores only one record for each instance of the global entity. The data collections process removes the source system reference from the global entity and stores the data in the data repository. If the data collections process collects the same instance of a global entity from more than one source system, the data repository stores the value from the last collection.

The following example describes the collection of the global entity called unit of measure (UOM) from three source systems, namely A, B, and C:

- A has an instance of a UOM. During the collection of UOMs from A, the kilogram UOM is collected. This is the first time the kilogram UOM is collected. The data collections process creates a kilogram record in the data repository.
- B doesn't have any instances of a UOM. During the collection of UOMs from B, the data collections process doesn't collect the kilogram value. Because there was no record for the kilogram UOM in B, the data collections process doesn't change the kilogram record in the data repository. The record of the kilogram value from A is still valid.
- C has an instance of a UOM. During the collection of UOMs from C, the kilogram UOM is again collected. The data collections process registers the kilogram record in the data repository to match the value from C.

Note: When you use the FBDI templates, the global entity files require a source system. The collections framework validates that the source system matches each record's source system. A source system identifier marks each data record.

In Oracle Supply Chain Planning, the following entities are classified as global entities:

- Approved Supplier List
- Currencies and Currency Conversion Class
- Customer and Customer Site
- Demand Class
- Order Orchestration Reference Objects
- Planners
- Regions and Zones

  Note: When you set up your geographies in the Oracle Trading Community Architecture or regions using the Supply Chain Planning Regions import template (ScpRegionsImportTemplate.xlsm), ensure that the names used for the first- and second-level regions are different. If the names are the same, collections won't happen for the second-level region and child regions.

- Shipping Methods (Carrier, Mode of Transport, Service Level)

- Supplier Capacity
- Suppliers and Supplier Sites
- Units of Measure and UOM Conversions

Data Collection Types for Supply Chain Planning

When you collect planning data, one of the parameters you specify for the Collect Planning Data task is the Collection Type parameter.

You can select this task from any of your Supply Chain Planning work areas. For the Collection Type parameter, you can select one of the following values:

- *Targeted*: Choose the Targeted collection type when you want to collect a significant volume of source system data. Typically, you use the Targeted collection type in scenarios such as bulk upload of transaction data, instance upgrade, and change in collection filters.
- *Net change*: Choose the Net change collection type when you want to collect changed data and new records since the last successful collection cycle.
- *Automatic selection*: Choose the Automatic collection type when you want the planning process to decide and automatically select an appropriate collection type for each of the entities.

Targeted

You use the Targeted collection type when you want to perform a complete refresh of the data in the data repository. In this mode, the planning process deletes the existing data for the selected entities from the data repository. Next, if subsequently collected from the source, the data for the selected entities replaces the deleted data.

Note: For the following data collection entities, you can use only the Targeted collection type: Item Costs, Resource Availability, Fiscal Calendars, and all Shipment and Booking History data.

Net change

When you use the Net Change collection type, you collect data incrementally. The Net Change collection type collects only changed or new data. Collecting data using the Net Change collection type is usually faster than using the Targeted collection type. You typically use the Net Change collection type when you have previously performed a Targeted collection, and now you want to keep your planning data current with your execution system data. You cannot select the demand planning data when the collection type is Net Change.

Automatic selection

You use the Automatic collection type when you are not sure which collection type to select and you want the planning process to decide the collection type for each entity. The planning process evaluates each entity on multiple factors, such as the last collected date for an entity, and decides whether to perform a Targeted or a Net Change collection for the entity. You can manually select the entities that you want to collect or you can use one of the predefined templates to select your entities. If you select one of the predefined templates, you can't make any changes in the Reference Data, Demand Planning Data, and Supply Planning Data tabs.

Manage Planning Source Systems for Data Collections

To populate the planning data repository, also known as the order orchestration and planning data repository, you collect data from the Oracle Fusion source system.

On the Manage Planning Source Systems page in one of the Supply Chain Planning work areas, enable organizations for collections. Depending on your security privilege, you can also enable organizations from the Setup and Maintenance work area.

Go to the Setup and Maintenance work area, then go to the task:

- Offering: Supply Chain Planning
- Functional Area: Supply Chain Planning Configuration
- Task: Manage Planning Source Systems

The Oracle Fusion Source System

The Oracle Fusion source system is included as a source system for data collection. Supply chain planning, order orchestration, and order promising processes use data that are stored in the planning data repository. You ensure the Collections Allowed check box is enabled and manage which organizations you enable for collections.

To open the Manage Trading Community Source Systems page, navigate to the Setup and Maintenance work area and use the following:

- Offering: Supply Chain Planning
- Functional Area: Supply Chain Planning Configuration
- Task: Manage Trading Community Source System

External Source Systems

You can also allow collections for external source systems if you will be loading planning data from files for Oracle Fusion Global Order Promising. You must first define the external source system on the Manage Trading Community Source Systems.

There are two types of external source systems: Others and External.

Version External

The version External source system indicates that the source system is not connected to any other Oracle Fusion Cloud Applications Suite. This source system is not integrated with the Product Information Management work area, Oracle Trading Community Model, and Oracle Order Management. The external source system is also referred as a completely external source system. You cannot enable any other source system settings that are related to other Oracle Fusion applications. You can select the Collections allowed check box now or later depending on when you want to start collecting data. This enables the source system for data collections using the file-based import process.

Version Others

The version Others source system indicates that the source system is connected to other Oracle Fusion Applications Suite. This source system is integrated for the Product Information Management work area, Oracle Trading Community

Model, and Oracle Fusion Cloud Order Management. The following conditions are applicable when the external source is Others.

- External system data for Items, Item Structures, and Catalogs is uploaded to the Product Information Management work area
- External system data for Customers, Customer Sites, Regions and Zones is uploaded to Oracle Oracle Trading Community Model
- External system data for Sales Orders is uploaded to Oracle Fusion Cloud Order Management

For more information on types of data that can be collected for each source system, see the Import Templates Used to Create CSV Files for Supply Chain Planning topic.

Organizations Enabled for Data Collections

The process for enabling organizations varies depending on the version of the source system.

To enable organizations for data collections when the source system version is **Oracle Fusion**, perform the following steps:

1. Click the Manage Organization List button for your Oracle Fusion source system.
2. Click the Refresh Organization List button to update the organizations list.

   When adding organizations to the Oracle Fusion source system to be collected into planning, you must click the **Refresh Organization List** button and then enable the organizations for collections.
3. Select the Enable for Collections check box for the organizations from which you want to collect data.

> **Tip:** When performing collections during your initial setup, collect order orchestration reference objects from the predefined Oracle Fusion source system, and consider collecting organizations. After enabling organizations for collection, collect organizations first. You can confirm the collection results on the Supply Network Model page.

To enable organizations for data collections when the source system version is **External** (completely external source system), upload organizations using the file-based import process. The organizations are automatically enabled for collections. In the Supply Chain Planning Organizations FBDI import template (ScpOrganizationImportTemplate.xlsm), Organization tab, enter **Active** in the **Status** column for all organizations you want to import. If you leave the field blank for an organization, that organization won't show up in the Maintain Supply Network Model page in the Plan Inputs work area.

To enable organizations for data collections when the source system version is **Others**, perform the following steps:

1. Define an organization as an item-organization in the product data model.
2. Upload the organization using the file-based import process and associate the organization with **Others** source system.

Related Topics

- Import Templates Used to Create CSV Files for Supply Chain Planning
- Considerations for Enabling Organizations for Data Collections
- Define Flexfield Mappings

How the Order Orchestration and Order Promising Processes Use the Collected Planning Data

You perform data collections to populate the planning data repository. In addition to being used by Supply Chain Planning processes, the collected data is used by Oracle Order Management order orchestration processes and by Oracle Global Order Promising processes.

Data Collections

You must perform data collections to populate the planning data repository, also called the order orchestration and planning data repository, with data from the Oracle source system or from a completely external source system. When you load data from an external source system, use the XLSM files to organize your data in the required format and then convert the data into CSV files. You can then upload the CSV files to the planning data repository.

Order Orchestration

Order orchestration processes use some reference data directly from the planning data repository. You must perform data collections for the order orchestration reference entities even if you are not using the Supply Chain Planning work areas.

> **Note:** Before collecting data from your Oracle source system, you must define at least one organization for the source system. After you have set up at least one organization, you must update the organization list on the Manage Planning Source Systems page and then enable at least one of the organizations for collections. If you have not enabled any organization, then the collections process ends with an error.

Order Promising

The Global Order Promising processes use an in-memory copy of the data from the planning data repository. When order orchestration processes send a scheduling request or a check availability request to Oracle Global Order Promising, the order promising processes use the data stored in main memory to determine the response to send back to order orchestration. You must refresh the Global Order Promising data store after every collections so that the main memory always reflect the current.

Related Topics

- Collect Data for Global Order Promising

How You Enable Cross-References of Entities by Data Collections

Cross-references enable you to locate the correct source value for each cross-referenced entity. When you enable entities for cross-referencing, data collection pays attention to the cross-references that you have set up for certain values.

To enable cross-referencing of entities, click the Manage Planning Data Collection Processes task from your supply chain planning work area. Select the source system from the list, and then enable the available entities that you want to cross-reference during data collections.

You can view the cross-referenced data for each entity on the Cross-Reference Relationships for Collected Data page in the Plan Inputs work area.

How Planning Processes Collect Different Work Definitions and Item Structures

You might be concerned that the work definition and item structure data in your supply chain planning work area don't match with what was defined in Oracle Fusion Cloud Manufacturing.

You don't need to worry. The planning application collects and uses data based on how the work definitions and item structures are defined and associated in the manufacturing source system.

Work Definitions and Item Structures in the Source System

The work definition is a primary source of data for the planning application. The planning process uses the work definition of make order items to determine component and resource requirements. In case the work definition isn't defined, the planning process uses the defined item structure, but to plan for components only. If a work definition is defined and no item structure is associated with it, then you can manually add ad hoc components to it. If an item structure is associated with it, you can still add ad hoc components to the work definition, alongside the components in the item structure. Remember that while a work definition can be associated with only one item structure, one item structure can be associated with several work definitions within the parent item.

Work Definitions and Item Structures in the Planning Data Repository

In the manufacturing source system, the work definitions and item structures for an item can be defined and associated in different ways. The following table lists the most common source system combinations and how the collections and run plan processes proceed accordingly:

Oracle Manufacturing Definition	Item Structure Name and Work Definition Name in the Planning Data Repository	Planning Collections Processes
Only the item structure is defined for an item. No work definition is defined.	Item structure name exists, no work definition name	The planning process collects the item structure information but doesn't collect information for routing, operations, or item resources. The planning process uses the item structure to plan components and doesn't plan resources.
Only the work definition is defined for an item. No item structure is defined.	Work definition name exists, no item structure name	The planning process collects the work definition information to populate the item structure and routing information. The planning process populates the component information and operation sequence number in the item structure based on the ad hoc components and operation assignment available in the work definition. The planning process uses the work definition information to plan both components and resources.
Both the item structure and work definition are defined for the item.	Both work definition name and item structure name exist	The planning process uses the components that are associated with the work definition to plan. The planning process doesn't consider any components of the item structure that aren't associated with the work definition. You can override the item structure component usage within the work definition. The planning process collects component attributes (such as component effectivity) from the item structure if the components are associated with the work definition. The planning process uses the work definition to plan resources.
Both the item structure and work definition are defined for the item, but the work definition doesn't refer to the item structure. Ad hoc components are assigned to the work definition operations.	Work definition name exists, no item structure name	The planning process collects the components from the work definition and not from the item structure in Oracle Fusion Cloud Product Lifecycle Management. The process plans components based on work definition operation assignments and plans resources based on the work definition.

Enable External Data Collection for the Oracle Fusion Source System

Enable external data collection if you want to load transactional data from external systems. Typically, you do this if some of your supply chain processes are managed in external applications. You load the transactional data from these applications using file-based data imports (FBDI).

You can use external data sources for these functional areas: Inventory and Materials Management, Procurement, Order Management, and Manufacturing. When you enable external data collection for a functional area, be aware of these restrictions:

- You can't use configure-to-order, drop shipment, and back-to-back fulfillment.
- The entities associated with the functional area are no longer available for Oracle Fusion source collection. For example, if you enable Order Management, the Sales Orders entity won't be available on the Collect Planning Data page for you to select for Oracle Fusion source collection.

This table lists the entities for each functional area.

Functional Area	Entities
Inventory and Materials Management	On-hand Quantity and Transfer Orders
Procurement	Purchase Orders and Requisitions
Order Management	Sales Orders and Reservations
Manufacturing	Work Order Supplies, Resource Availability, Resources, Work Definitions, and Item Structures

Enable External Data Collection

Use these steps to enable external data collection:

1. Select the **Manage Planning Source Systems** task in the Tasks panel from any Supply Planning work area page. Or use this task in the Setup and Maintenance work area:
    - Offering: Supply Chain Planning
    - Functional Area: Supply Chain Planning Configuration
    - Task: Manage Planning Source Systems
2. In the list of source systems, select the row that has Oracle Fusion in the **Version** column.
3. In the Actions menu, click **Select Data Sources**.
4. Select the **Enable External Data** check box, and then select the functional areas that you want to source transactional entities for.

Note: Every time you enable or disable external data collection, you must run a targeted data collection to ensure complete refresh of data in the data repository. Only the data for the organizations included in the FBDI template is refreshed.

Related Topics

- How You Load Planning Data from Files

Set Up Catalogs and Items for Collections

Guidelines for Setting Up Catalogs for Collections

This topic provides guidelines for setting up catalogs so that they can be collected for use in Oracle Fusion Cloud Supply Chain Planning.

Note these guidelines for setting up catalogs for collections:

Note: This topic provides only high-level information for setting up catalogs in the Product Information Management work area. For detailed information and requirements, see the documentation for that work area.

- Create the default Product catalog:

If You're	Then
Creating the default Product catalog in the Product Information Management work area	○ In the Create Catalog dialog box, in the **Functional Area** field, select **Planning**. Once you select **Planning** as the functional area, some settings for the default Product catalog are automatically applied. ○ In the **Controlled At** field, select **Master Level**. ○ Select the **Assign items to leaf level categories only** check box. ○ Don't select the **Allow multiple item category assignments** check box. ○ On the Edit Functional Area Catalog page, on the Details tab, in the **Default Category** field, select a default category. On the Edit Functional Area Catalog page, on the Category Hierarchy tab, you won't be able to create a hierarchy of categories. Under the root level, you will be able to create only one level of categories.
Creating the default Product catalog using the file-based data import (FBDI) template named Supply Chain Planning Catalogs (ScpCatalogImportTemplate.xlsm)	○ On the Catalogs_ tab, in the **Control Level** column, enter **1**. ○ In the **Default Indicator** column, enter **Yes**. ○ On the CatalogCategoryAssociation_ tab, create a hierarchy of categories if this setup meets your requirements.

If You're	Then
	○ On the ItemCategories_ tab, ensure that items belong to only the lowest-level categories, and that items don't belong to multiple categories.

After the collections process, the default Product catalog that you set up or import is populated into the default Product hierarchy of the Product dimension for Oracle Supply Chain Planning.

If you haven't set up the default Product catalog, the predefined Product hierarchy of the Product dimension is used. The predefined Product hierarchy has only one predefined item. In this situation, your items won't be available in the default Product hierarchy, and your items will be available through the other hierarchies that are created for collected catalogs.

- Create your other Product catalogs:

If You're	Then
Creating the Product catalog in the Product Information Management work area	○ In the Create Catalog dialog box, in the **Controlled At** field, select **Master Level**. ○ Select the **Assign items to leaf level categories only** check box. ○ Don't select the **Allow multiple item category assignments** check box. ○ On the Edit Catalog page, on the Category Hierarchy tab, create a hierarchy of categories if this setup meets your requirements. You can have a maximum of 15 levels in your category hierarchy when you collect the Product catalogs that you create in the Product Information Management work area.
Creating the Product catalog using the Supply Chain Planning Catalogs import template	○ On the Catalogs_ tab, in the **Control Level** column, enter **1** so that the catalog is controlled at the master level. **Note:** Oracle recommends that you import Product catalogs that are controlled at the master level. If you import organizations that are controlled at the organization level, the items must be associated with the same categories in all organizations. Otherwise, the items won't be present in the resulting hierarchies. ○ On the CatalogCategoryAssociation_ tab, create a hierarchy of categories if this setup meets your requirements.

- Ensure that your default Product catalog and other Product catalogs have this structure:
  - The catalog shouldn't have a ragged structure; the categories at a catalog level should have the same number of levels for child categories.
  - The catalog can't have any category that doesn't have child categories or items.

    Such categories are referred to as dummy categories.
  - You can assign items to only the lowest-level categories.

    For Product catalogs other than the default Product catalog, items that you assign to the top-level category or intermediate-level categories won't be present in the resulting hierarchies.
  - You can assign an item to only one category.

    Any items that you assign to multiple categories aren't collected.

Other Points for Consideration

Note these points about the creation and collection of catalogs:

- For a catalog that's created in the Product Information Management work area or imported through the Supply Chain Planning Catalogs import template, the control level specifies whether the association between an item, the catalog, and a category can be controlled at the level of a parent organization or child organization.

  When a catalog that's created in the Product Information Management work area is controlled at the master level, if you assign an item to a parent organization, the item is automatically assigned to the child organizations.
- In the Setup and Maintenance work area, for the Items functional area, on the Manage Operational Attribute Group Control page, for the Planning Method attribute of the MPS and MRP Planning attribute group, in the **Controlled At** column, when you select **Master level**, you can assign the Planning functional area to a catalog that's controlled at the master or organization level. If you select **Organization level** in the **Controlled At** column, you can assign the Planning functional area to only a catalog that's controlled at the organization level. While this catalog that you create in the Product Information Management work area won't be collected, you can create other Product catalogs that are controlled at the master level and that can be collected.
- You can't assign a functional area to more than one catalog. However, you can assign more than one functional area to a catalog.
- Once you assign the Planning functional area to a catalog, you can't remove the assignment of the functional area from the catalog and reassign the functional area to another catalog.
- You must use the Collect Planning Data page to collect the default Product catalog and other Product catalogs that you create in the Product Information Management work area.
- During collections through the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process, the **Create Trees for Dimensions** scheduled process converts catalogs into hierarchies (trees) for the Product dimension. The structure of each catalog is validated according to the previously provided list in this topic for the catalog structure when the hierarchies are created. Any catalog that fails a validation isn't converted to a hierarchy, and a warning message is logged. You can examine the log file to identify catalogs that weren't converted.

  After fixing such catalogs in the Product Information Management work area or using the Supply Chain Planning Catalogs import template, you must run collections again using the net change collection type.
- The default Product hierarchy has three levels, two levels for categories and the lowest Item level. The collected items are stored at the Item level. If you're collecting the default Product catalog, the resulting Product hierarchy must have a minimum of three levels, two levels for categories and the lowest level for items. During collections, changes will be made so that your Product hierarchy has the required structure. For example, if your default Product catalog has only one category level with the items, two more levels will be created in the Product hierarchy, and the items will be moved to the lowest level. If your default Product catalog has more than three levels, all the levels are retained in the Product hierarchy, and the items are moved to the lowest level.

  These modifications are done for the Product hierarchy whether you set up your default Product catalog in the Product Information Management work area or using the Supply Chain Planning Catalogs import template.
- After you collect your catalogs through the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process, you must open the Configure Planning Analytics page in the Plan Inputs work area or the work area for your Oracle Supply Chain Planning module. On the Dimension Catalogs tab, for the dimension catalog that's attached to your plan, you must move the hierarchies for the created catalogs from the Available Hierarchies pane to the Selected Hierarchies pane.

  The hierarchies will then be available for use in your plan.

- You can view the hierarchies for the collected catalogs using the Levels and Attributes tab on the Configure Planning Analytics page. In the **Dimension** field, select **Product**. You can filter the displayed information using the **Hierarchy** field.

Related Topics

- Guidelines for Setting Up Items for Collections
- Resolve Warnings About Catalogs and Categories That Weren't Processed
- Resolve the Warning About the Default Product Catalog
- Functional Area Catalog Rules
- Load Planning Data from Flat Files

Guidelines for Setting Up Items for Collections

This topic provides guidelines for setting up items so that they can be collected for use in Oracle Fusion Cloud Supply Chain Planning.

> **Note:** This topic provides only high-level information for setting up items in the Product Information Management work area. For detailed information and requirements, see the documentation for that work area.

Note these guidelines for setting up items for collections:

- In the Setup and Maintenance work area, for the Items functional area, search for and open the **Manage Operational Attributes Groups** task. On the Manage Operational Attribute Group Control page, for the Planning Method attribute of the MPS and MRP Planning attribute group, in the **Controlled At** column, select **Master level**. Once you set the value to the Master level, items in child organizations inherit the planning method from items in parent organizations, and you can't change the planning method for items in child organizations.

  This restriction applies to only items that you create in the Product Information Management work area.
- For every item in a parent organization, in the Product Information Management work area, on the Specifications tab on the Edit Item page, in the Item Organization section, Planning section, MPS MRP Planning section, in the **Planning Method** field, select one of these values:
  - MPS Planning
  - MRP Planning
  - Not Planned: Select this value when you want the item to be collected but not planned. This selection is meant for assemble-to-order (ATO), configure-to-order (CTO), and pick-to-order (PTO) models that don't need to be planned. In such cases, only the individual items need to be planned.

    For ATO, CTO, and PTO models, in the Item Organization section, Manufacturing section, Item Structure section, in the **Pick Components** field, select **Yes**.
  - Replenishing Planning: Select this value if the item is meant for use in Oracle Replenishment Planning after collection.
- For every item, on the Specifications tab on the Edit Item page, in the Item Organization section, Inventory section, Material Control section, in the **Inventory Item** field, select **Yes**.

If you're using the file-based data import (FBDI) template named Supply Chain Planning Items (ScpItemImportTemplate.xlsm) to import your items, for every item, on the Item_ tab, enter **Yes** in the **Inventory Item**

Indicator column, and enter the allowed values in the **Planning Method** column. You might also need to enter **Yes** in the **Pick Components Indicator** column.

Other Points for Consideration

Note these points about the creation and collection of items:

- Oracle Supply Chain Planning doesn't support planning by item revisions.

  However, Oracle Fusion Cloud Product Lifecycle Management supports item revisions.
- Both Oracle Supply Chain Planning and Oracle Product Lifecycle Management don't support product families.

  For a workaround in Oracle Supply Chain Planning, follow these high-level steps:

  a. Create a catalog that mimics a planning bill.
  b. In Oracle Demand Management, forecast at the category level.
  c. In Demand Management, disaggregate the forecast to the item level.
  d. Consume the item-level forecast in other modules of Oracle Supply Chain Planning.
- On the Edit Item page, on the Specifications tab, in the Item Organization section, Planning section, General Planning section, in the **Inventory Planning Method** field, if you select a value other than **Not planned**, the item is automatically assigned to the default category for the default Product catalog. However, on the Categories tab, if you assign the item to the default category for the default Product catalog, the **Inventory Planning Method** field isn't updated.
- You must use the Collect Planning Data page to collect your items if you've set them up in the Product Information Management work area.
- You can view the collected items in the Items table for the Plan Inputs work area or your module.

Related Topics

- Guidelines for Setting Up Catalogs for Collections
- Resolve the Issue About Items Not Being Collected

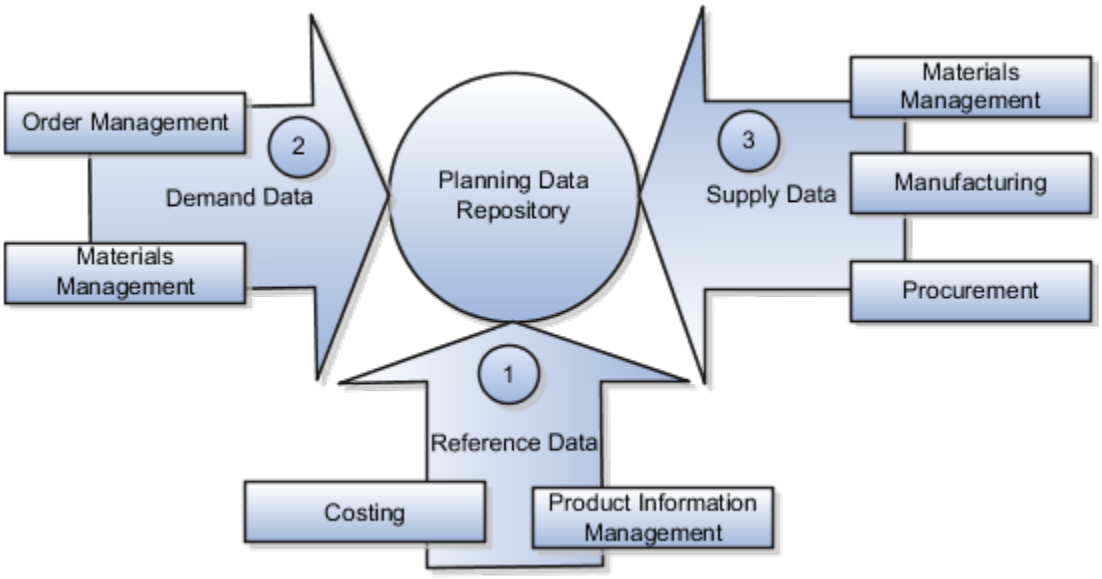
Collect Planning Data from the Oracle Fusion Source System

How You Collect Different Data Types for Supply Chain Planning

When you collect data, you collect data from three categories: reference data, demand data, and supply data. On the Collect Planning Data page there is a tab for each of these categories.

The collected data are stored in the planning data repository.

The following figure illustrates the three categories of data that you collect from the Oracle Fusion source system to the planning data repository.



Explanation of Callouts

1. Reference data is primarily sourced from Oracle Fusion Cloud SCM
2. Demand data comes from Oracle Fusion Cloud Order Management and Oracle Fusion Cloud Inventory Management
3. Supply data is sourced from Oracle Inventory Management, Oracle Fusion Cloud Manufacturing, and Oracle Fusion Cloud Purchasing

Reference Data

The collection process begins with reference data, which is primarily sourced from Oracle Fusion Cloud SCM. You collect the data collection entities, such as basic item, resource, organization, customers and suppliers, and calendar data.

> **Note:** Oracle Sales and Operations Planning uses the Bill of Resources entity to link the make items with their associated components and resource requirements. For more information on collecting Bill of Resources from an external source system, see the Loading Planning Data from Files section.

You also use Oracle Fusion Cloud Supply Chain Planning to collect the following items:

- Item structures: To explode item-level demand into component demands and supplies.
- Work Definitions: To assign the component and resource requirements for make items.
- Units of measure: To align plan data and to convert plans from one set of units to another.
- Costs: To review plans in financial terms and evaluate the financial impact of planning decisions.

Demand Data

You collect demand data from two potential sources:

- Sales orders that flow from Oracle Fusion Cloud Order Management: You can use this as the basis of the demand forecast, while current orders can consume the demand in near-term forecast time buckets.
- Shipment history from Oracle Fusion Cloud Inventory Management: You can use this to generate a shipments forecast.

Supply Data

You collect supply data from three sources:

- Oracle Inventory Management: This provides data related to on hand inventory, reservations, material transfers, in-transit supplies, and receipts.
- Oracle Manufacturing: This provides work in process status and any manufacturing work orders.
- Oracle Purchasing: This provides purchase requisitions and purchase orders.

Related Topics

- How You Load Planning Data from Files
- Run the Load Planning Data from Files Process
- Import Templates Used to Create CSV Files for Supply Chain Planning

Collection Filters and Collection Templates

You use collection filters and collection templates when you need to collect some common set of entities repeatedly.

The collection filters and collection templates are located on the Collect Planning Data page. To open the Collect Planning Data page, click the Collect Planning Data task from one of the Supply Chain Planning work areas.

Depending on your security privileges, you can also open the Collect Planning Data page from the Setup and Maintenance work area. In the Setup and Maintenance work area, use the following:

- Offering: Supply Chain Planning
- Functional Area: Supply Chain Planning Configuration
- Task: Collect Planning Data

Collection Filters

Use collection filters to improve the performance and efficiency of the collections process, and to avoid accumulation of irrelevant data in the planning data repository. You can use several filter criteria while performing collections, such as by employing catalogs, order types, and price lists. You can also use date-based filters for collecting shipment and booking history information.

Enabling Collection Filters

To enable collection filters, you must first run the schedule process called Load Filter Names for Planning Data Collection from the Scheduled Processes work area. When you run the scheduled process, the filters get enabled in the Collect Planning Data page. Then, you can apply the filters from the next collection.

Collection Templates

Use collection templates when you want to collect a set of data repeatedly over a period. You can select either one of the predefined templates that serves your specific need, or you can create your own template and save it for future use.

When you select a predefined template from the list, the Collection Type field is defaulted to **Automatic selection** and you cannot edit the field. Also, when you select a predefined template, the Select Collection Filters field is disabled.

You can create a collection template on the Collect Planning Data page by selecting the data collection entities and saving the template for future use. For example, if you frequently collect certain supply planning transactional entities, such as On Hand, Purchase Orders, and Purchase Requisitions, then save these entities as a collection template. It reduces the overhead of selecting the same entities for subsequent collection cycles.

If the template file contains any error during the upload process, rectify the issue found in the log file and upload the template file again.

Collect Data Using the Targeted Collection Type

To perform a complete refresh of the data repository used by the Supply Chain Planning products, run a targeted collection.

You can run the targeted collection immediately or you can schedule the process to run later. Demand planning data can only be collected by using the Targeted collection type.

> **Note:** Before collecting demand planning data, you must successfully run the **Load Filter Names for Planning Data Collection** scheduled process.

Perform the following steps to collect reference data, demand planning data, and supply planning data using the Targeted collection type.

1. Access the Collect Planning Data page from a Supply Planning work area or the Setup and Maintenance work area.
    - If you are in one of the Supply chain Planning work areas:
        i. Click the Tasks panel tab.
        ii. In the Tasks panel drawer, click the **Collect Planning Data** link.
    - If you are in the Setup and Maintenance work area, then select the following:
        - Offering: Supply Chain Planning
        - Functional Area: Supply Chain Planning Configuration
        - Task: Collect Planning Data

2. On the Collect Planning Data page, complete the following steps.
    - On the Parameters tab:
        i. Select your source system.
        ii. For the collection type, select Targeted.

            Demand planning data can only be collected by using the Targeted collection type.
        iii. Click **Select Collection Filters** to select the collection filters.
    - On the Reference Data subtab, move the required reference entities to the Selected Entities area.
    - On the Demand Planning Data subtab, set options to collect the historical demand data in the planning data repository. The planning process uses the historical demand data for statistical forecasting.

        - **Collection Time Frame Options**: You can specify a fixed or rolling date range for which to collect data.

            The **Fixed Date Range** option enables you to collect history data within a fixed date range that you specify.

            The **Rolling Date Range** option enables you to collect the history data for the number of days that you specify. For example, if you forecast weekly, specify **7** in the **Number of Days to Collect** field to collect the demand history data once per week. The data collections collect the demand history data for the latest week.

            Select **Roll off time periods automatically** to truncate the history data by the number of days that you specify in the **Number of days to keep** field each time you run collections for the demand history data. For example, if you prefer to forecast each week based on the history data of 52 weeks, select the **Roll off time periods automatically** check box and specify **Number of days to keep** as 364 days. This setting ensures that as you collect data every week, you keep the most recent history of 52 weeks and automatically purge history data older than 52 weeks.
        - **History Measures and Attributes**: Select your shipments history and bookings history measures.
        - **Collection for ETO Items**: Select **Collect history from associated base models** to collect bookings and shipments history for Engineer to Order (ETO) items from the associated base models. When you don't select this option, the history is collected from the standard ETO items.
        - **History Data Options**: To collect only specific order types, select from the **Order Types to Include** list of values. By default, all order types are included.

            Select **Organization - Consumption Inventory Transactions to Include** to collect consumption inventory transactions at the organization level. You can collect only the transfer orders inventory transactions or all consumption inventory transactions.

            Select **Subinventory - Consumption Inventory Transactions to Include** to collect consumption inventory transactions at the subinventory level. You can collect only the transfer orders inventory transactions or all consumption inventory transactions for the organizations that you enabled for subinventory planning.

            Select the **Collect amount data for history** check box to collect amount data.

- **Additional Options**: Select additional options for collections.

  Collect Price Lists: Collect the price lists specified in the collections filter for price lists, or collect all price lists if no filter is specified.

  Collect Configure to Order Data: If you selected history measures and attributes, then select the relevant check boxes to collect shipment history options and booking history options.

  Sales Organization Hierarchy: Select **Enable sales organization hierarchy collection** to collect one or more sales hierarchies.

- On the Supply Planning Data subtab:

  i. Move the required supply entities to the Selected Entities area.
  ii. If you collect resource availability, then select a date range type: **Fixed** or **Relative to collection run date**.

  If you selected **Fixed**, then provide a start date and an end date for collecting resource availability.

  If you selected **Relative to collection run date**, then enter a number of days in the **Collection Window in Days** field. The number that you enter determines a collection window in days to collect resource availability based on a rolling time window. That rolling time window adjusts itself, based on the date that you run collections. For example, if you specify 90, then resource availability is collected for the next 90 days each time from the date of the collection run.

  > **Note:** You can save your date range type selection for resource availability collection as a collection template to use later.

  iii. You can collect the existing data for the resource availability.
  iv. You can also regenerate the resource availability data and then collect the data. If you select the **Regenerate data, and then collect** option, the collections process runs the **Update Resource Availability Job** scheduled process first and then collects the resource availability data.

3. (Optional) Click the Schedule tab and set collections to run as soon as possible or schedule to run at a different time.
4. Click **Submit** to start the collections process.
5. Monitor the collection status using the Scheduled Processes page.
6. Review the collected data in the Plan Inputs work area.

Related Topics

- Verify the Load Planning Data from Files Process
- Review Data in the Planning Data Repository
- Set Up Forecast Consumption for Transfer Orders

Collect Data Using the Net Change Collection Type

You can collect data from the Oracle Fusion source system by running the net change collection or by scheduling to run the process later.

Before running a Net Change collection, you must run a Targeted collection for the selected entities. After the first Targeted collection, you can run Net Change collections.

Perform the following procedure to collect reference data and supply planning data using the net change collection type:

1. If you are in one of the Supply Chain Planning work areas, then click the Tasks panel tab. In the Tasks panel drawer, click the **Collect Planning Data** task. If you are in the Setup and Maintenance work area, then use the following:
    - Offering: Supply Chain Planning
    - Functional Area: Supply Chain Planning Configuration
    - Task: Collect Planning Data
2. Complete the following parameters for the Collect Planning Data process:
    a. Select your source system.
    b. Select the collection type as Net change.

    > **Note:** You cannot make any changes to the filter criteria and demand planning data in the net change collection type.

    c. In the **Reference Data** tab, move the required reference entities to the Selected Entities area.
    d. In the **Supplies Planning Data** tab, move the required supply entities to the Selected Entities area.
3. (Optional) Click the **Schedule** tab and set collections to run as soon as possible or schedule to run at a different time.
4. Click **Submit** to initiate the collections process.
5. Monitor the collection status using the Scheduled Processes page.
6. Review the collected data in the Plan Inputs work area.

Related Topics

- Verify the Load Planning Data from Files Process
- Review Data in the Planning Data Repository
- How do I update existing setup data?

Enable Organization Group Collection for the Net Change Collection Type

You can use organization groups to limit the net change data collection from a source system to specific organizations.

Using organization groups for collection also eliminates the chances of data overlap when multiple instances of net change collections are run at a time. Planners can run collections for their organizations without waiting for each other.

Let's take a simple example where your organization considers only the D1 and D2 distribution centers in your source system for shipments to your customers. In such a case, you can create an organization group, assign D1 and D2 to the organization group, and collect net change data specifically for this group.

> **Note:** Before you begin, ensure that you have your organization groups created. A supply planner creates and manages organization groups using the Manage Organization Groups button on the Maintain Supply Network Model page.

Do these to collect net change data for an organization group.

1. Access the Collect Planning Data page or Load Planning Data from Files page from a Supply Planning work area.
2. Select the source system. Organization groups are managed within the source systems.
3. Select the Net Change collection type. You can select an organization group for data collection only when the collection type is Net Change.
4. Enable the organization group collection, and then select an organization group.
5. Perform the net change data collection. Refer to the *Collect Data Using Net Change Collection Type* topic in this chapter for instructions.

Note: After selecting your organization group and other data collection entities, you can also save your selections as a template. Refer to the *Collection Filters and Collection Templates* topic in this chapter for additional information.

Related Topics

- Collect Data Using the Net Change Collection Type
- Collection Filters and Collection Templates
- How You Maintain Your Supply Network Model

Manage Incremental Planning Collections Artifacts Scheduled Process

Use the Manage Incremental Planning Collections Artifacts scheduled process to create, maintain, drop, or truncate net-change planning collection log tables.

Log tables store information about modifications to supported entities within net-change or incremental collections. These modifications include actions such as deletion, updating, or creation of entities or their attributes. For example, the details could reflect alterations to the date or quantity of a purchase order schedule.

The Manage Incremental Planning Collections Artifacts scheduled process is run to manage log tables in these modules:

- Oracle Supply Planning
- Oracle Demand and Supply Planning
- Oracle Sales and Operations Planning
- Oracle Demand Management
- Oracle Replenishment Planning
- Oracle Global Order Promising
- Oracle Backlog Management

For more information on this scheduled process, see the topic titled *Manage Incremental Planning Collections Artifacts*.

Load Planning Data from Others and External Source Systems

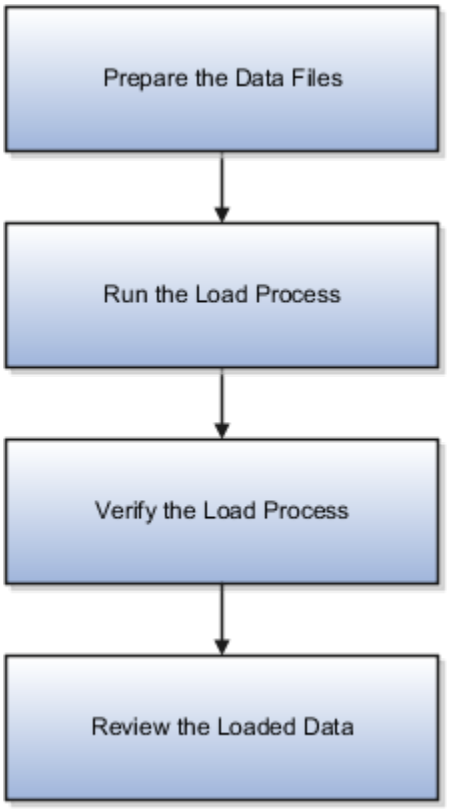
How You Load Planning Data from Files

You upload data using CSV files for specific business objects using the targeted or net change method.

> **Note:** To create the CSV files, you can use a set of Microsoft Excel template files that are provided for this purpose. You can download the templates from the File-Based Data Import (FBDI) for SCM guide in the Oracle Help Center.

You use the targeted mode when you want to refresh data for selected entities in the planning data repository. You use the net change mode to collect data incrementally. The net change collections mode collects only the changed or new data. Data collection using the net change mode is fast compared to the targeted mode. The net change mode is used to retain planning data to current with that of the executing system.

The following figure illustrates the process of collecting data from files.



To load planning data from files, you perform the following steps:

1. Create CSV files using Microsoft Excel template and compress them into zip files.
    a. Save the CSV file using the suggested entity name. You can add an underscore and other additional characters to the CSV file name. However, you can provide any name to the zipped file.

       For example, you can name the CSV file ShipmentHistory_abc.csv and the zip file LoadingCSV.zip.
2. Run the process to load planning data from files
3. Verify the load planning data process
4. Review the loaded data

Related Topics

- Create CSV Files to Load Planning Data
- Import Templates Used to Create CSV Files for Supply Chain Planning
- Run the Load Planning Data from Files Process
- Verify the Load Planning Data from Files Process
- Review Data in the Planning Data Repository

Create CSV Files to Load Planning Data

To perform the Load Planning Data from Files task in one of the Supply Chain Planning work areas or Setup and Maintenance work area, you must prepare the data you want to load.

You must create the necessary CSV files used to create files for import. This procedure explains how to create CSV files to prepare planning data for loading.

1. Locate the applicable file import templates (XLSM files) in the following guide: File-Based Data Import (FBDI) for SCM. Extract the templates to a local space.

   For additional information about creating and importing CSV files, see the following section in the Implementing Common Features for SCM guide: External Integration chapter, External Data Integration Services for Oracle Cloud section.
2. Open the template file for the entity you are preparing and complete the file import template worksheet.

   You must enable the macros in the template file before generating the CSV file.

   > **CAUTION:** For the cells that contain dates, ensure that the data is set to the correct format in the data type. For example, date must be set to YYYY/MM/DD.
3. After you finish preparing the data in the worksheet, generate the CSV file. The Generate CSV File button is located in the Instructions and CSV Generation worksheet of the workbook.
4. When you save the generated CSV file, you must use the suggested name of the entity. You can add underscore and add additional characters to the file name. For example, you can name the CSV file as ShipmentHistory_abc.csv and you can name the file as LoadingCSV.zip.

5. Compress the CSV file into a zipped file format using a compression utility. You can provide any name to the zipped file.

   > **Note:** You can include multiple CSV files in a single compressed file for a source system. The load process uploads them in a sequential order. Select the CSV files and compress them directly. Do not compress the parent folder that contains the files.

   This completes the preparation of a file that you will upload to collect planning data.

Related Topics

- How You Load Planning Data from Files
- Run the Load Planning Data from Files Process

Data Collection Sequence

This topic explores the sequence that you should follow for data collection.

Data collection involves collecting entities in a predefined sequence. The collected entities form the basis for supply planning calculations. To have accurate data, you must ensure to collect the entities in a proper sequence. You cannot collect some entities without collecting their precursor entities. The data collection sequence is very crucial when you collect data from an external source system using CSV files.

If you run targeted collections for all entities, you can ignore the sequence for collections because targeted collections automate the collection sequence for all entities within a single collections request. If you collect many entities in a single request, collections will process them according to the sequences shown in this topic. If you collect only a few entities, then you must be aware of the collections sequence information. For example, you should not collect work orders before you collect items or resources.

To make the workflow simple, the collection sequence is divided into two parts - Part A and Part B. The collection entities in Part B are dependent on the collection entities in Part A. You must collect the entities in Part A before you collect the entities in Part B. Also, the collection entities are grouped together for easier presentation. The data groups in Part A are:

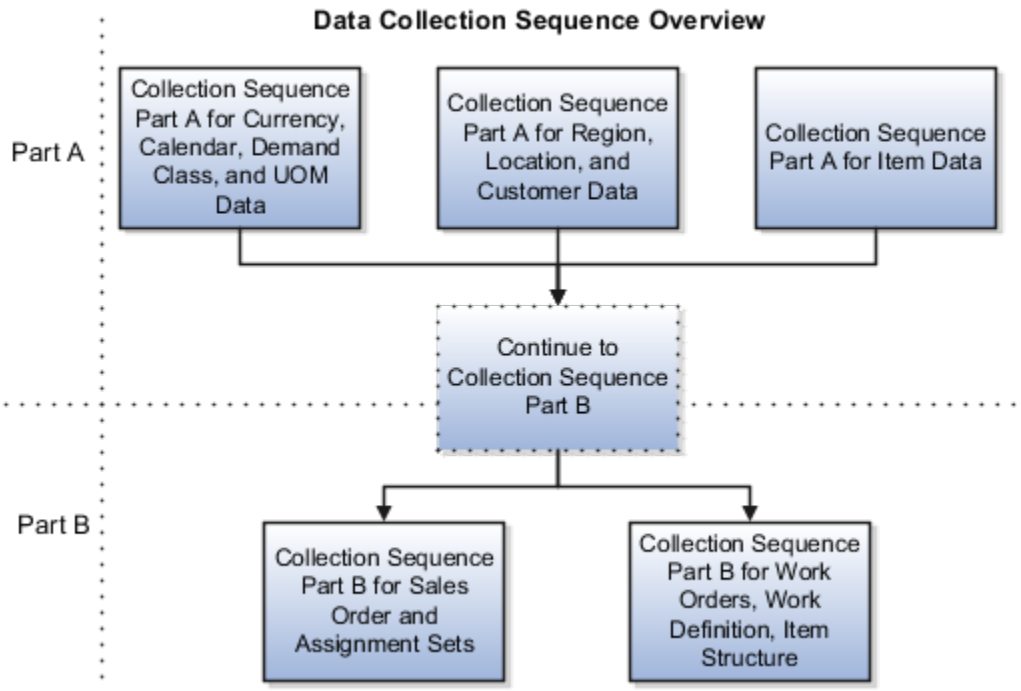
- Collections Sequence Part A for Item Data
- Collections Sequence Part A for Region, Location, and Customer Data
- Collections Sequence Part A for Currency, Calendar, Demand Class, and UOM Data

The data groups in Part B are:

- Collections Sequence Part B for Sales Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure

Every collection sequence in Part A starts with defining a source system where the collected data will reside. If you are collecting data to the same source system, you define the source system only once. Then, use the same source system to collect all the entities.

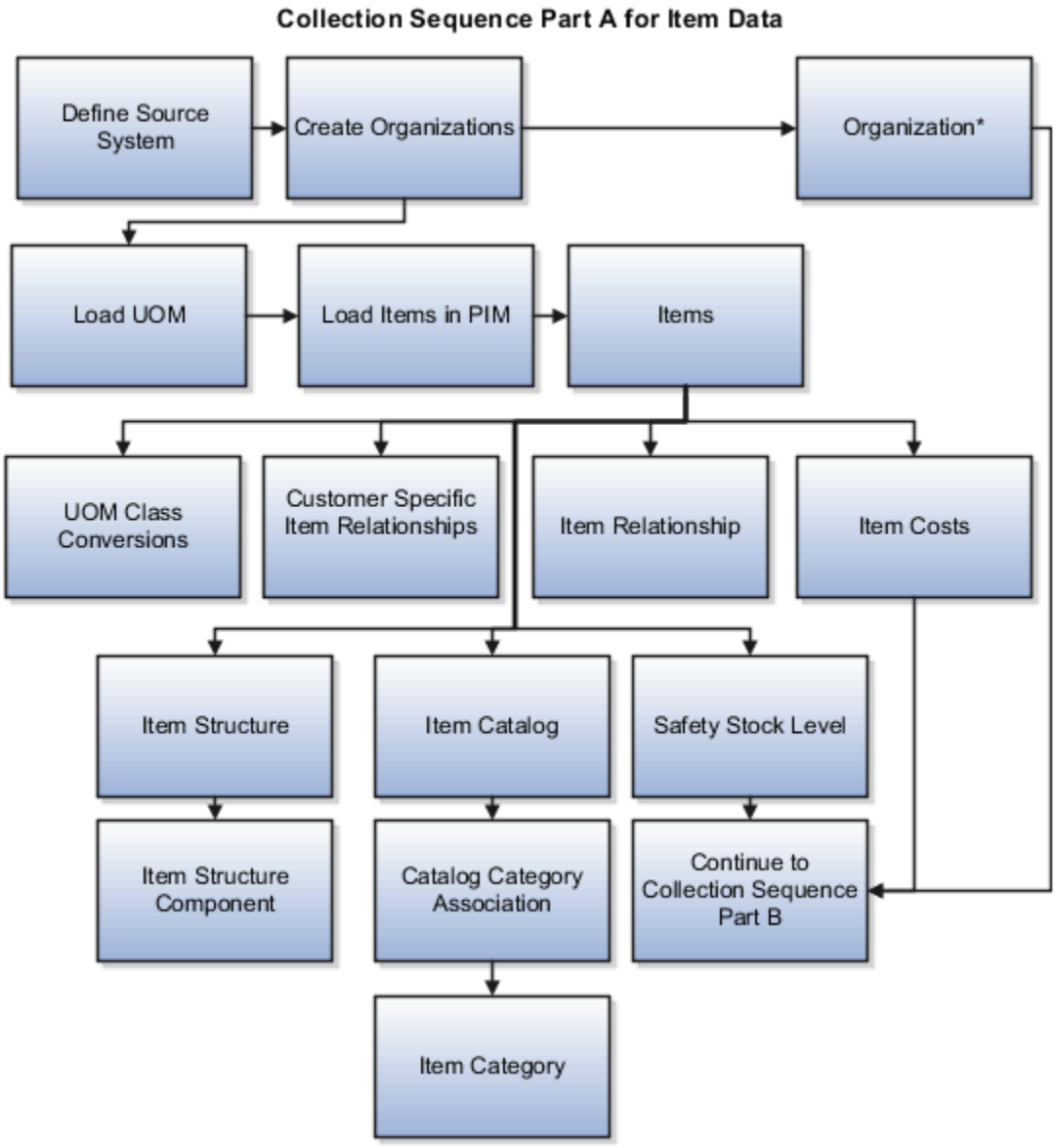
The following figure provides an overview of the data collection sequence. The overview shows how Part A and Part B fit together to form a complete data collection flow.



Collections Sequence Part A for Item Data

The following image shows the collections sequence to follow while collecting Item data from external source systems. This image represents only half of the entities for collecting Item data.

> **Note:** The Organization entity is marked with an asterisk because you can collect other entities such as Planner, Item Cost, Subinventory, Carrier, Calendar Assignment, Supplier, and Supplier Site after collecting Organization. For more information on the collection sequence for these entities, see the Collections Sequence Part A for Currency, Calendar, Demand Class, and UOM Data figure. Refer to the entities that are collected after Organization. Also, ensure that you collect Location before collecting Supplier Site.

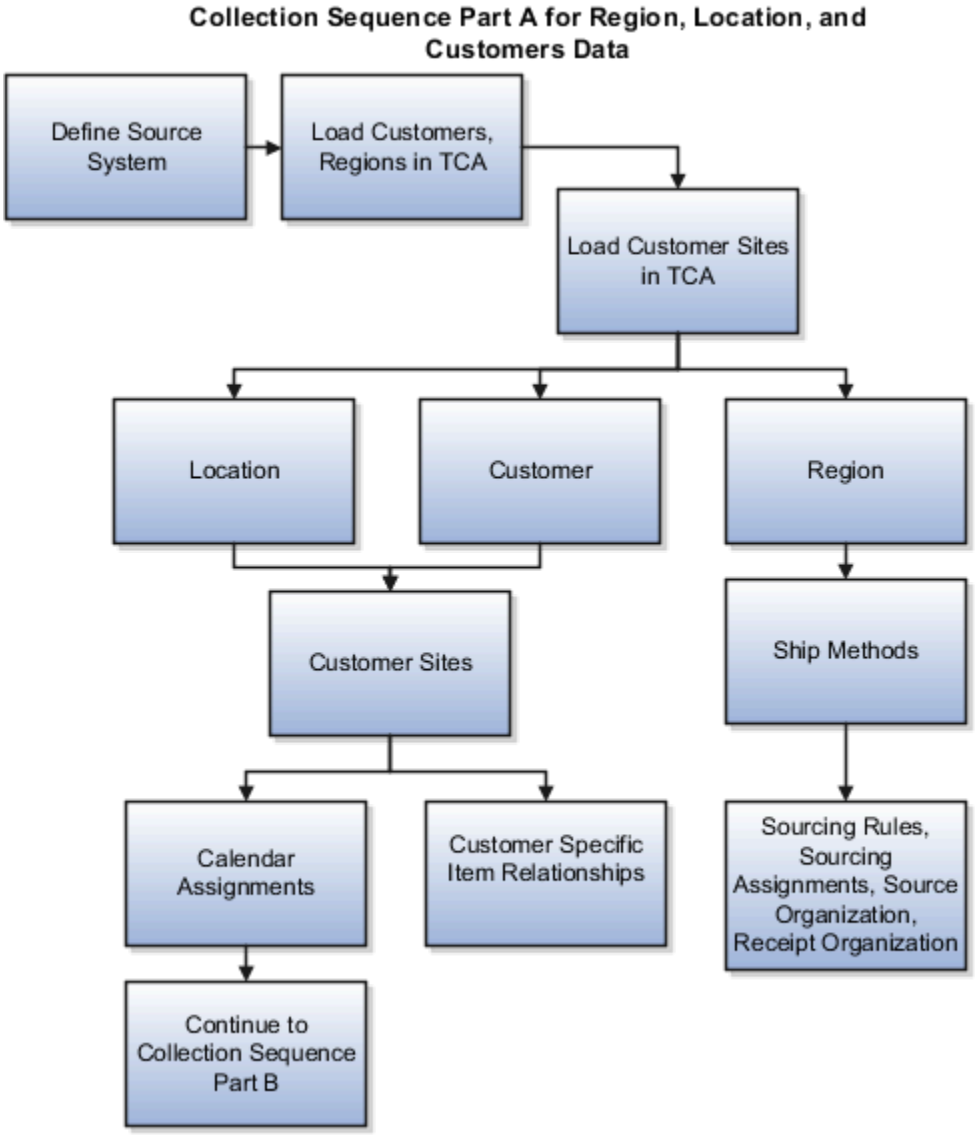


When you collect the data described here, continue to the collection sequence Part B described in the following subsections.

- Collection Sequence Part B for Sales and Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure

Collections Sequence Part A for Region, Location, and Customer Data

The following image shows the collections sequence to follow while collecting Regions and Customers data from external source systems. This image represents only half of the entities for Item data.



When you collect the data described here, continue to the collection sequence Part B described in the following subsections.

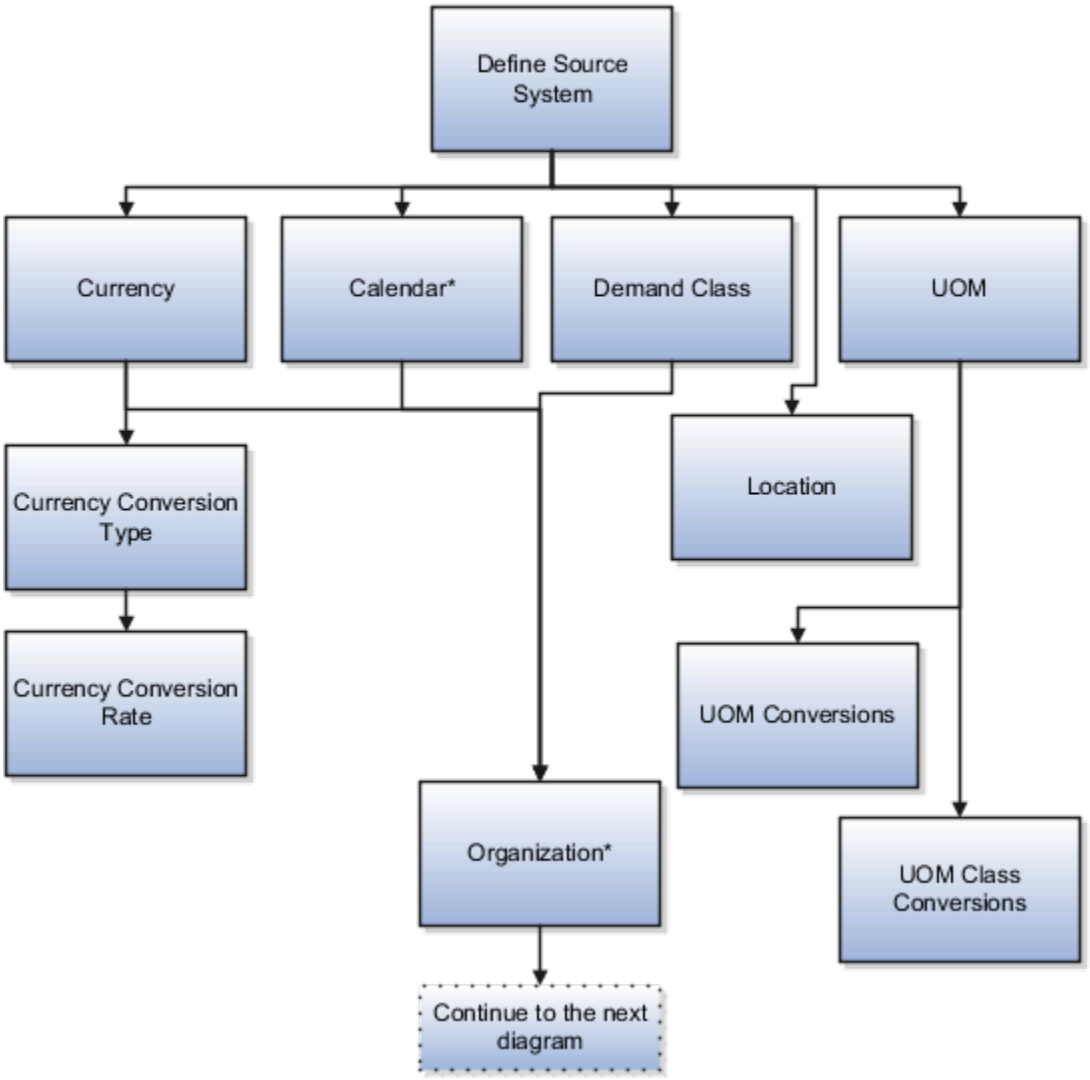
- Collection Sequence Part B for Sales and Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure

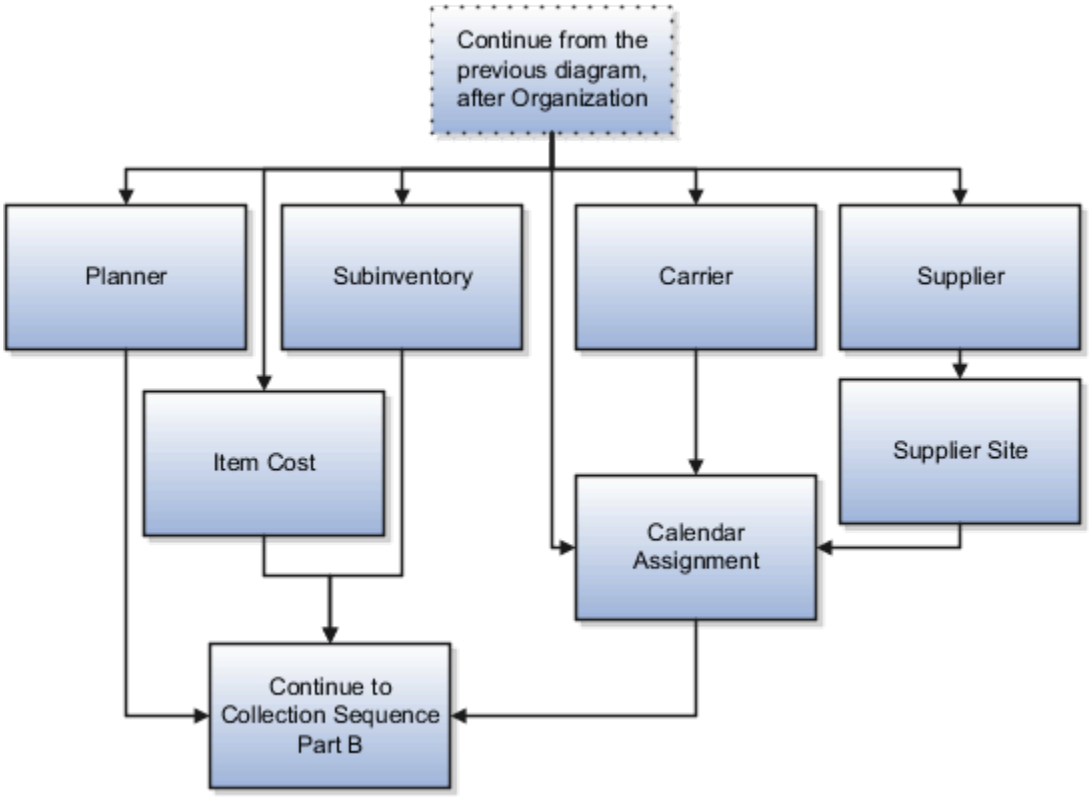
Collections Sequence Part A for Currency, Calendar, Demand Class, and UOM Data

The following image shows the collections sequence to follow while collecting Currency, Calendar, Demand Class, and UOM data from external source systems. Also, ensure that you collect Location before collecting Supplier Site.

> **Note:** The Calendar entity is marked with an asterisk because there are other entities that are associated with Calendar that you must collect in a sequence. To collect other entities associated with Calendar, see the Calendar Upload Sequence figure.

Collection Sequence Part A for Currency, Calendar, Demand Class and UOM Data



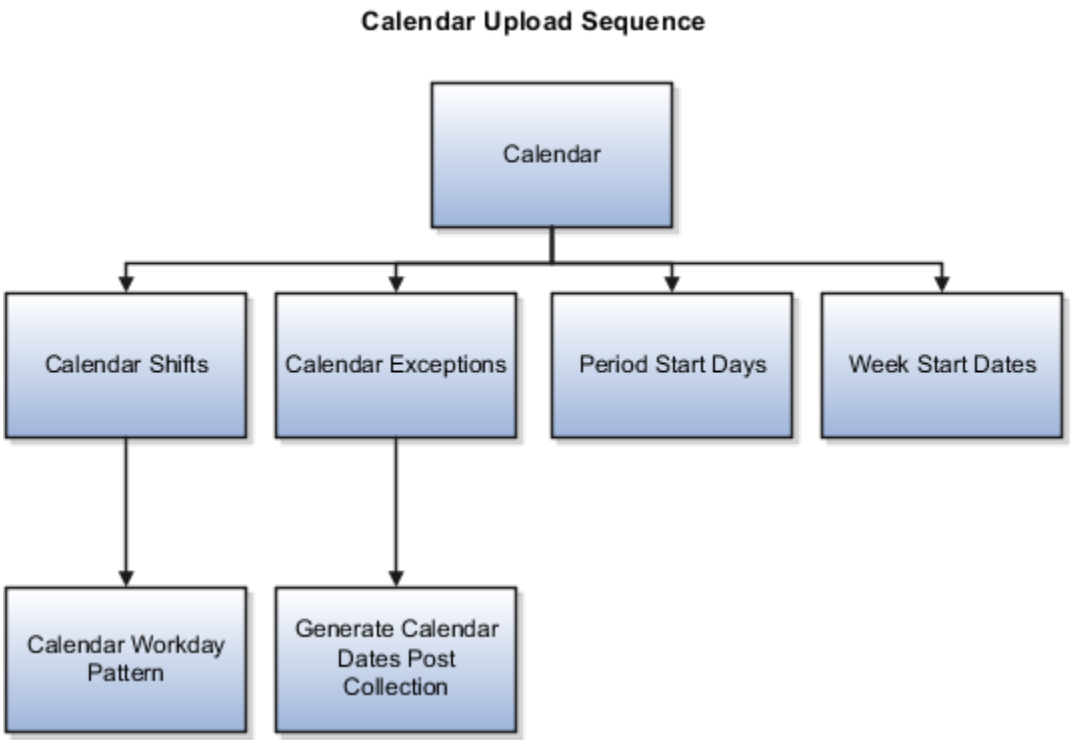


When you collect the data described here, continue to the collection sequence Part B described in the following subsections.

- Collection Sequence Part B for Sales and Order and Assignment Sets
- Collection Sequence Part B for Work Orders, Work Definition, and Item Structure

Collection Sequence for Calendar Data

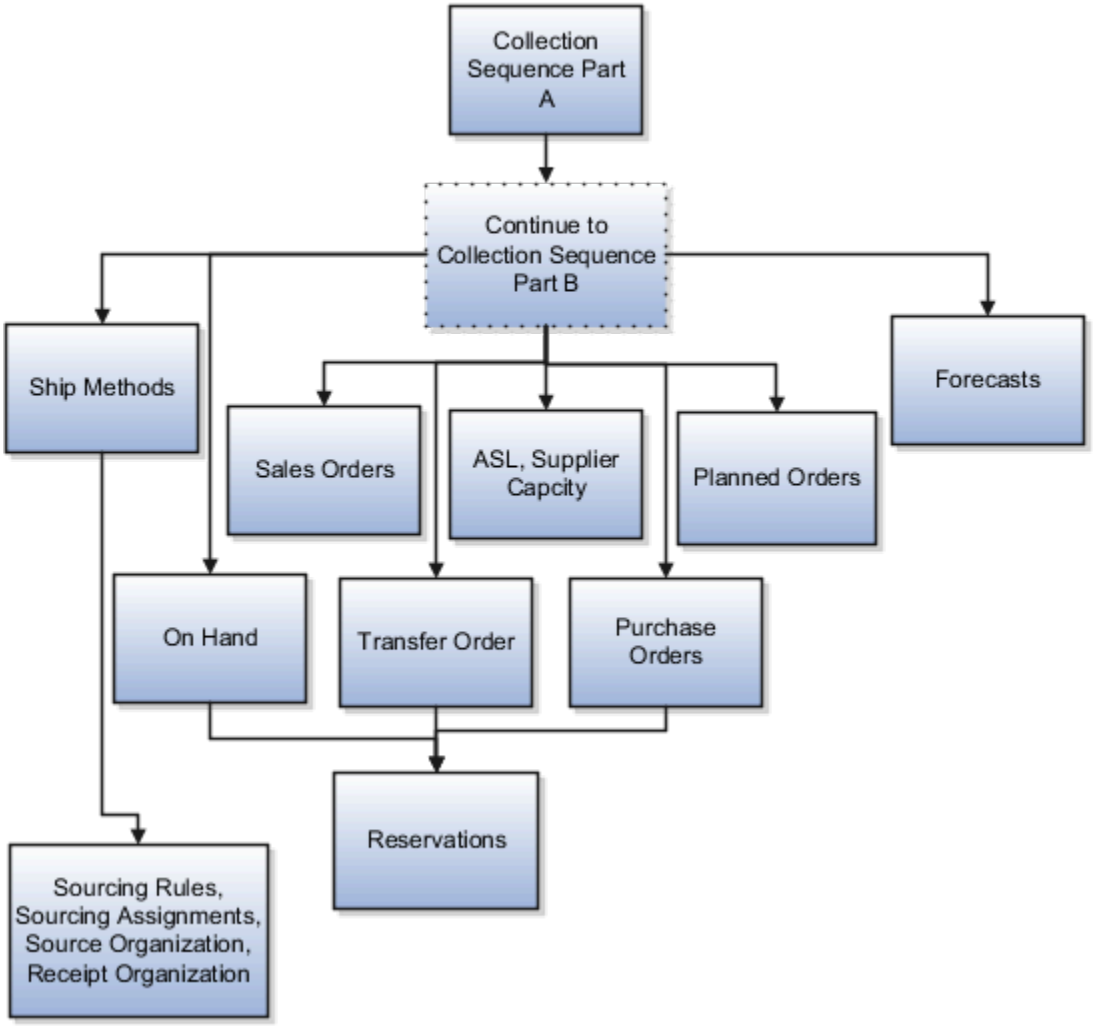
The following image shows the collections sequence to follow for collecting the Calendar data. Calendar data is a part of the data collection in Part A. You collect the Calendar data in the following subsection: Collection Sequence Part A for Currency, Calendar, Demand Class, and UOM Data.



Collections Sequence Part B for Sales Order and Assignment Sets

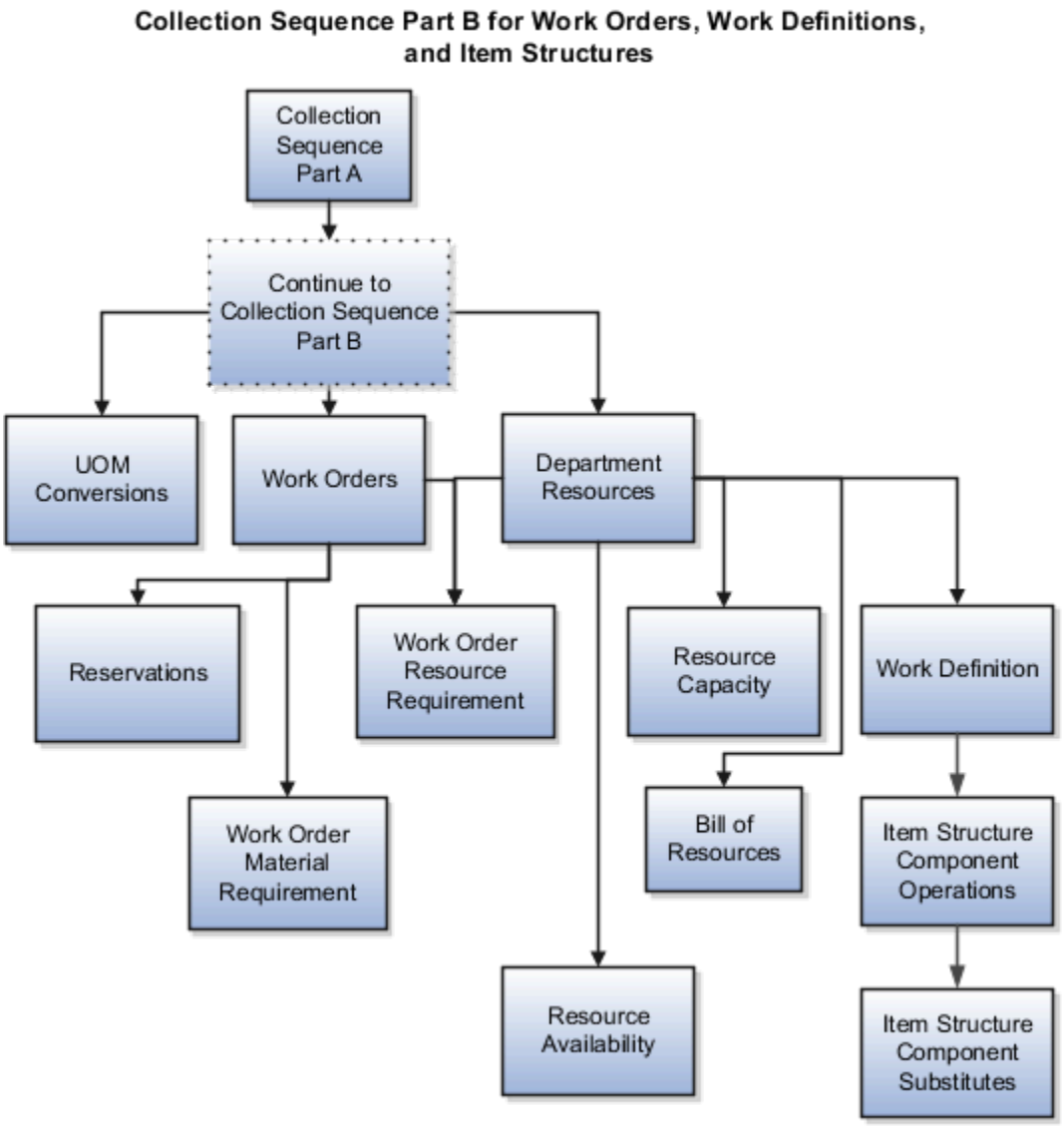
The following image shows the collections sequence to follow while collecting Sales Order and Assignment Sets data from external source systems. The data entities in Part B are dependent on Part A. So, you must collect entities listed in Part A before you collect the entities in Part B.

Collections Sequence Part B for Sales Orders and Assignments Sets



Collection Sequence Part B for Work Orders, Work Definition, and Item Structures

The following image shows the collections sequence to follow while collecting Work Orders, Work Definition, and Item Structure data from external source systems. The data entities in Part B are dependent on Part A. So, you must collect entities listed in Part A before you collect the entities in Part B.



Templates Used to Create CSV Files

You can use the Microsoft Excel templates (XLSM files) to prepare the data for the supported collection entities.

The templates are listed in the following guide: File-Based Data Import (FBDI) for SCM. Extract the templates to a local drive, enter appropriate data as described in the template, and generate CSV files. Compress the CSV files to a zipped file format and upload the .zip file to the Universal Content Manager using the File Import and Export utility. The data is then loaded from the Universal Content Manager to the planning data repository.

Collect Data from the Oracle Fusion Source

The following table lists the collections entities that can be loaded into the planning data repository for the Oracle Fusion source. The Collection Entity column provides the name of the entities for which you can collect the data. The XLSM File Name column provides the template name that you will download for the respective collection entity. Download the XLSM template from the File-Based Data Import (FBDI) for SCM guide. The Link in Data Import Guide

column provides the name of the topic in the FBDI guide from where you will download the template. For example, to collect data for the Item Costs collection entity, refer to the Item Cost Import topic in the FBDI guide.

Collections Entity	Link in Data Import Guide	XLSM File Name
Item Costs	Supply Chain Planning Item Cost	ScpItemCostImportTemplate.xlsm
Customer Specific Item Relationships	Supply Chain Planning Item Substitute	ScpItemSubstituteImportTemplate.xlsm
Planners	Supply Chain Planning Planners	ScpPlannersImportTemplate.xlsm
Item Suppliers	Supply Chain Planning Approved Supplier List	ScpApprovedSupplierListImportTemplate.xlsm
Demand Classes	Supply Chain Planning Demand Classes	ScpDemandClassImportTemplate.xlsm
Allocation Assignments and Allocation Rules	Supply Chain Planning Planning Allocation Rules	ScpPlanningAllocationRulesImportTemplate.xlsm
ATP Assignments and ATP Rules	Supply Chain Planning Available-to-Promise Rules	ScpATPRulesImportTemplate.xlsm
Supply Update Rules	Supply Chain Planning Real Time Supply Updates	ScpRealTimeSupplyUpdatesImportTemplate.xlsm
Measures	Supply Chain Planning Measures	ScpMeasuresImportTemplate.xlsm **Note:** You must use separate CSV files to collect measure data for measures with different dimensional granularity.
Booking History	Supply Chain Planning Bookings History	ScpBookingHistoryImportTemplate.xlsm
Option Booking History	Supply Chain Planning Option Bookings History	ScpOptionBookingHistoryImportTemplate.xlsm
Shipment History	Supply Chain Planning Shipments History	ScpShipmentHistoryImportTemplate.xlsm
Option Shipment History	Supply Chain Planning Option Shipments History	ScpOptionShipmentHistoryImportTemplate.xlsm
Price Lists	Supply Chain Planning Price List	ScpPriceListImportTemplate.xlsm
Causal Factors	Supply Chain Planning Causal Factors	ScpCausalFactorsImportTemplate.xlsm
Forecast Measures	Supply Chain Planning Forecast Measures	ScpForecastMeasureImportTemplate.xlsm

Collections Entity	Link in Data Import Guide	XLSM File Name
		Note: This template has been superseded by the generic template ScpMeasuresImportTemplate.xlsm, but will continue to be supported. Future enhancements will be made only to the generic measures template.
Fiscal Calendars	Supply Chain Planning Fiscal Calendars	ScpFiscalCalendarImportTemplate.xlsm
Forecasts	Supply Chain Planning External Forecasts	ScpExternalForecastImportTemplate.xlsm
Safety Stock Levels	Supply Chain Planning Safety Stock Levels	ScpSafetyStockLevelImportTemplate.xlsm
Supplier Capacity	Supply Chain Planning Approved Supplier Capacity	ScpApprovedSupplierCapacityImportTemplate.xlsm
Planned Order Supplies	Supply Chain Planning Planned Order Supply	ScpPlannedOrderSupplyImportTemplate.xlsm **Note:** This template is only used to load planned order supply to Global Order Promising.
Sourcing Rule and Assignments	Supply Chain Planning Sourcing Rules	ScpSourcingImportTemplate.xlsm
Cross-Reference Mapping Information	Supply Chain Planning Cross-Reference Data	ScpCrossReferenceDataImportTemplate.xlsm

Collect Data from External Source - Version Others

The following table lists the collections entities that can be loaded into the planning data repository from an external source, where the version is Others. The Collection Entity column provides the name of the entities for which you can collect the data. The XLSM File Name column provides the template name that you will download for the respective collection entity. Download the XLSM template from the File-Based Data Import (FBDI) for SCM guide. The Link in Data Import Guide column provides the name of the topic in the FBDI guide from where you will download the template. For example, to collect data for the Items and Item Costs collection entities, refer to the Item Cost Import topic in the FBDI guide.

Collections Entity	Link in Data Import Guide	XLSM File Name
Item Costs	Supply Chain Planning Item Cost	ScpItemCostImportTemplate.xlsm
Customer Specific Item Relationships	Supply Chain Planning Item Substitute	ScpItemSubstituteImportTemplate.xlsm
Planners	Supply Chain Planning Planners	ScpPlannersImportTemplate.xlsm

Collections Entity	Link in Data Import Guide	XLSM File Name
Organizations (Warehouses) and Organization Site (Including Organization Site - Internal Location Mapping)	Supply Chain Planning Organizations	ScpOrganizationImportTemplate.xlsm
Subinventories	Supply Chain Planning Subinventories	ScpSubInventoryImportTemplate.xlsm
Suppliers and Supplier Sites	Supply Chain Planning Suppliers	ScpPlanningSupplierImportTemplate.xlsm
Item Suppliers	Supply Chain Planning Approved Supplier List	ScpApprovedSupplierListImportTemplate.xlsm
Interlocation Shipping Networks	Supply Chain Planning Interlocation Shipping Methods	ScpInterLocationShipMethodsImportTemplate.xlsm
Currencies, Currency Conversion Types, and Currency Conversion Rates	Supply Chain Planning Currencies	ScpCurrencyImportTemplate.xlsm
Units of Measure, Units of Measure Conversions, and Units of Measure Class Conversions	Supply Chain Planning Units of Measure	ScpUOMImportTemplate.xlsm
Calendars, Calendar Exceptions, Calendar Shifts, Week Start Dates, Period Start Dates, and Calendar Shift Workday Pattern	Supply Chain Planning Calendars	ScpCalendarImportTemplate.xlsm
Calendar Associations	Supply Chain Planning Calendar Assignments	ScpCalendarAssignmentsImportTemplate.xlsm
Demand Classes	Supply Chain Planning Demand Classes	ScpDemandClassImportTemplate.xlsm
Ship Mode of Transport, Ship Class of Service, and Carrier	Supply Chain Planning Carriers	ScpCarrierImportTemplate.xlsm
Allocation Assignments and Allocation Rules	Supply Chain Planning Planning Allocation Rules	ScpPlanningAllocationRulesImportTemplate.xlsm
ATP Assignments and ATP Rules	Supply Chain Planning Available-to-Promise Rules	ScpATPRulesImportTemplate.xlsm
Supply Update Rule	Supply Chain Planning Real Time Supply Updates	ScpRealTimeSupplyUpdatesImportTemplate.xlsm
Freight Terms, FOB Points, Invoicing and Accounting Rules, Shipment Priorities, Payment Terms, Return Reason, Tax Classification Code, Tax Exemption Reason, Sales Credit Type, Activity Type, Document Categories, Payment Methods, and Receipt Methods	Supply Chain Planning Order Orchestration	ScpOrderOrchestrationImportTemplate.xlsm

Collections Entity	Link in Data Import Guide	XLSM File Name
Measures	Supply Chain Planning Measures	ScpMeasuresImportTemplate.xlsm **Note:** You must use separate CSV files to collect measure data for measures with different dimensional granularity.
Booking History	Supply Chain Planning Bookings History	ScpBookingHistoryImportTemplate.xlsm
Option Booking History	Supply Chain Planning Option Bookings History	ScpOptionBookingHistoryImportTemplate.xlsm
Shipment History	Supply Chain Planning Shipments History	ScpShipmentHistoryImportTemplate.xlsm
Option Shipment History	Supply Chain Planning Option Shipments History	ScpOptionShipmentHistoryImportTemplate.xlsm
Price Lists	Supply Chain Planning Price Lists	ScpPriceListImportTemplate.xlsm
Causal Factors	Supply Chain Planning Causal Factors	ScpCausalFactorsImportTemplate.xlsm
Forecasts Measures	Supply Chain Planning Forecast Measures	ScpForecastMeasureImportTemplate.xlsm **Note:** This template has been superseded by the generic template ScpMeasuresImportTemplate.xlsm, but will continue to be supported. Future enhancements will be made only to the generic measures template.
Fiscal Calendars	Supply Chain Planning Fiscal Calendars	ScpFiscalCalendarImportTemplate.xlsm
Forecasts	Supply Chain Planning External Forecast	ScpExternalForecastImportTemplate.xlsm
User-Defined Hierarchies	Supply Chain Planning User-Defined Hierarchies	ScpUser-DefinedHierarchyImportTemplate.xlsm
Safety Stock Levels	Supply Chain Planning Safety Stock Levels	ScpSafetyStockLevelImportTemplate.xlsm
Supply Reservations to Sales Orders	Supply Chain Planning Reservations	ScpReservationImportTemplate.xlsm
On Hand	Supply Chain Planning Supply On Hand	ScpOnhandImportTemplate.xlsm

Collections Entity	Link in Data Import Guide	XLSM File Name
Purchase Orders, Purchase Requisitions, PO in Receiving, and In Transits	Supply Chain Planning Purchase Order Requisitions	ScpPurchaseOrderRequisitionImportTemplate.xlsm
Transfer Orders	Supply Chain Planning Transfer Orders	ScpTransferOrderImportTemplate.xlsm
Supplier Capacity	Supply Chain Planning Approved Supplier Capacity	ScpApprovedSupplierCapacityImportTemplate.xlsm
Resources and Resource Shifts	Supply Chain Planning Resources	ScpResourcesImportTemplate.xlsm
Resource Availability	Supply Chain Planning Resource Availability	ScpResourceAvailabilityImportTemplate.xlsm
Work Definition (Including mapping between Item Structures and Work Definitions), Work Definition Operations, and Work Definition Operation Resources	Supply Chain Planning Routings	ScpRoutingsImportTemplate.xlsm
Work Order Supply	Supply Chain Planning Work Order Supplies	ScpWorkOrderSuppliesImportTemplate.xlsm
Work Order Material Requirements	Supply Chain Planning Work Order Component Demands	ScpWIPComponentDemandsImportTemplate.xlsm
Work Order Resource Requirements	Supply Chain Planning Work Order Operation Resources	ScpWIPOperationResourceImportTemplate.xlsm
Planned Order Supplies	Supply Chain Planning Planned Order Supply	ScpPlannedOrderSupplyImportTemplate.xlsm **Note:** This template is only used to load planned order supply to Global Order Promising.
Sourcing Rule and Assignments	Supply Chain Planning Sourcing Rules	ScpSourcingImportTemplate.xlsm
Cross Reference Mapping Information	Supply Chain Planning Cross-Reference Data	ScpCrossReferenceDataImportTemplate.xlsm
Key Customer Options	Supply Chain Planning Key Customer Options	ScpKeyCustomerOptionsImportTemplate.xlsm

Collect Data from External Source - Version External

The following table lists the collections entities that can be loaded into the planning data repository from an external source, where the version is External. The Collection Entity column provides the name of the entities for which you can collect the data. The XLSM File Name column provides the template name that you will download for the respective collection entity. Download the XLSM template from the File-Based Data Import (FBDI) for SCM guide. The Link in Data Import Guide column provides the name of the topic in the File-Based Data Import (FBDI) for SCM guide from where you will download the template. For example, to collect data for the Items and Item Costs collection entities, refer to the

Item Cost Import topic in the File-Based Data Import (FBDI) for SCM guide. All the planning-related entity names are prefixed with Supply Chain Planning in the FBDI guide.

Collection Entities	Link in FBDI Guide	XLSM File Name
Items	Supply Chain Planning Items	ScpItemImportTemplate.xlsm
Item Costs	Supply Chain Planning Item Cost	ScpItemCostImportTemplate.xlsm
Item Relationships	Supply Chain Planning Item Substitute	ScpItemSubstituteImportTemplate.xlsm
Catalogs, Categories, and Item Categories	Supply Chain Planning Catalogs	ScpCatalogImportTemplate.xlsm.xlsm
Item Structures	Supply Chain Planning Item Structures	ScpBillofMaterialImportTemplate.xlsm
Bill of Resources	Supply Chain Planning Bill of Resources	ScpBillOfResourcesImportTemplate.xlsm
Planners	Supply Chain Planning Planners	ScpPlannersImportTemplate.xlsm
Customers and Customer Sites	Supply Chain Planning Customers	ScpCustomerImportTemplate.xlsm
Regions	Supply Chain Planning Regions	ScpRegionsImportTemplate.xlsm
Zones	Supply Chain Planning Zones	ScpZonesImportTemplate.xlsm
Region-Zone Mapping	Supply Chain Planning Region Zone Mappings	ScpRegionZoneMappingImportTemplate.xlsm
Locations and Region-Location Mapping	Supply Chain Planning Locations	ScpLocationsImportTemplate.xlsm
Organizations and Organization Sites	Supply Chain Planning Organizations	ScpOrganizationImportTemplate.xlsm
Subinventories	Supply Chain Planning Subinventories	ScpSubInventoryImportTemplate.xlsm
Suppliers and Supplier Sites	Supply Chain Planning Suppliers	ScpSupplierImportTemplate.xlsm
Item Suppliers (Approved Supplier List)	Supply Chain Planning Approved Supplier List	ScpApprovedSupplierListImportTemplate.xlsm
Interlocation Shipping Networks and Transit Times	Supply Chain Planning Interlocation Shipping Methods	ScpInterLocationShipMethodsImportTemplate.xlsm
Currencies and Currency Conversions	Supply Chain Planning Currencies	ScpCurrencyImportTemplate.xlsm
Units of Measure, Units of Measure Conversions, and Units of Measure Class Conversions	Supply Chain Planning Units of Measure	ScpUOMImportTemplate.xlsm

Collection Entities	Link in FBDI Guide	XLSM File Name
Calendars, Calendar Exceptions, Shifts, Shift Workday Pattern, Week Start Dates, and Period Start Dates	Supply Chain Planning Calendars	ScpCalendarImportTemplate.xlsm
Calendar Associations	Supply Chain Planning Calendar Assignments	ScpCalendarAssignmentsImportTemplate.xlsm
Demand Classes	Supply Chain Planning Demand Classes	ScpDemandClassImportTemplate.xlsm
Carrier, Ship Mode of Transport, and Ship Class of Service	Supply Chain Planning Carriers	ScpCarrierImportTemplate.xlsm
GOP Allocation Rules and Rule Assignments	Supply Chain Planning Planning Allocation Rules	ScpPlanningAllocationRulesImportTemplate.xlsm
GOP ATP Rules and Rule Assignments	Supply Chain Planning Available-to-Promise Rules	ScpATPRulesImportTemplate.xlsm
GOP Supply Update Rules	Supply Chain Planning Real Time Supply Updates	ScpRealTimeSupplyUpdatesImportTemplate.xlsm
Order Orchestration Reference Objects: Freight Terms, FOB Points, Invoicing and Accounting Rules, Shipment Priorities, Payment Terms, Return Reason, Tax Classification Code, Tax Exemption Reason, Sales Credit Type, Activity Type, Document Categories, Payment Methods, and Receipt Methods	Supply Chain Planning Order Orchestration	ScpOrderOrchestrationImportTemplate.xlsm
Cross Reference Mapping Information	Supply Chain Planning Cross-Reference Data	ScpCrossReferenceDataImportTemplate.xlsm
Measures	Supply Chain Planning Measures	ScpMeasuresImportTemplate.xlsm **Note:** You must use separate CSV files to collect measure data for measures with different dimensional granularity.
Booking History	Supply Chain Planning Bookings History	ScpBookingHistoryImportTemplate.xlsm
Option Booking History	Supply Chain Planning Option Bookings History	ScpOptionBookingHistoryImportTemplate.xlsm
Shipment History	Supply Chain Planning Shipments History	ScpShipmentHistoryImportTemplate.xlsm
Option Shipment History	Supply Chain Planning Option Shipments History	ScpOptionShipmentHistoryImportTemplate.xlsm

Collection Entities	Link in FBDI Guide	XLSM File Name
Price Lists	Supply Chain Planning Price Lists	ScpPriceListImportTemplate.xlsm
Causal Factors	Supply Chain Planning Causal Factors	ScpCausalFactorsImportTemplate.xlsm
Forecast Measures	Supply Chain Planning Forecast Measures	ScpForecastMeasureImportTemplate.xlsm **Note:** This template has been superseded by the generic template ScpMeasuresImportTemplate.xlsm, but will continue to be supported. Future enhancements will be made only to the generic measures template.
Fiscal Calendars	Supply Chain Planning Fiscal Calendars	ScpFiscalCalendarImportTemplate.xlsm
Measures, Sales and Operations Planning Backlog, Inventory, and Production History	Supply Chain Planning Measures	ScpMeasuresImportTemplate.xlsm **Note:** You must use separate CSV files to collect measure data for measures with different dimensional granularity.
User-Defined Hierarchies	Supply Chain Planning User-Defined Hierarchies	ScpUser-DefinedHierarchyImportTemplate.xlsm
Forecasts	Supply Chain Planning External Forecasts	ScpExternalForecastImportTemplate.xlsm
Sales Orders	Supply Chain Planning Sales Orders	ScpSalesOrderImportTemplate.xlsm
Safety Stock Levels	Supply Chain Planning Safety Stock Levels	ScpSafetyStockLevelImportTemplate.xlsm
Supply Reservations to Sales Orders	Supply Chain Planning Reservations	ScpReservationImportTemplate.xlsm
On Hand	Supply Chain Planning Supply On Hand	ScpOnhandImportTemplate.xlsm
Purchase Orders, Purchase Requisitions, PO in Receiving, In Transits	Supply Chain Planning Purchase Order Requisitions	ScpPurchaseOrderRequisitionImportTemplate.xlsm
Transfer Orders (including expense type transfers)	Supply Chain Planning Transfer Orders	ScpTransferOrderImportTemplate.xlsm

Collection Entities	Link in FBDI Guide	XLSM File Name
Supplier Capacity	Supply Chain Planning Approved Supplier Capacity	ScpApprovedSupplierCapacityImportTemplate.xlsm
Resources, Resource Shifts	Supply Chain Planning Resources	ScpResourcesImportTemplate.xlsm
Resource Availability	Supply Chain Planning Resource Availability	ScpResourceAvailabilityImportTemplate.xlsm
Work Definition (including mapping between Item Structures and Work Definitions), Work Definition Operations, Work Definition Operation Resources	Supply Chain Planning Routings	ScpRoutingsImportTemplate.xlsm
Work Order Supply	Supply Chain Planning Work Order Supplies	ScpWorkOrderSuppliesImportTemplate.xlsm
Work Order Material Requirements	Supply Chain Planning Work Order Component Demands	ScpWIPComponentDemandsImportTemplate.xlsm
Work Order Resource Requirements	Supply Chain Planning Work Order Operation Resources	ScpWIPOperationResourceImportTemplate.xlsm
Planned Order Supplies	Supply Chain Planning Planned Order Supply	ScpPlannedOrderSupplyImportTemplate.xlsm **Note:** This template is only used to load planned order supply to Global Order Promising.
Sourcing Rule and Assignments	Supply Chain Planning Sourcing Rules	ScpSourcingImportTemplate.xlsm
Key Customer Options	Supply Chain Planning Key Customer Options	ScpKeyCustomerOptionsImportTemplate.xlsm

Related Topics

- Run the Load Planning Data from Files Process

Loading of Measure Data at Aggregate Levels

Use the file-based data import (FBDI) templates to load measure data at aggregate levels for your module in Oracle Fusion Cloud Applications.

About the Aggregation and Disaggregation of Measure Data

When you load data for a measure at an aggregate level, you're loading data at a level that's higher than the level that the data is stored at.

When measure data is loaded at an aggregate level, it's disaggregated to the stored level during the data refresh. The data refresh occurs when you run your plan by refreshing it with current data using the Run Plan dialog box or **Batch Run Plan** scheduled process. The data refresh also occurs when you submit the scheduled process named **Orchestrate Refresh Measures Processes**.

For example, the Sales Forecast measure is stored at the Customer Site, Demand Class, Organization, Item, Sales Rep, and Day levels. If you load the measure at the Customer (parent level for Customer Site), Demand Class, Organization, Category Level 1 (parent level for Item), Sales Rep, and Day levels, when you run your plan while refreshing it with current data, the data will be disaggregated from the Customer level to the Customer Site level and from the Category Level 1 level to the Item level based on the demand history. The data is disaggregated for only those customer sites and items for which demand history was loaded at the stored levels, or the data for another measure with the same stored levels as the Sales Forecast measure was loaded at the stored levels.

More Points About Loading Measure Data at Aggregate Levels

Note these points about loading measure data at aggregate levels:

- Before loading measure data at an aggregate level, you must first load historical demand data because it's used as the basis for disaggregating measure data loaded or generated at an aggregate level.

  Historical demand data must be loaded at the levels that it's stored at: Item, Organization, Customer Site, Demand Class, Sales Rep, and Day. The Demand Class is required for demand, demand and supply, and sales and operations plans and is optional for replenishment plans. The Sales Rep level is required for only sales and operations plans.
- You must use the import templates to load measures for historical demand data as follows:
  - Supply Chain Planning Bookings History (ScpBookingHistoryImportTemplate.xlsm)
    - Bookings History: Booked Item by Booked Date
    - Bookings History: Booked Item by Promised Date
    - Bookings History: Booked Item by Requested Date
    - Bookings History: Booked Item by Scheduled Ship Date
    - Bookings History: Requested Item by Booked Date
    - Bookings History Value: Booked Item by Booked Date
    - Bookings History Value: Booked Item by Promised Date
    - Bookings History Value: Booked Item by Requested Date
    - Bookings History Value: Booked Item by Scheduled Ship Date
    - Bookings History Value: Requested Item by Booked Date
  - Supply Chain Planning Option Bookings History (ScpOptionBookingHistoryImportTemplate.xlsm)
    - Option Bookings History
  - Supply Chain Planning Option Shipments History (ScpOptionShipmentHistoryImportTemplate.xlsm)
    - Option Shipments History
  - Supply Chain Planning Shipments History (ScpShipmentHistoryImportTemplate.xlsm)
    - Shipments History: Requested Item by Shipped Date
    - Shipments History: Shipped Item by Promised Date
    - Shipments History: Shipped Item by Requested Date
    - Shipments History: Shipped Item by Scheduled Ship Date
    - Shipments History: Shipped Item by Shipped Date
    - Shipments History Value: Requested Item by Shipped Date
    - Shipments History Value: Shipped Item by Promised Date
    - Shipments History Value: Shipped Item by Requested Date

    - Shipments History Value: Shipped Item by Scheduled Ship Date
    - Shipments History Value: Shipped Item by Shipped Date

- You can load forecast data at the level that it's stored at or an aggregate level using the import template named Supply Chain Planning Forecast Measures (ScpForecastMeasureImportTemplate.xlsm) for these measures:
    - Imported Forecast
    - Marketing Forecast
    - Marketing Forecast Value
    - Sales Forecast
    - Sales Forecast Value
- You can use the import template named Supply Chain Planning Measures (ScpMeasuresImportTemplate.xlsm) to load any measure for which a specific import template isn't available.
- Before you load data at an aggregate level for a measure, you must already have loaded another measure with the same dimensions and stored levels as the first measure. Otherwise, the underlying combinations for the dimension levels won't exist, and the aggregate data can't be disaggregated. The underlying dimensions and levels for both measures need to be the same.

  For example, assume that you've a measure called MyForecast that has the Product, Organization, and Time dimensions and is stored at the Item, Organization, and Day levels. Before you can load MyForecast at an aggregate level such as Category Level 1, Business Unit, and Month, you should have loaded another measure with the same dimensions at the Item, Organization, and Day levels. Otherwise, the underlying item-organization-day combinations won't exist, and aggregate data for MyForecast won't be disaggregated. If the second measure included the Customer dimension, the disaggregation of data for MyForecast won't happen.
- Don't load the same measure at different levels of aggregation. For example, don’t load a measure at both the Category Level 1 and Category Level 2 levels.
- When loading measure data at an aggregate level, you must specify the name of the hierarchy and level that you’re using in the import templates. Also, ensure that the hierarchy is included in the dimension catalog selected for your plan.

  For a demand plan that's using a hybrid time hierarchy, you can import data to any aggregate level for the hybrid time hierarchy that you selected as the planning calendar or a corresponding hybrid time hierarchy. If you're not importing data at the time level of the measure, enter the name of the hybrid time hierarchy in the Time Hierarchy Name column of the import template.
- For your demand, demand and supply, sales and operations, or supply plan, for plan-specific measures that include the Customer dimension, you can load the aggregate data without specifying a customer level by entering the **#ignore** parameter in the Customer Level Name column of the import templates. In this case, you must not enter any value in the Customer Level Member Name and Customer Site Level Member Name columns. Effectively, you’re aggregating the data by the customer level, and the aggregate data is disaggregated to the existing customer sites based on the disaggregation parameters of the measures.

  If you don’t want to specify the customer level name, then you must use the #ignore parameter while loading data at the stored level and also at the aggregate level.

  > **Note:** For a replenishment plan, for plan-specific measures that include the Customer dimension, you must enter the **#ignore** parameter in the Customer Level Name column of your import template to ignore the Customer dimension in the imported measure data because this dimension isn’t supported for replenishment plans. Otherwise, the load process will fail. You must enter this parameter while loading data at the stored and aggregate levels.

- For your demand, demand and supply, sales and operations, or supply plan, for measures that include the Demand Class dimension, you can load the aggregate data without specifying a demand class level by entering the **#ignore** parameter in the Demand Class Level Name column of the import templates. In this case, you must not enter any value in the Demand Class Level Member Name column. Effectively, you're aggregating the data by the demand class level, and the aggregate data is disaggregated to the existing demand classes based on the disaggregation parameters of the measures.

  If you don't want to specify the demand class, then you must use the #ignore parameter while loading data at the stored level and also at the aggregate level.

  > **Note:** For a replenishment plan, for plan-specific measures that include the Demand Class dimension, you must enter the **#ignore** parameter in the Demand Class Level Name column of your import template to ignore the Demand Class dimension in the imported measure data because this dimension isn't supported for replenishment plans. Otherwise, the load process will fail. You must enter this parameter while loading data at the stored and aggregate levels.

- After you load data for a measure, during the subsequent plan run, data can either be aggregated or disaggregated based on the planning time level of the plan. However, both aggregation and disaggregation of measure data can't happen at the same time. This limitation usually crops up when the measure includes the Time dimension, and the planning time level is higher than a day. Don't load measure data that needs to be disaggregated on one dimension and aggregated on another dimension.

  Consider an example in which you've a measure that's defined at the levels of Item, Organization, Customer Site, Demand Class, and Day. The following table explains what happens when you load the measure for a day-level plan and a month-level plan:

Load Level	Planning Time Level	Scenario Supported?	Comment
Item, Organization, Customer Site, Demand Class, Day	Day	Yes	The load is at the stored level. During the plan run, no aggregation or disaggregation of the data is done.
Item, Organization, Customer Site, Demand Class, Month	Day	Yes	The load is at the aggregate level. Data is aggregated by the Time dimension. During the plan run, the data is disaggregated from month to day.
Item, Organization, Customer Class, Demand Class, Day	Day	Yes	The load is at the aggregate level. Data is aggregated by the Customer dimension. During the plan run, the data is disaggregated from customer class to customer site.

Load Level	Planning Time Level	Scenario Supported?	Comment
Item, Organization, Customer Class, Demand Class, Month	Day	Yes	The load is at the aggregate level. Data is aggregated by the Customer and Time dimensions. During the plan run, the data is disaggregated from month to day and then from customer class to customer site.
Item, Organization, Customer Site, Demand Class, Day	Month	Yes	The load is at the stored level. During the plan run, the data is aggregated from day to month.
Item, Organization, Customer Site, Demand Class, Month	Month	Yes	The load is at the aggregate level. Data is aggregated by the Time dimension. During the plan run, no aggregation or disaggregation of the data is done.
Category Level 2, Business Unit, Customer Site, Demand Class, Month	Month	Yes	The load is at the aggregate level. Data is aggregated by the Product, Organization, and Time dimensions. During the plan run, data is disaggregated from category to item and from business unit to organization.
Category Level 2, Organization, Customer Site, Demand Class, Day	Month	No	The load is at the aggregate level. Data is aggregated by the Product dimension. During the plan run, the data must be aggregated from day to month and then disaggregated from category to item. This scenario isn't supported. In this case, the records are collected but won't show up in the plan.

Related Topics

- Import Templates Used to Create CSV Files for Supply Chain Planning

Run the Load Planning Data from Files Process

To load planning data from files, first you must prepare the data you want to load.

To prepare the data, download the relevant XLSM template, update the XLSM template with required data, and create the necessary CSV files for upload. This procedure explains how to load planning data from files after you have prepared the data and created CSV files.

1. From the Navigator, use the File Import and Export page to upload the previously prepared and zipped CSV files to the Universal Content Manager. Use the scm/planningDataLoader/import account to upload the zipped file.

   > **Note:** For more information about uploading files to the Universal Content Manager server, see the following section in the Implementing Common Features for SCM guide: External Integration chapter, External Data Integration Services for Oracle Cloud section.

2. From one of the Supply Chain Planning work areas or Setup and Maintenance work area, Supply Chain Planning offering, select the Load Planning Data from Files task.
3. Complete the following parameters on the Load Planning Data from Files page:
   a. Select the source system.
   b. Select Collection Type: **Net change** or **Target**.
   c. Select the .zip file you previously imported into the Universal Content Manager.
4. Click **Submit**. Make a note of the process ID. You will need this process ID to review the status of the process.

Related Topics

- Create CSV Files to Load Planning Data

Load Planning Data from Files for a Selected Group of Organizations

When you load planning data from files for the net change or targeted collection type, you can enable organization group collection and then select an organization group.

Data is collected for only the organizations in the organization group, and the purge of data before the load of the new data is also done for only the organizations in the organization group. That is, previously collected data for organizations that aren't included in the organization group is retained when you're doing collections using the file-based data import (FBDI) process.

> **Note:** Enabling organization group collection isn't applicable to reference entities and entities for Oracle Demand Management, such as history, measures, and price lists.

Parameters for the Load Planning Data from Flat Files Scheduled Process

These are the parameters for the **Load Planning Data from Flat Files** scheduled process:

- Source System: The source system for the data determines which organization groups are applicable.

- Collection Type: You must select **Net change** or **Targeted**.
- Data File: The file previously uploaded to the Oracle WebCenter Content server.
- Enable Organization Group Collection: Select **Yes** for this parameter.
- Organization Group: Select an organization group.

Organization Groups

The organization group you can select for the Organization Group parameter is determined by:

- Which source system you select for the Source System parameter
- What organization groups are set up for that source system

You set up organization groups in the Manage Organization Groups dialog box that you open from the Organizations tab on the Maintain Supply Network Model page.

Example

Here's an example that shows how data is retained for organizations in other organization groups when you load planning data for a selected organization group.

For this example, let's say you've three organizations and two organization groups, and the source for your data is the EX1 source system.

- Organization group OG1 includes organization M1.
- Organization group OG2 includes organizations B1 and B2.

First, you load planning data for the OG1 organization group for the Work Order Supplies entity. Two rows of data are collected for the OG1 organization group.

Item	Organization	Order Type	Order Quantity	Suggested Due Date
Item 1	EX1:M1	Work order	10	2/14/22
Item 2	EX1:M1	Work order	15	2/11/22

Then, you load planning data for the OG2 organization group for the Work Order Supplies entity.

- Three rows of data are collected for the OG2 organization group.
- The two rows that were previously collected for the OG1 organization group are retained.

Item	Organization	Order Type	Order Quantity	Suggested Due Date
Item 1	EX1:M1	Work order	10	2/14/22
Item 2	EX1:M1	Work order	15	2/11/22
Item 1	EX1:B1	Work order	11	2/09/22

Item	Organization	Order Type	Order Quantity	Suggested Due Date
Item 1	EX1:B2	Work order	16	1/31/22
Item 2	EX1:B2	Work order	10	2/09/22

Applicable Entities

You can use FBDI templates to load data for organization groups for these entities:

Source	Entities
From an Oracle Fusion Cloud SCM source	• External Forecasts • Planned Order Supply • Safety Stock Levels
From an Oracle Fusion Cloud SCM source for which you've selected the **Enable external data** check box and other check boxes in the Select Data Sources dialog box that you open from the Setup and Maintenance work area, Supply Chain Planning Configuration functional area, Manage Planning Source Systems page	• On Hand • Transfer Orders • Purchase Orders and Purchase Requisitions • Sales Order and Associated Reservations • Work Order Component Demands • Work Order Supplies, Work Order By-Product and Co-Product Supplies, Work Order Operation Resources • Resource Availability **Note:** These entities are in addition to those mentioned in the previous row for the Oracle Fusion Cloud SCM source.
From an external source	• External Forecasts • Movement Requests • Planned Order Supply • Purchase Orders and Purchase Requisitions • Reservations • Safety Stock Levels • Sales Orders • Transfer Orders • On Hand • Work Order Component Demands • Work Order Supplies, Work Order By-Product and Co-Product Supplies, Work Order Operation Resources • Resource Availability

More Details About Using Organization Groups for Loading Data

Here are a few more details to know about loading planning data from files for a selected group of organizations:

- If you've included the history, measures, or price list entities in a data file used during collections with organization group collection enabled, collections will be done for these entities for all organizations and not just the organizations in the groups.
- If you've included reference data entities in a data file used during collections with organization group collection enabled, these entities will be ignored.
- Data security created and enabled at the organization level for any role isn't applied to organization groups.
- You can submit the **Load Planning Data from Flat Files** scheduled process multiple times to specify a different organization group for each submission. The submissions are processed in the order of submission.
- You can specify an organization group when you submit the **Load Planning Data from Flat Files** scheduled process or when using a scheduled process job set.
- You can specify an organization group when you submit the **Load Planning Data from Flat Files** scheduled process using the ERP Integrations REST resource.
- If you use the Collect Planning Data page to collect some of your data, note that you can use organization groups for only the net change collection type. For the targeted collection type, you must use the collection filter named Organizations Filter for Transaction Data.

Related Topics

- Enable External Data Collection for the Oracle Fusion Source System
- Enable Organization Group Collection for the Net Change Collection Type

Improve Performance of Measure Disaggregation

Overview of Improving Performance While Disaggregating Measure Data

While importing data at an aggregate level to stored measures for Oracle Fusion Cloud Supply Chain Planning, you can improve the performance by enabling multithreading for the disaggregation process.

While using the file-based data import (FBDI) template named Supply Chain Planning Measures, you can import data at the stored levels or aggregate levels of the stored levels. For example, if your measure is configured with the dimension levels of Item, Organization, Sales Rep, Customer Site, Demand Class, and Day, you can import data at these stored levels or aggregate levels, such as product category, business unit, sales organization level, customer, demand class, and month.

Measure data that's collected at an aggregate level is disaggregated to the stored levels during the data refresh step in a plan run or when you incrementally refresh a plan after loading new measure data.

By default, the process for disaggregating the measure data is single-threaded. Consequently, long processing times can result when there's a large volume of measure data to disaggregate.

To improve performance, you can configure disaggregation to run as a multithreaded process. The disaggregation process runs in parallel for different time ranges within the time range for the collected measure data.

The multithreaded process runs in 90-day increments by default. For example, if you've collected measure data at an aggregate level for the past year (365 days), then the process runs five disaggregation jobs in parallel, four jobs of 90 days each and one job for the remaining five days of data.

You can do the following:

- Enable multithreading for measure data disaggregation for all plans in the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area.
- Enable multithreading for measure data disaggregation for a single plan that's enabled for demand forecasting.
- Override the default of 90 days for the multithreaded process.

Related Topics

- Enable Multithreading for Measure Data Disaggregation for All Plans
- Enable Multithreading for Measure Data Disaggregation for a Single Plan
- Override the Default Value for the Multithreaded Process

Enable Multithreading for Measure Data Disaggregation for All Plans

You can enable multithreading for measure data disaggregation for all demand, demand and supply, replenishment, sales and operations, or supply plans.

Before you start

You may need to work with someone who has administration privileges to make these profile-related changes.

Here's what to do

1. In the Demand Management, Demand and Supply Planning, Plan Inputs, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area, on the Tasks panel tab, under Configuration, select **Manage Planning Profile Options**.

   The Manage Planning Profile Options page opens.
2. Search for the SCP_PARAMETER_OVERRIDES profile option code.
3. If the SCP_PARAMETER_OVERRIDES profile option code exists, then click the **New** icon.

   A new row appears for the profile value.
4. Add the profile value as follows:
   - Profile Level: Select **Site** to set the value globally for all users. Select **User** to set the value for a specific user, in which case you must then select a user. User-level values take precedence over the site-level value.
   - Profile Value: Enter **enableParallelDisaggMeasure=true**.

   > **Note:** You can enter multiple profile values for a profile level provided you separate them with the space or semicolon. Whether you can select the site or user depends on the enabled levels in the profile option.
5. Click **Save and Close**.
6. If the SCP_PARAMETER_OVERRIDES profile option code doesn't exist, then follow these steps:
   a. In the Setup and Maintenance work area, go to the **Manage Profile Options** task.

      The Manage Profile Options page opens.
   b. Click **New**.

      The Create Profile Option page opens.
   c. Create the profile option as follows:
      - Profile Option Code: SCP_PARAMETER_OVERRIDES

- Profile Display Name: SCP_PARAMETER_OVERRIDES
- Application: Planning Common
- Module: Planning Common
- Start Date: Current date

Leave the remaining fields blank.

7. Click **Save and Close**.
8. For the profile option levels for the profile option, select the check boxes under the **Enabled** and **Updatable** columns for both the Site and User levels.
9. Click **Save and Close**.
10. In your work area, open the Manage Planning Profile Options page.
11. Search for the SCP_PARAMETER_OVERRIDES profile option code.
12. Set the profile level and value as previously explained.
13. Click **Save and Close**.

Related Topics

- Overview of Improving Performance While Disaggregating Measure Data
- Enable Multithreading for Measure Data Disaggregation for a Single Plan
- Override the Default Value for the Multithreaded Process

Enable Multithreading for Measure Data Disaggregation for a Single Plan

You can enable multithreading for measure data disaggregation for a single, forecast-enabled plan in the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, or Sales and Operations Planning work area.

1. In your work area, open the Plan Options page for your forecast-enabled plan.
2. On the Demand tab, click **Select Advanced Options**.
   The Demand: Advanced Options dialog box opens.
3. In Forecasting Control Parameters, in **Parameter Overrides**, enter **enableParallelDisaggMeasure=true**.

> **Note:** You can enter multiple values in the **Parameter Overrides** field provided you separate them with the number sign (#).

4. Click **Done**.
5. Save your plan.

Related Topics

- Overview of Improving Performance While Disaggregating Measure Data
- Enable Multithreading for Measure Data Disaggregation for All Plans
- Override the Default Value for the Multithreaded Process

Override the Default Value for the Multithreaded Process

After you've enabled multithreading for the measure disaggregation process for all plans in your work area or a single, forecast-enabled plan, you can override the default value of 90 days for the process.

Before you start

You may need to work with someone who has administration privileges to make these profile-related changes.

Here's what to do

1. In the Setup and Maintenance work area, go to the **Manage Profile Options** task.
   The Manage Profile Options page opens.
2. Click **New**.
   The Create Profile Option page opens.
3. Create a profile option as follows:
   - Profile Option Code: MSC_DISAGG_PERF_BATCH_SIZE
   - Profile Display Name: MSC_DISAGG_PERF_BATCH_SIZE
   - Application: Planning Common
   - Module: Planning Common
   - Start Date: Current date

   Leave the remaining fields blank.
4. Click **Save and Close**.
5. For the profile option levels for the profile option, select the check boxes under the **Enabled** and **Updatable** columns for both the Site and User levels.
6. Click **Save and Close**.
7. In the Demand Management, Demand and Supply Planning, Plan Inputs, Planning Central, Replenishment Planning, Sales and Operations Planning or Supply Planning work area, on the Tasks panel tab, in Configuration, select **Manage Planning Profile Options**.
   The Manage Planning Profile Options page appears.
8. Search for the MSC_DISAGG_PERF_BATCH_SIZE profile option code.
9. Click the **New** icon.
   A new row appears for the profile value.
10. Add the profile value as follows:
    - Profile Level: Select **Site** to set the value globally for all users. Select **User** to set the value for a specific user, in which case you must then select a user. User-level values take precedence over the site-level value.
    - Profile Value: Enter the number of days for processing in each parallel job.
11. Click **Save and Close**.

Related Topics

- Overview of Improving Performance While Disaggregating Measure Data
- Enable Multithreading for Measure Data Disaggregation for All Plans
- Enable Multithreading for Measure Data Disaggregation for a Single Plan

Collect Resources and the Resource Availability

Overview of Collecting Resources and the Resource Availability

This topic provides an overview of collecting resources and the resource availability from Oracle Fusion Cloud Applications, Oracle E-Business Suite, or a third-party application.

When you collect information for resources in your organization, you collect their reference data. This information pertains to the names, codes, types, work centers, run rates, units of measure (UOMs), and shifts of the resources, among other attributes.

Regarding the availability of resources in your organization, you can collect this information or generate it during the collections process.

Sources and Methods for Collecting Resources and the Resource Availability

You collect resources and the resource availability from these sources:

- Oracle Fusion Cloud Manufacturing in Fusion Applications
- Oracle E-Business Suite
- A third-party application

If you're collecting resources and the resource availability from Oracle Manufacturing, you must use the Collect Planning Data page in the work area for your module in Oracle Fusion Cloud Supply Chain Planning. You can also use the **Collection Job Set** scheduled process.

If you're collecting resources and the resource availability from Oracle E-Business Suite or a third-party application, you must use the **Load Planning Data from Flat Files** scheduled process along with these file-based data import (FBDI) templates:

- Supply Chain Planning Resources (ScpResourcesImportTemplate.xlsm), in which you define your resources and resource shifts, and that's used for generating the resource availability
- Supply Chain Planning Resource Availability (ScpResourceAvailabilityImportTemplate.xlsm), which you optionally use to calculate the resource availability

More Points About Collecting Resources and the Resource Availability

Note these points about collecting resources and the resource availability:

- After you collect resources and the resource availability, you need to recollect the data only when there's a change to your resources or their availability.
- When you're collecting resources and the resource availability from Oracle Manufacturing, you can collect resources using the targeted or net change collection type.

  You can collect the resource availability using only the targeted collection type.
- When you're collecting resources and the resource availability from Oracle E-Business Suite or a third-party system, you can use the targeted or net change collection type.

- When you collect resources from Oracle Manufacturing, the resource types are labor and equipment. Both primary and alternate resources are collected.

  When you collect resources from Oracle E-Business Suite or a third-party system using the import template named Supply Chain Planning Resources, the resource types are person and machine. These resource types are reflected in Oracle Supply Chain Planning as labor and equipment.
- When you collect the resource availability from Oracle Manufacturing, you can choose to collect the data as is or have it regenerated by Oracle Manufacturing and then collect the data.
- Resources can be based on hours or units:
  - The UOMs for hours used by Oracle Supply Chain Planning can vary by setup.
  - Oracle Sales and Operations Planning considers both hour-based and unit-based resources.

    While the availability for some resources can be calculated in hours, the availability for other resources can be calculated in units.

    Sales and operations plans consider only primary resources.
  - Oracle Supply Planning considers only hour-based resources.

    Constrained supply plans use both primary and alternate resources, but unconstrained supply plans use only primary resources.

    Constrained and unconstrained supply plans support resources that are available 24 hours a day or in shifts. The resource availability can also be collected for nonworking days of manufacturing calendars if resource exceptions or work center calendars are defined on those days.
  - Oracle Demand Management and Oracle Replenishment Planning don't consider resources.
  - You can collect unit-based resources only through the import template named Supply Chain Planning Resources and from Oracle E-Business Suite or a third-party system.

    You can't collect unit-based resources from Oracle Manufacturing.

Related Topics

- Profile Option Codes and the Collection of Resources and the Resource Availability
- Collect Resources and the Resource Availability from Oracle Fusion Cloud Manufacturing
- Collect Resources and the Resource Availability from an External Source
- Collection Job Set
- Load Planning Data from Flat Files

Collect Resources and the Resource Availability from Oracle Fusion Cloud Manufacturing

This topic provides the procedure for collecting resources and the resource availability from Oracle Fusion Cloud Manufacturing in Oracle Fusion Cloud Applications.

You must collect resources and the resources availability from Oracle Manufacturing using the **Collection Job Set** scheduled process. You can submit the scheduled process from the following:

- Collect Planning Data page that you open from the work area for your module in Oracle Fusion Cloud Supply Chain Planning
- Scheduled Processes work area

  If you use the scheduled process in the Scheduled Processes work area, you first need to create a collection template for the resources and resource availability entities. The collection template must specify the date range type and whether the resource availability is collected as is from Oracle Manufacturing or regenerated in Oracle Manufacturing and then collected.

You can collect resources and the resource availability separately or with other reference, demand planning data, and supply planning data entities.

1. If you're using the Collect Planning Data page, follow these steps:
    a. In the work area for your module in Oracle Supply Chain Planning, on the Tasks panel tab, in Plan Inputs, click **Collect Planning Data**.

       The Collect Planning Data page opens.
    b. Select your source system.
    c. Select the collection type.

       Note that you can collect the resource availability only when you select the **Targeted** or **Automatic selection** collection type.
    d. If you've defined a collection template for collecting resources and the resource availability, select the template.

       In this case, you don't need to make any selections on the Reference Data and Supply Planning Data subtabs.
    e. To apply the filter named Organizations Filter for Items and Item Structures to the collection of resources and the resource availability, click **Select Collection Filters**, and configure the filter in the Select Collection Filters dialog box.

       Your collection template can also include collection filters. If so, you needn't perform this step.

       > **Note:** The **Organization Group** field is grayed out for the targeted or automatic selection collection type. Also, when the **Organization Group** field is set to **Yes** for the net change collection type, the Reference Data subtab is grayed out. To apply an organization group to the targeted collection of resources and the resource availability, use the collection filter named Organizations Filter for Items and Item Structures.

    f. On the Reference Data subtab, move the **Resources** entity from **Reference Entities** to **Selected Entities**.
    g. On the Supply Planning Data subtab, move the **Resource Availability** entity from **Supply Entities** to **Selected Entities**.

       The fields in the Resource Availability section are enabled.
    h. In **Date Range Type**, select **Fixed** to specify a date range for collecting the resource availability.

       For example, though you might have 10 years of resource availability data in Oracle Manufacturing, you want to collect only one year of data for your planning.

       Select **Relative to collection run date** to use the collection run date as the reference point for the date range.

    i. If you selected **Fixed** in the previous step, enter the start and end dates for the resource availability collection. Ensure that the dates are after the collection run date.

       If you selected **Relative to collection run date** in the previous step, enter a value in the **Collection Window in Days** field.

       The resource availability will be collected for the specified number of days after the collection run date.

    j. To collect the existing data for the resource availability from Oracle Manufacturing, select **Collect existing data**.

       To regenerate the resource availability data in Oracle Manufacturing before the collection, select **Regenerate data, and then collect**.

       When this option is selected, the **Collection Job Set** scheduled process calls the **Update Resource Availability Job** scheduled process for regenerating the resource availability. If you've recently submitted

the **Update Resource Availability Job** scheduled process, then you can select the **Collect existing data** option.

k. On the Schedule tab, to collect resources and the resource availability immediately, select **As soon as possible**.

To collect resources and the resource availability according to a schedule, select **Using a schedule**, and specify values in the fields that appear.

l. Click **Submit**.

A dialog box with the ID of the submitted scheduled process is displayed. You can query the status of the submitted process in the Scheduled Processes work area using use this process ID.

2. If you're using the **Collection Planning Set** scheduled process, follow these steps:

a. Click **Navigator** > **Tools** > **Scheduled Processes**.

The Overview page in the Scheduled Processes work area opens.

b. Click **Schedule New Process**.

The Schedule New Process dialog box opens.

c. Click **Job Set**.

d. Search for the **Collection Job Set** scheduled process, select it, and click **OK**.

The Process Details dialog box opens.

e. On the Processes tab, select the **Extract Master** scheduled process.

The Parameters tab is displayed.

f. Select your source system.

g. Select the collection type.

Note that you can collect the resource availability only when you select the **Targeted** or **Automatic selection** collection type.

h. In **Collection Templates**, select the collection template that you created for collecting resources and the resource availability.

You can't make any changes on the Reference Data and Supply Planning Data subtabs.

The selected collection template should include any collection filter that you want to apply to your collection. You can use the collection filter named Organizations Filter for Items and Item Structures to filter your collection of resources and the resource availability by organizations.

i. On the Schedule tab, to collect resources and the resource availability immediately, select **As soon as possible**.

To collect resources and the resource availability according to a schedule, select **Using a schedule**, and specify values in the fields that appear.

j. On the Notification tab, to receive information about the scheduled process after it's submitted, select or create a notification.

k. Click **Submit**.

A dialog box with the ID of the submitted scheduled process is displayed. You can query the status of the submitted process in the Scheduled Processes work area using this process ID.

Related Topics

- Overview of Collecting Resources and the Resource Availability
- Collection Job Set

Collect Resources and the Resource Availability from an External Source

This topic provides the procedure for collecting resources and the resource availability from Oracle E-Business Suite or a third-party system.

Import Templates for Collecting Resources and the Resource Availability

When you're collecting resources and the resource availability from Oracle E-Business Suite or a third-party system, you must use the following file-based data import (FBDI) templates:

- Supply Chain Planning Resources (ScpResourcesImportTemplate.xlsm): Use this import template to specify the resources and resource shifts.

  During the collections process, the information in the import template is used for generating the resource availability.

  Note the following:

  - The Unit of Measure Code column on the WorkCenterResources_ worksheet must specify a unit of measure (UOM) that's based on hours or units.
  - If the resource availability is calculated in hours, then the UOM for hours specified in the MSC_HOUR_UOM profile option code must be specified in the Unit of Measure Code column.

    For 24-hour availability, you can enter **Yes** in the Available 24 Hours Indicator column on the WorkCenterResources_ worksheet to avoid loading the resource availability for each hour of every day of your plan.
  - For hour-based resources, you can use the ResourceShifts_ worksheet to define the shifts. The information for shifts is considered along with the applicable organization calendars for calculation of the resource availability.

    If you don't have shifts for your hour-based resources, you don't have to enter information on the ResourceShifts_ worksheet. In this case, you'll enter information on only the WorkCenterResources_ worksheet, and the resources will be considered as being available for 24 hours a day.
  - If the resource availability is calculated in units, then the UOM for units specified in the MSC_DEFAULT_UNIT_UOM profile option code must be specified in the Unit of Measure Code column.

    The Available 24 Hours Indicator column should be set to Yes, and values must also be entered in the Capacity Units and Run Rate columns on the WorkCenterResources_ worksheet. The value entered in the Run Rate column becomes the resource availability for a resource.

    Otherwise, the resource availability won't be calculated.

- Supply Chain Planning Resource Availability (ScpResourceAvailabilityImportTemplate.xlsm): Optionally, use this import template to calculate the resource availability through multiplication of the values in the Capacity Units and Availability columns on the ResourceAvailability_ worksheet.

  When this import template is used, the resource availability isn't generated during the collections process on the basis of the information in the import template named Supply Chain Planning Resources.

  You can also use the import template named Supply Chain Planning Resource Availability to override the generated resource availability when it has some problem.

After you enter data in the import templates, generate the comma-separated values (.csv extension) files, and place them in a compressed file (.zip extension). Then, use the File Import and Export page to import the compressed file to the scm/planningDataLoader/import account on the Oracle WebCenter Content server.

Methods for Collecting Resources and the Resource Availability with the Import Templates

You must collect resources and the resource availability for Oracle E-Business Suite or a third-party system using the **Load Planning Data from Flat Files** scheduled process. You can submit the scheduled process from the following:

- Load Planning Data from Files dialog box that you open from the work area for your module in Oracle Fusion Cloud Supply Chain Planning
- Scheduled Processes work area

You can collect resources and the resource availability separately or with other reference, demand planning data, and supply planning data entities.

1. To submit the scheduled process through the Load Planning Data from Files dialog box, follow these steps:
    a. In the work area for your module in Oracle Supply Chain Planning, on the Tasks panel tab, in Plan Inputs, click **Load Planning Data from Files**.

       The Load Planning Data from Files dialog box opens.
    b. On the Parameters tab, select the source system.
    c. Select the collection type.
    d. In **Data File**, select the compressed file that you previously uploaded to the scm/planningDataLoader/import account on the WebCenter Content server.
    e. In **Enable Organization Group Collection**, select **No**.

       In **Organization Group**, don't select any value.

       If any organization group is applied, the data for resources won't be collected.
    f. Select or enter values in the remaining fields according to your requirement.
    g. Click the **Advanced** button.

       The Schedule and Notification tabs are displayed.
    h. On the Schedule tab, to collect resources and the resource availability immediately, select **As soon as possible**.

       To collect resources and the resource availability according to a schedule, select **Using a schedule**, and specify values in the fields that appear.
    i. On the Notification tab, to receive information about the scheduled process after it's submitted, select or create a notification.
    j. Click **Submit**.

       A dialog box with the ID of the submitted scheduled process is displayed. Using this process ID, you can query the status of the submitted process in the Scheduled Processes work area.

2. To submit the scheduled process through the Scheduled Processes work area, follow these steps:
    a. Click **Navigator** > **Tools** > **Scheduled Processes**.
       The Overview page in the Scheduled Processes work area opens.
    b. Click **Schedule New Process**.
       The Schedule New Process dialog box opens.
    c. Click **Job**.
    d. Search for the **Load Planning Data from Flat Files** scheduled process, select it, and click **OK**.
       The Process Details dialog box opens.
    e. On the Parameters tab, select the source system.
    f. Select the collection type.
    g. In **Data File**, select the compressed file that you previously uploaded to the scm/planningDataLoader/import account on the WebCenter Content server.
    h. In **Enable Organization Group Collection**, select **No**.
       In **Organization Group**, don't select any value.
       If any organization group is applied, the data for resources won't be collected.
    i. Select or enter values in the remaining fields according to your requirement.
    j. Click the **Advanced** button.
       The Schedule and Notification tabs are displayed.
    k. On the Schedule tab, to collect resources and the resource availability immediately, select **As soon as possible**.
       To collect resources and the resource availability according to a schedule, select **Using a schedule**, and specify values in the fields that appear.
    l. On the Notification tab, to receive information about the scheduled process after it's submitted, select or create a notification.
    m. Click **Submit**.
       A dialog box with the ID of the submitted scheduled process is displayed. Using this process ID, you can query the status of the submitted process in the Scheduled Processes work area.

Related Topics

- Overview of Collecting Resources and the Resource Availability
- Profile Option Codes and the Collection of Resources and the Resource Availability
- Import Templates Used to Create CSV Files for Supply Chain Planning
- Load Planning Data from Flat Files

Profile Option Codes and the Collection of Resources and the Resource Availability

This topic explains how the collection of resources and the resource availability for modules of Oracle Fusion Cloud Supply Chain Planning is affected by the use of profile option codes.

Note these points about the use of profile option codes while you collect resources and the resource availability:

- When resources are based on hours, you must define the applicable unit of measure (UOM) for hours using the MSC_HOUR_UOM profile option code. Examples of hour-based UOMs are Hour and HRS.

  When you're collecting resources and the resource availability from Oracle Fusion Cloud Manufacturing, if the profile value for MSC_HOUR_UOM isn't set, the profile value set for the ORA_RCS_HOUR_UOM profile option code in Oracle Manufacturing is considered.

  When you're collecting resources and the resource availability from Oracle E-Business Suite or a third-party system, you must set the profile value for MSC_HOUR_UOM.

  The UOM you set for the profile value of MSC_HOUR_UOM or ORA_RCS_HOUR_UOM should belong to the UOM class specified in the administrator profile option code called RCS_DEFAULT_UOM_CLASS_CODE_FOR_SVC_DURATION.
- When resources are based on units, you must define the applicable UOM for units using the MSC_DEFAULT_UNIT_UOM profile option code. Examples of unit-based UOMs are EA and Each.

  If you're not collecting unit-based resources, ensure that the profile value for MSC_DEFAULT_UNIT_UOM isn't defined.
- If your resources are using a UOM that's different from the profile value defined for MSC_HOUR_UOM/ ORA_RCS_HOUR_UOM or MSC_DEFAULT_UNIT_UOM, you've to define a conversion between the base UOM of the UOM class associated with the profile value and the UOM that your resources are using.
  - If you're collecting resources and the resource availability from Oracle Manufacturing, you'll use the **Manage UOM Standard Conversions** task in the Setup and Maintenance work area to define the conversion.
  - If you're collecting resources and the resource availability from Oracle E-Business Suite or a third-party system, you'll define the conversion using the file-based data import (FBDI) template named Supply Chain Planning Units of Measure (ScpUOMImportTemplate.xlsm).
- No conversion is possible between hour-based and unit-based UOMs.
- Don't enter the same profile value for MSC_HOUR_UOM and MSC_DEFAULT_UNIT_UOM. Otherwise, the resource availability for unit-based resources will also be generated in hours, and the generated information will be incorrect. For example, don't select the HRS profile option for both profile option codes.

  The profile value for ORA_RCS_HOUR_UOM shouldn't also match the profile value for MSC_DEFAULT_UNIT_UOM.

Related Topics

- Overview of Collecting Resources and the Resource Availability

Collections for Oracle Replenishment Planning

This topic explains how collections are done for Oracle Replenishment Planning.

Collections are done at the organization level.

Collections are also done for all subinventories of organizations that are marked for subinventory-level planning on the Organizations tab on the Maintain Supply Network Model page.

Collected Business Objects That Are Relevant for Replenishment Planning

This table lists the collected business objects that are relevant for replenishment planning:

Oracle Fusion Cloud Applications	Business Object
Oracle Fusion Cloud Procurement and Oracle Fusion Cloud Inventory Management	• Purchase orders and requisitions • Suppliers • Approved supplier lists • Units of measure (UOMs) • Transfer orders • Shipping methods • Subinventories • On-hand inventory
Oracle Fusion Cloud Product Lifecycle Management	• Items • Organizations • Catalogs
Oracle Cost Management, Oracle Order Management, and others	• Item costs • Currencies • Calendars and fiscal calendars • Sales orders • Bookings history • Shipments history • Transfer order history • Price lists

Related Topics

- How You Maintain Your Supply Network Model
- How You Set Up Replenishment Planning for Subinventories

Collection of Consumption Data for Oracle Replenishment Planning

This topic discusses the collection of consumption inventory transactions or point-of-sale (POS) data from Oracle Fusion Inventory Management for the generation of consumption-based forecasts in Oracle Replenishment Planning.

To generate consumption-based forecasts for your replenishment plan, make these selections on the Collect Planning Data page:

- On the Parameters tab, for the Targeted collection type, under History Data Options on the Demand Planning Data tab, in **Organization - Consumption Inventory Transactions to Include**, select the types of consumption inventory transactions you want to collect at the organization level. If you select **Transfer orders**, historical transfer orders at the organization level are collected. If you select **All**, all historical consumption inventory transactions at the organization level are collected.
- In **Subinventory - Consumption Inventory Transactions to Include**, select the types of consumption inventory transactions you want to collect at the subinventory level. If you select **Transfer orders**, both historical transfer orders and historical movement requests at the subinventory level are collected. If you select **All**, all historical consumption inventory transactions at the subinventory level are collected.

Consumption-based forecasting provides you with these benefits:

- You can improve the effectiveness of your forecast by basing it on demand signals that are closest to your customers.

  Thereby, you can effectively compute your policy parameters and calculate and release your replenishment orders.
- In the retail and healthcare sectors, you can model stores and departments as subinventories. By collecting consumption inventory transactions at the subinventory level, you can generate forecasts at this level.

Historical Transaction Collections for Consumption-Based Forecasting at the Organization Level

When you select **All** in the **Organization - Consumption Inventory Transactions to Include** field, all historical transactions are collected at the organization level from Inventory Management for consumption-based forecasting except for those listed in this table:

Transaction Action	Transaction Source	Transaction Type
Issue from stores	Purchase Order	Return to Supplier
Issue from stores	Sales Order	Sales Order Issue
Issue from stores	Transfer Order Return	Transfer Order Return with Scrap

Item Transaction Collections for Consumption-Based Forecasting at the Subinventory Level

When you select **All** in the **Subinventory - Consumption Inventory Transactions to Include** field, all item transactions are collected at the subinventory level from Inventory Management for consumption-based forecasting except for those listed in this table:

Transaction Action	Transaction Source	Transaction Type
Direct organization transfer	Transfer Order Return	Transfer Order Return Transfer

Transaction Action	Transaction Source	Transaction Type
Intransit shipment	Transfer Order Return	Transfer Order Return Shipment
Issue from stores	Purchase Order	Return to Supplier
Issue from stores	Transfer Order Return	Transfer Order Return with Scrap
Staging transfer	Transfer Order Return	Transfer Order Return Pick

Difference Between Consumption History and Shipments History

While shipments history includes the history for shipped sales orders, consumption history includes the shipments history as well as the consumption-related history that falls under transaction actions such as Issue from stores.

Measures for Storing Collected or Uploaded Consumption Data

If you're collecting consumption data from Inventory Management, the collected data is stored in the measure that you select in the **Shipments History Measures** field under History Measures and Attributes on the Demand Planning Data tab.

If you're uploading consumption data from an external source, use the file-based data import (FBDI) template named Supply Chain Planning Measures (ScpMeasuresImportTemplate.xlsm) to import consumption data into the predefined Consumption History measure.

In the import template, enter #ignore under the **Customer Level Name** and **Demand Class Level Name** columns if you don't want to specify these levels. Don't enter values in the columns for level member names.

ERP Integrations REST Service

Use of ERP Integrations REST Service in Collections

You can upload all reference and transactional data to Oracle Fusion Cloud Supply Chain Planning from an external source using the ERP Integrations REST service. This external source can be data from Oracle E-Business Suite, Oracle Fusion Cloud Applications, or third-party source. In Collections, this REST service is used to upload data and submit the collection job set.

Overview

This service updates all key changes in supply chain operations like unexpected changes in inventory levels or manufacturing capacities in your application in real-time. Hence when compared to the system that relies on batch integration and synchronizes data only on periodic basis, this system provides accurate results.

Note: To upload data for Oracle Supply Chain Planning products, use of ERP Integrations REST service is preferred over use of ERP Integrations SOAP Service.

ERP Integrations REST Service

The ERP Integrations REST service that is available as part of Oracle Fusion Cloud Financials is used with Oracle Fusion Cloud Supply Chain Planning products to import bulk data, upload files to UCM server, and to load planning data from flat files. The REST resource name is ERP Integrations and it supports multiple POST operations.

This topic provides specific guidelines on how to use these REST operations with Oracle Supply Chain Planning products. For the Oracle Financials documentation regarding the ERP Integrations REST service, refer to the REST API for Oracle Fusion Cloud Financials book, ERP Integrations task, in Oracle Help Center.

Import Bulk Data

The ERP Integration Service importBulkData is the main REST operation that's used to import data for Oracle Supply Chain Planning. This is a multistep operation that invokes the following subprocesses to complete the data load:

1. Upload file content to UCM Server
2. Loads data into Planning staging tables
3. Launches Load Planning Data from Files scheduled process
4. Launches the Collect Planning Data Job Set

This operation is completed in a single API call and also handles encrypted data files and decrypts them as part of upload.

Here are the specific parameters that are used in the importBulkData REST operation.

- JobName: For Oracle Supply Chain Planning data loads, this parameter must be specified as `JobName: /oracle/apps/ess/scm/advancedPlanning/collection/configuration/CSVController`
- Parameter List: This parameter contains a comma separated list of the parameter values. This is used by the Load Planning Data from Files scheduled process that is launched as part of this REST service operation. Here are the parameters that are used in the parameter list.

  Parameters

Scheduled Process Internal Parameter	Maps to the displayed parameter of this process	Expected Value	Parameter Details
Parameter 1	Source System	Source System	Source system code of the source system for which the data is being uploaded. This code is specified during the set up of the source system
Parameter 2	Collection Type	1 or 2	Type of collections to be launched. Valid values are: ○ 1 denotes Targeted Collection type

Scheduled Process Internal Parameter	Maps to the displayed parameter of this process	Expected Value	Parameter Details
			○ 2 denotes Net change Collection type
Parameter 3	Data File	Zip File name	Name of the zip file to be uploaded.
Parameter 4	Not displayed	Not used	Specify as #NULL.
Parameter 5	Not displayed	Document ID (DId) Value	Document ID of the zip file to be uploaded to UCM. Optional when using importBulkData operation but mandatory when using the submitEssJobRequest operation.
Parameter 6	Not displayed	Instance ID	Internal ID of the source system specified in Parameter 1 (instance code). This is stored internally as MSC_APPS_INSTANCES.INSTANCE_ID and can be derived using the following SQL query: `SELECT instance_id FROM msc_apps_instances WHERE instance_code = '<instance code>'`
Parameter 7	Not displayed	Apps Version	Internal value of the version of the source system specified in Parameter 1 (instance code). This is stored internally as MSC_APPS_INSTANCES.APPS_VER and can be derived using the following SQL query: `SELECT apps_ver FROM msc_apps_instances WHERE instance_code = '<instance code>'`
Parameter 8	Not displayed	Not used	Specify as #NULL.
Parameter 9	Organization Group	Organization Group	This is optional. It is required only if the user wants to run collections for a specific organization group. The value is the name of the organization

Scheduled Process Internal Parameter	Maps to the displayed parameter of this process	Expected Value	Parameter Details
			group. If not specifying, use #NULL.

Parameters File

You must include the special parameters file Supply Chain Planning ERP Integration Service Parameters that's generated using the ScpErpIntegrationServiceParamsImportTemplate.xlsm template file when using ERP Integrations REST service with Oracle Supply Chain Planning products. This parameters file is the file that provides metadata that you need to include in the zip file along with other CSV files to load data in the ERP Integrations Flow. This file contains the following parameters:

- Source System Code (Parameter 1 in the Parameters table)
- Collection Type (Parameter 9 in the Parameters table)
- Organization Group (Parameter 9 in the Parameters table)

If the input zip file does not contain ScpErpIntegrationServiceParams.csv, then the mode of collections is defaulted to Net change and the Load Planning Data from Flat Files schedule process reads the value of instance code from the respective data files.

The ScpErpIntegrationServiceParams.csv meta data file is required only when your loading data using the ERP Integration importBulkData operation and isn't required when you submit the Load Planning Data from Flat Files process either from the Scheduled Processes page or using the submitEssJobRequest operation.

> **Note:** Oracle Supply Chain Planning data loads using importBulkData operation don't need any other properties files like jobDetails.properties that are required for other product areas.

Upload File to UCM

The uploadfiletoUCM operation uploads a file to the UCM server in a single step based on the document specified in the REST operation.

Here is the parameter that is used to complete the operation.

DocumentAccount: For Oracle Supply Chain Planning data loads, this parameter must be specified as

```
DocumentAccount":"scm$/planningDataLoader$/import$
```

The REST response includes the DocumentId as one of the data elements.

Load Planning Data from Flat Files

The submitEssJobRequest operation is used to load planning data from flat files. It submits the collections job set with a set of parameters in a single step.

When loading data for Oracle Supply Chain Planning products, use the following parameters and respective guidelines to complete the operation.

- JobPackageName: This parameter must be specified as
  `JobPackageName:oracle/apps/ess/scm/advancedPlanning/collection/configuration`

- JobDefName: This parameter must be specified as
  `JobDefName: CSVController`
- DocumentId: Use the document ID from the response of uploadFileToUCM operation.
- ESSParameters: This parameter must include a list of values as indicated for the Parameter List parameter of importBulkData operation. For example,

  ESSParameters:EX8,2,UOM.zip,#NULL,289568,300100110961358,3,#NULL,#NULL

The REST response includes the RqstId as one of the data elements. This data element is the process ID of the submitted scheduled process which in this case is the Load Planning Data from Files process. This process is completed only after total flow including Collect Planning Data job set is launched and completed.

For other Oracle Supply Chain Planning processes, like the Publish Data and Release Plan processes, the recommended approach is to use the respective REST services under Oracle Supply Chain Planning group and not use the submitEssJobRequest operation. For example:

- For Publish Data – use Supply Chain Planning/Supply Chain Plans/Publish Data
- For Release Plan – use Supply Chain Planning/Supply Chain Plans/Releases
- For Archive Plan – use Supply Chain Planning/Supply Chain Plans/Archives

Note: loadAndImportData operation isn't recommended for use with Oracle Supply Chain Planning products because with this operation you can't upload encrypted data files.

Verify Collection Processes

Verify the Load Planning Data from Files Process

Perform the following steps to verify the process status of the uploaded file and review log file for any errors or warnings.

1. In the Navigator, click **Scheduled Processes**.
2. In the search area, enter the process ID you noted when you submitted during the Load Planning Data from Files process. Click **Search**.
3. Monitor the process to verify completion.

   If the process completes with warnings, select the request that shows the warning status and click the **View Log** button to review the details.
4. For the rows with errors, resolve the issues found in the log file, and then upload the CSV file again. To load only the revised rows, use the Net Change option.

Review Data in the Planning Data Repository

You can review the data collected or loaded into the planning data repository using two different options. The option you use depends on which data collection entities you want to review.

To review the data collected or loaded into the planning data repository, use one of the following options:

- Review data using the Plan Inputs page layout
- Review data using the Maintain Supply Network Model page

To review the following entities, use the Maintain Supply Network Model page:

- Organizations
- Customers
- Suppliers
- Carriers
- Interlocation Shipping Networks

To review data that's not part of the supply network model, use the Plan Inputs page layout. You can view the following data in the Plan Inputs page layout

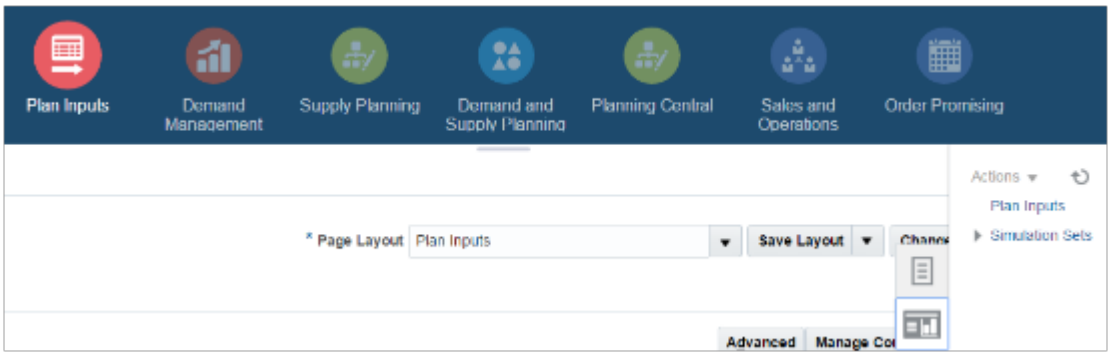
- Supply data
- Demand data

You can view Carriers and Suppliers using either option.

Review Data Using the Plan Inputs Page Layout

Perform the following steps to review the planning data that you loaded.

1. In the Navigator, click **Plan Inputs**.
2. From the Plans menu, right-click **Plan Inputs**, and click **Open**.



> **Tip:** You can set the preview pane to Full Pane for viewing your data in full pane. Click **Change** and select **Full Pane**.

3. On the Plan Inputs page, click **Open**, and click **Full Pane**.
4. On the Open Table, Graph, or Tile Set page, search for the table name.
5. Enter the criteria for the data you want to verify and click **Search**.
6. Review the data in the Search Results table.

Review Data Using the Maintain Supply Network Model Page

Perform the following steps to review the planning data using the Maintain Supply Network Model page.

1. In the Navigator, click **Plan Inputs**.
2. From the Tasks menu, click **Maintain Supply Network Model**.

3. Enter the criteria for the data you want to verify and click **Search**.
4. Review the data in the Search Results table.

Purge Data

How You Purge Collected Data from the Data Repository for Supply Chain Planning

Use the Purge Data Repository scheduled process to purge data collected by supply chain planning collections processes into the database tables that comprise the planning data repository.

Delete data from these tables to free up space and improve performance. Use the Scheduled Processes work area to run the scheduled process. This topic explains the parameters of the **Purge Data Repository** scheduled process.

The parameters for the **Purge Data Repository** scheduled process are in one of these categories:

- The Source System and Purge Global Entities parameters
- Parameters on the Reference Data tab
- Parameters on the Demand Planning Data tab
- Parameters on the Supply Planning Data tab

Note: If you're purging Customer dimension data or measure data at the Customer Site level for a demand plan that uses a planning level profile, you must manually run the **Aggregated Collected Planning Data** and **Create Trees for Dimensions** scheduled processes after you've purged the data.

The Source System and Purge Global Entities Parameters

Provide values for these parameters to determine which data records for reference data will be purged from the staging tables when you run the **Purge Data Repository** scheduled process.

Parameter	Notes
Source System	You must select a source system. • For data collected from the Oracle Fusion source system, select OPS. • For data collected from an external system, select the applicable source system code.
Purge Global Entities	You can select **Yes** if you want to delete data for the entities for which the planning data repository stores only one record for each instance of the global entity so there's no reference to a source system. The default is No.

Parameters on the Reference Data Tab

Provide values for these parameters on the Reference Data tab to determine which data records for reference data will be purged from the staging tables when you run the **Purge Data Repository** scheduled process.

Parameter	Notes
The set of entities categorized as reference entities. The entities you haven't selected yet are included in the Reference Entities list on the Reference Data tab.	You select which reference entities you want data deleted for. The entities you select are included in the Selected Entities list on the Reference Data tab.

Parameters on the Demand Planning Data Tab

Provide values for these parameters on the Demand Planning Data tab to determine which data records for demand planning data will be purged from the staging tables when you run the **Purge Data Repository** scheduled process.

Parameter	Notes
The set of entities categorized as reference entities. The entries you haven't selected yet are included in the Demand Entities list on the Demand Planning Data tab.	You select which demand entities you want data deleted for. The entities you select are included in the Selected Entities list on the Demand Planning Data tab.
Limit the Days to Purge	You can choose to limit the number of days to purge by selecting one of three choices. For each choice you must also specify the additional details needed for that choice: • By date range, followed by a from date and a to date • By number of days in the future, followed by a number of most recent days to keep • By number of days in the past, followed by either a number of most recent days to keep or a number of oldest days to purge

Parameters on the Supply Planning Data Tab

Provide values for these parameters on the Supply Planning Data tab to determine which data records for supply data will be purged from the staging tables when you run the **Purge Data Repository** scheduled process.

Parameter	Notes
The set of entities categorized as supply entities. The entities you haven't selected yet are included in the Supply Entities list on the Supply Planning Data tab.	You select which supply entities you want data deleted for. The entities you select are included in the Selected Entities list on the Supply Planning Data tab.

Related Topics

- Purge Data Repository
- Overview of Planning Level Profiles

How You Purge Staging Tables for Supply Chain Planning

Use the Purge Staging Tables scheduled process to delete data from the staging tables used during collections processes for supply chain planning.

Delete data from the staging tables to free up space and improve performance. Use the Scheduled Processes work area to run the scheduled process. This topic explains the parameters of the **Purge Staging Tables** scheduled process. For information on how to run scheduled processes, refer to the Scheduled Processes chapter in the Implementing Common Features for SCM guide.

Provide values for these parameters to determine which data records will be purged from the staging tables when you run the **Purge Staging Tables** scheduled process.

Parameter	Notes
Source System	You must select a source system. • For data collected from the Oracle Fusion source system, select OPS. • For data collected from an external system, select the applicable source system code.
Record Type	You must select a record type, but you can select **All** if you want to purge all records that meet the values of the other parameters, regardless of their record type. The record types other than the All type are the status of records in the staging tables in regard to the next stage of the collections process. The next stage of the collections process is the import of the records that are in the staging tables into the tables that comprise the planning data repository. • All: All records regardless of status. • Complete: Records that were successfully imported into the tables that comprise the planning data repository. • Error: Records that are in the Error status in the staging tables after import into the planning data repository was tried, but not successful. • New: Records that were collected into the staging tables, but import into the planning data repository hasn't been tried yet. • Retry: Records in the staging tables for which import into the planning data repository is being tried again. • Warning: Records in the staging tables for which a warning occurred when the record was imported into the planning data repository.
Collection Cycle ID	You can enter a request number if you want to do so.
Collected From Date and Collected To Date	You can provide these dates if you want to purge data within a specific time frame.
The set of specific entities for which data is collected and deletion of the data from the staging tables is supported.	Each entity is a parameter for the scheduled process. You can select **No** for any of the parameters if you don't want to purge the data for that entity. The default value for each parameter is Yes.

View and Refresh Collected Measure Data

View Collected Data for Measures Before Running a Plan

The Collected Measure Data table enables you to view imported or collected records and their statuses without having to examine log files or run a plan. The table lists measures that were successfully populated as well as also those that weren't for your plan. By using this table, you can quickly resolve problems in the data load process.

Just as you can use the Supplies and Demands table to view the collected or imported supplies and demands, you can use the Collected Measure Data table to view bookings, shipments, and other entities.

For example, Small Inc. imported its shipments history data using the Supply Chain Planning Shipments History file-based data import (FBDI) template. To save time and work efficiently, the company wants to ensure that data was correctly imported before running its plan. The company uses the Collected Measure Data table and selects the option to view only records with errors. The company notices that several records have an error pertaining to invalid names for the Customer Site level member. Now that the reason behind the error has been identified, Small Inc. can fix the data in the FBDI file, import the data again, and run the plan. By using the Collected Measure Data table, Small Inc. quickly identified data import-related problems and didn't have to spend time analyzing the log files for the import or analyzing the plan after running it.

1. In the Plan Inputs work area, click the **Open** drop-down button.
   The Open Table, Graph, or Tile Set dialog box opens.
2. Select the Collected Measure Data table and click **OK**.
   The Collected Measure Data table opens in a new tab.
3. Specify your search criteria, and click **Search**.
   Use the **Errors** field to limit the records to those with errors or those without errors.

   > **Note:** By default, the table displays only the first 10,000 records that meet your search criteria. To change this limit, you need to create and use a profile option with the MSC_COLLECTED_MEASURE_DATA_MAX_ROWS code. No indication is provided if the table has records that aren't displayed because the predefined or user-defined limit has been exceeded.

4. Analyze the records that are returned according to your search criteria.
   The **Last Updated Date** column displays the date on which the records were created or last updated.
   The **Refresh Number** column displays the refresh numbers of the collection job sets through which the measures were populated when the FBDI templates or collections feature was used.
5. Optionally, to export the records to a Microsoft Excel file for further analysis, click **Actions** > **Export to Excel**.
   The records available in the Collected Measure Data table are exported to the file. The predefined or user-defined limit is applied when the records are exported.

   > **Tip:** When you export the records to an Excel file, you can view more than 15 records at a time. You may find it helpful during your error analysis to view more than 15 records at a time.

Additional Points About the Collected Measure Data Table

These are some additional points about the Collected Measure Data table:

- The table displays records that are successfully uploaded to the MSC_MEASURE_DATA table.
- For records with errors, the table displays records from the MSC_ST_MEASURE_DATA staging table that have information in the ERROR_TEXT column.

  The table doesn't display records from the staging table that weren't moved to MSC_MEASURE_DATA and don't have error information.
- The table filters records by the applicable security privileges of the user. For example, if you've access to only certain organizations, you can view measure values for only those organizations.
- The table lists both predefined and user-defined measures.
- The table displays measure data that's imported through these file-based data import (FBDI) templates:
  - Supply Chain Planning Bookings History (ScpBookingHistoryImportTemplate.xlsm)
  - Supply Chain Planning Causal Factors (ScpCausalFactorsImportTemplate.xlsm)
  - Supply Chain Planning Forecast Measures (ScpForecastMeasureImportTemplate.xlsm)
  - Supply Chain Planning Measures (ScpMeasuresImportTemplate.xlsm)
  - Supply Chain Planning Option Bookings History (ScpOptionBookingHistoryImportTemplate.xlsm)
  - Supply Chain Planning Option Shipments History (ScpOptionShipmentHistoryImportTemplate.xlsm)
  - Supply Chain Planning Shipments History (ScpShipmentHistoryImportTemplate.xlsm)
- The table doesn't display measure data that's imported through the import templates named Supply Chain Planning External Forecasts (ScpExternalForecastImportTemplate.xlsm) and Supply Chain Planning Price Lists (ScpPriceListImportTemplate.xlsm).

  To troubleshoot imported data for external forecasts or price lists, examine the log files or run your plan.
- The table also displays any measure for which information is collected from Oracle Fusion Cloud Applications or loaded from Oracle E-Business Suite.
- For demand, demand and supply, and sales and operations plans in which you're using the functionality for aggregating data for non-key customers, for aggregated records, the value displayed in the Customer column is <zone name>:All Other or Default:<All Other>.
- The table doesn't return aggregated data for a planning level profile.
- To avoid reduced performance, don't sort the records if you increase the maximum number of records displayed in the table by creating and using a profile option with the MSC_COLLECTED_MEASURE_DATA_MAX_ROWS code.

Related Topics

- Overview of Aggregating Data for Non-Key Customers

Refresh Collected Measure Data

The Orchestrate Refresh Measures Processes scheduled process lets you update the plan data for collected planning measures without running the plan.

You can refresh a subset of predefined or user-defined measures such as shipments and bookings history, sales and marketing forecasts, and financial measures such as Budget Value and Financial Forecast Value. This scheduled process retains the measure data for statistical and simulation demand forecasts usually purged when running your plan. By defining a job set, you can automate this scheduled process to refresh measures immediately after loading external measure data from flat files.

For example, an enterprise has a weekly demand planning cycle. They need to generate a baseline statistical forecast once a week but continue to get daily updates for recent shipments, bookings, and sales forecasts. Instead of running the plan daily, they modify their planning process to run it at the start of the week and then refresh the key collected measures daily.

Orchestrate Refresh Measures Processes

Use these steps to configure the Orchestrate Refresh Measures Processes scheduled process using a measure catalog containing only a subset of plan measures:

1. In the Scheduled Processes work area, click **Schedule New Process** on the Overview page.
2. In the Schedule New Process dialog box, search for and select **Orchestrate Refresh Measures Processes**, and then click **OK**.
3. In the Process Details dialog box, Basic Options section, do the following:
    - **Plan**: Select a plan name.
    - **Measure Catalog**: Select a measure catalog.
4. Click **Advanced** and navigate to the Schedule tab. You can set up the process to run as soon as possible or establish a schedule.
5. When done, click **Submit**.

The Confirmation dialog box opens and displays the process number. You can use this process number to search for the process result in the Scheduled Processes work area.

Related Topics

- Orchestrate Refresh Measures Processes

Additional Information About Orchestrate Refresh Measures Processes

Here's some additional information about the Orchestrate Refresh Measures Processes scheduled process:

- You can schedule the **Orchestrate Refresh Measures Processes** scheduled process to refresh collected measure data for one time or on a repetitive schedule from the Scheduled Processes work area. You can configure a job set that contains the **Orchestrate Refresh Measures Processes** scheduled process after the **Load Planning Data from Flat Files** scheduled process to sequence and automate these planning processes.
- When copying a plan, you get the following options:
    - Copy plan options only
    - Copy plan with reference to the base plan
    - Copy plan with no reference to the base plan

  If the copied plan was created using the second option (Copy plan with reference to the base plan), then it doesn't support the Refresh Collected Measure Data capability. Such plans don't appear in the **Plan** field of the **Orchestrate Refresh Measures Processes** scheduled process.
- The **Orchestrate Refresh Measures Processes** scheduled process considers the measure data uploaded using file-based data import (FBDI) templates, including planning measures and demand history. The scheduled process doesn't consider transactional data such as sales orders, price changes, or new items and organizations that aren't already included in a plan. For supply plans, measure data loaded using the Supply Chain Planning External Forecasts import template can't be refreshed.
- If you've defined a measure with the **Refresh with current data** option on the Properties subtab on the Advanced tab in the Create Measure dialog box, after you add the measure to a plan, you must first run the plan to refresh it with the current data before you can refresh that measure's data using this scheduled process.

  > **Note:** Run your plan after a release upgrade before using this scheduled process.

- You need to include both the Shipments History (or Bookings History) measure and the default measure used to refresh shipments history in your measure catalog. For example, if the default measure used for the Default Shipments History Measure profile option is Shipments History: Requested Item by Shipped Date, then include both this measure and the Shipments History measure in the measure catalog used to refresh your plan.
- You can't use the **Orchestrate Refresh Measures Processes** scheduled process to refresh the measures in a demand plan that has a planning level profile. Such plans aren't available for selection in the **Plan** field for the scheduled process.

Related Topics

- Orchestrate Refresh Measures Processes
- Overview of Planning Level Profiles

5 Segmentation

Segmentation in Oracle Fusion Cloud Sales and Operations Planning

Segmentation is the process of grouping combinations into segments on the basis of user-defined, static, or dynamic attributes. Through segmentation, you can better manage the supply for many combinations by grouping them into a few segments.

In Sales and Operations Planning, these combinations can include items, locations, customers, and demand classes.

You can use segments in sales and operations planning to do any of the following:

- Apply policy assignment sets by segment groups.
- View data and perform drills in tables and graphs by segments.
- Define segment groups for use in attribute-based netting sequences.
- Filter data in analysis sets by using segments as filters. Then, you can apply forecasting profiles to specific segments by selecting the associated analysis sets.

  For example, you can perform segmentation by defining segment groups that are based on:
  - Intermittency and volatility
  - Demand volume and cost
  - Item attributes for the Customer, Demand Class, Organization, and Product dimensions such as Lifestyle Phase
  - User-defined attributes and organizations, regions, and zones

Segmentation is available and functions the same in the following work areas, except for minor differences, which are noted in specific segmentation topics.

- Sales and Planning Operations
- Supply Planning
- Planning Central
- Demand Management
- Demand and Supply Planning
- Replenishment Planning
- Plan Inputs

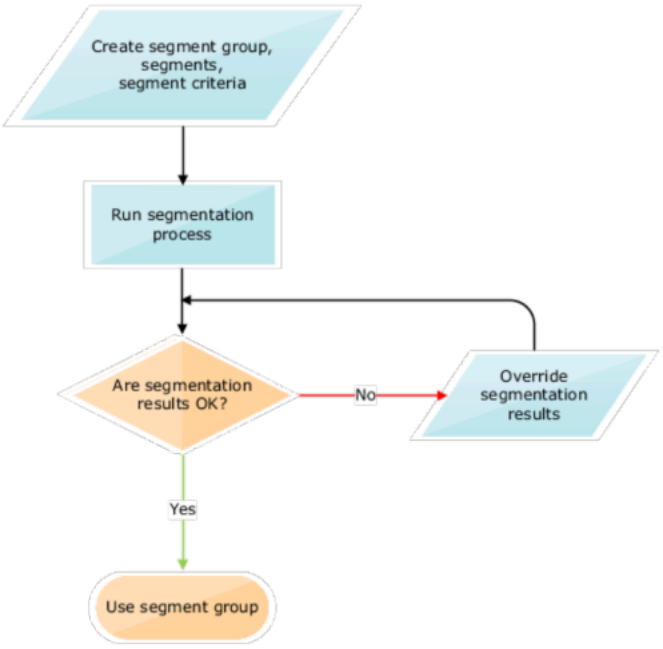
How You Perform Segmentation

Here's what you do during the segmentation process:

1. Set up a segment group and its segments. The segment group has a specific granularity that's applicable to the segments. You specify dimension-based or measure-based criteria for each segment on the basis of which combinations are assigned to the segment.

2. Run the segmentation job for the segment group from the Manage Segment Groups and Criteria page (**Actions > Execute Segmentation**). The combinations are grouped into the segments.
3. View the results of segmentation, and optionally override the assignment of combinations to segments to better meet your business requirements.

This flow chart summarizes the segmentation process:



When the segments are used as members for tables and graphs, for combinations that aren't associated with a segment in the segment group, the segment information is shown as "Not available."

What You Do After Segmentation

Here's what you do after the segmentation process:

1. Create a policy assignment set and then attach the segment group to the policy assignment set.
2. Attach the segment group to a supply plan.
3. Run the supply plan to calculate the unique plan requirements for the item-org combinations in each segment.

Work with Segment Groups

Create a Segment Group

A segment group consists of segments into which combinations are grouped. The segment group has a granularity that's also applicable to the segments. You define the segments on the basis of dimension-based or measure-based criteria.

- In the Replenishment Planning work area, the combinations consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Supply Planning and Planning Central work areas, the combinations consist of items and locations that are collected from Oracle Product Lifecycle Management.
- In the Sales and Operations Planning work area, the combinations consist of items and locations that are collected from Oracle Product Lifecycle Management.
- In the Demand Management work area, the combinations could include both:
    - Items and locations that are collected from Oracle Product Lifecycle Management.
    - Customers and demand classes that are collected from Oracle Fusion Cloud Applications and external sources.

To create a segment group, you must:

1. Create the segment group.
2. Define the segments.
3. Define criteria for the segments.

To restrict segmentation to items for which replenishment planning must be done, you first set the MPS and MRP Planning Method attribute of items to Replenishment planning in Oracle Product Lifecycle Management. Then, while setting up criteria for segments of the segment group, you set the Planning Method attribute for the Product dimension to Replenishment planning. After collection and segmentation, only replenishment planning items are grouped into the segments of the segment group.

If you're planning replenishments at the item-subinventory level, select the Organization dimension for the segment group. Then, add the dimension to segments of the group, and use the Location attribute of the dimension to include subinventories in the segments. The subinventories are listed in the <organization>:<subinventory> format.

Create the Segment Group

Follow these steps to create the segment group:

1. On the Tasks panel tab, under Plan Inputs, select **Manage Segment Groups and Criteria**.

   The Manage Segment Groups and Criteria page opens.
2. Under Search Results, click **Actions** > **Create**.

   The Create Segment Group page opens.
3. In **Segment Group**, enter the segment group name.

4. In **Source System**, select the source system for the segment group.
   The source system must be the same as that used in the plan to which you attach the segment group. Only the combinations in the selected source system are available after segmentation in the segment group.
5. In **Simulation Set**, select a simulation set for the segment group.
   If you plan to simulate changes to the same item attributes at the segment group and plan levels, preferably, use the same simulation set in both cases.
6. In **Description**, enter the segment group description.
7. Under Segment Granularity, in the **Dimension** column, select the dimension that you want to specify for the segment group granularity.
   The lowest levels for the selected dimensions are displayed in the **Level** column, and the displayed levels make up the segment group's granularity.
   Note the following:
   - For demand, demand and supply, sales and operations, and supply plans, only the predefined Customer, Demand Class, Organization, and Product dimensions are supported. You must select the Product dimension. If you select the Customer or Demand Class dimension, you must specify measure-based criteria for each segment.
   - For replenishment plans, you must select only the Organization and Product dimensions.
8. Add more dimensions as required by clicking the **Add Row** icon.
9. In **Catalog**, select the Oracle Product Lifecycle Management catalog from which you want to use categories while specifying the attributes for Product dimension-based criteria of segments in the group.
10. Click **Save**.

Define the Segments

Follow these steps to create a segment in the segment group:

1. Under Segments, click the **Add Row** icon.
2. Enter the segment name and description.
3. Under **Rank**, accept the default number that's a multiple of 10 or enter a whole number that's unique for the segment group.
   During segmentation, if a combination meets the criteria for more than one segment, the combination is assigned to the segment with the lower rank.
4. Add more segments as required.
5. Click **Save**.

Define Criteria for the Segments

Follow these steps to define criteria for segments:

1. Under Segments, select the segment for which you want to define criteria.
2. Under Segment Criteria, click the **Add Row** icon.
   A row appears for the segment criterion of the segment.
3. Set the criterion as follows:
   a. In the list under **Dimension**, if you want the criterion to be based on the selected dimensions for the segment group:
      i. Select a dimension.

The list under **Attribute** is enabled and displays the attributes for the selected dimension.

ii. In the list for attributes, select an attribute for the dimension.

If you selected the Product dimension, and you previously specified an Oracle Product Lifecycle Management catalog, the list includes Category as an attribute.

If you selected the Product dimension, you can select the attribute named Safety Stock Planning Method.

iii. In the list for operators, select the operator with which you want to evaluate the attribute.

Depending on your selection, fields or lists under **From Value** and **To Value** may be enabled, and dialog boxes may open.

iv. Specify the values for the attribute.

If you selected **Category** as an attribute, the categories for the selected Oracle Product Lifecycle Management catalog are displayed in the list under **From Value**.

If you selected **Safety Stock Planning Method** as an attribute, you can select **Safety stock quantity**, **Days of cover**, or **Not planned** in the list under **From Value**.

b. In the list under **Dimension**, if you want the criterion to be based on measures:

i. Select **Measure-based criteria**.

The Search and Select: Plans dialog box appears.

ii. In the Available Plans pane, in **Type**, specify the plan type.

iii. Click the **Find** icon.

The available plans are displayed. For Replenishment Planning, only those plans for which the **Generate forecast** check box is selected on the Plan Options page are displayed.

The plans should have been run and contain tables with the required measures. The tables should have only those dimensions and levels that are in the segment group.

iv. Select and move plans to the Selected Plans pane.

v. Click **OK** to return to the Create Segment Group page.

vi. In **Measure Evaluation Table**, select the table from which a measure should be selected for the segment criterion.

The tables associated with the selected demand or replenishment plans are available in the list.

vii. In **Measure Name**, select a measure.

viii. In **Operator**, select the operator with which you want to evaluate the measure value.

Depending on your selection, the **From Value** field, **To Value** field, or both are enabled.

ix. Specify the values for the measure.

4. Add more rows for segment criteria as required.

If you're adding rows, enter a whole number in the field under **Group** for each row. During segmentation, those rows with the same whole number are processed with the AND operator. Then, the resulting criteria are processed with the OR operator.

5. Click **Save**.

Related Topics

- How You Set Up Replenishment Planning for Subinventories

Edit a Segment Group

You can edit and delete segment groups, segments, and segment criteria.

Edit the Segment Group

You can duplicate, edit, and delete a segment group.

You can delete the segment group only if it's not associated with a policy assignment set or a plan for the work area.

The changes you can make to the segment group are limited. You can't change the name or source system for the segment group, and you can't change its granularity by adding or deleting dimensions.

Follow these steps to edit the segment group:

1. On the Tasks panel tab, under Plan Inputs, select **Manage Segment Groups and Criteria**.
   The Manage Segment Groups and Criteria page opens.
2. Search for the segment group that you want to edit.
3. Select the segment group, and click **Actions** > **Edit**.
   The Edit Segment Group page opens.
4. Change the description and simulation set as required.
   If you plan to simulate changes to the same item attributes at the segment group and plan levels, preferably, use the same simulation set in both cases.
5. In **Catalog**, select the catalog from Oracle Fusion Cloud Product Lifecycle Management from which you want to use categories while specifying the attributes for Product dimension-based criteria of segments in the group.
   If you previously selected a catalog and used one of its categories while setting up a Product dimension-based criterion, the list is grayed out.
6. Click **Save**.

Edit the Segments

You can add, duplicate, and delete segments and change their names, descriptions, and ranks.

In the Replenishment Planning work area, you can delete segments only if the segment group isn't associated with a policy assignment set or replenishment plan. In the Supply Planning work area, you can delete the segment group only if it's not associated with a policy assignment set or supply plan. In the Sales and Operations Planning work area, you can delete the segment group only if it's not associated with a plan.

If you change the rank of a segment, you may change how combinations are assigned to segments after you run segmentation again. During segmentation, if a combination meets the criteria for more than one segment, the combination is assigned to the segment with the lower rank.

Edit the Segment Criteria

You can add, edit, and delete criteria for a segment.

For dimension-based criteria, you can change the attributes, operators, and values. For measure-based criteria, you can change the plans, measure evaluation tables, measures, operators, and values.

Depending on the operator used for a criterion, you can change the values under **From Value**, **To Value**, or both.

If you change the value under **Group** for the criterion, you may affect the segmentation result. During segmentation, those criteria with the same whole number are processed with the AND operator. Then, the resulting criteria are processed with the OR operator.

Run Segmentation

You can run segmentation for a segment group from the Manage Segment Groups and Criteria page.

Follow these steps to run segmentation for the segment group:

1. On the Tasks panel tab, under Plan Inputs, select **Manage Segment Groups and Criteria**.

   The Manage Segment Groups and Criteria page opens.
2. Search for the segment group for which you want to run segmentation.
3. Select the segment group, and click **Actions** > **Execute Segmentation**.

   The Execute Segmentation dialog box opens.
4. To retain your segment overrides, select **Retain segment overrides**.

   To save your last segmentation result for display on the Segmentation Summary page, select **Save the last segmentation result**. When you select this check box, the results of the last segmentation run are displayed under the Previous heading on the Segmentation Summary page, and the results of the segmentation run you are presently submitting are displayed under the Latest heading.

   > **Tip:** If you're performing simulations, you may want to repeatedly make changes to your segmentation criteria and run segmentation so that you can compare the results of your changes with the results of the last segmentation run, which are displayed under the Latest heading on the Segmentation Summary page. In such cases, you don't want to select this check box. When you have finished your simulations and are satisfied with the results of your changes, then select this check box.
5. Click **Submit**.

   The Information dialog box opens and provides you with the request number (process ID) of the segmentation run. You can use this request number to search for the process status and log on the Scheduled Processes page. If the segmentation run fails, see the log for more information and troubleshooting.
6. Click **OK**.

   The Information dialog box closes.
7. On the Manage Segment Groups and Criteria page, click **View** > **Refresh** to update the status and last run date of segmentation for the segment group.

View the Segmentation Summary

You can view segmentation results on the Segmentation Summary page. The results of the latest and previous segmentation runs are displayed.

A segment group consists of segments into which combinations are grouped.

- In the Replenishment Planning work area, the combinations consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Supply Planning and Planning Central work areas, the combinations also consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Sales and Operations work area, the combinations consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Demand Management work area, the combinations could include both:
    - Items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
    - Customers and demand classes that are collected from Oracle Fusion Cloud Applications and external sources.

View the Summary

Follow this procedure to view the segmentation summary for a segment group:

1. Perform one of these steps:
    - On the Tasks panel tab, under Plan Inputs, select **View Segmentation Summary**.

      The Segmentation Summary page opens.
    - On the Manage Segment Groups and Criteria page, select a segment group, and click **Actions** > **View Segmentation Summary**.

      The Segmentation Summary page opens.
2. In **Segment Group**, select the segment group for which you want to view the segmentation summary.

   The page is refreshed with the segmentation summary for the segment group. The results of the latest and previous segmentation runs are displayed, along with other details of the combinations for each segment.

   You can click a number for a segment under a column to open the Manage Segment Members page and view the combinations that meet the criteria for the number that you clicked. If you perform any overrides on the Manage Segment Members page, the changes are immediately reflected on the Segmentation Summary page.

   If you opened the segmentation summary from the Manage Segment Groups and Criteria page, the field is grayed out, and you can view segmentation results for only the segment group you selected on the page.
3. Click **Done** to close the Segmentation Summary page.

Points to Note About Displayed Information

Note these points about the information displayed on the Segmentation Summary page:

- You can use the latest and previous results to understand how and why combinations have moved from one segment to another. These movements happen because of changes in demands, sales, and consumption. By identifying the factors underlying these movements, you can fine-tune the segmentation process and apply manual overrides as required.
- Every time you run segmentation with the **Save the last segmentation result** check box selected in the Execute Segmentation dialog box, the latest results presently displayed on the Segmentation Summary page are displayed as the previous results, and the results of the job you just submitted are displayed as the latest results. Your manual overrides remain unaffected so long as you selected the **Retain segment overrides** check box in the Execute Segmentation dialog box.
- If you have run segmentation for the first time for the segment group, the previous results aren't displayed.
- No previous results are displayed for a segment that's added during the latest segmentation run.
- The values under the **Latest Count**, **Previous Count**, **Added in Latest Run**, and **Removed in Latest Run** columns don't include your manual overrides.

Override Segmentation Results

You can override segmentation results by manually assigning combinations to segments.

- In the Replenishment Planning work area, the combinations consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Supply Planning and Planning Central work areas, the combinations also consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Supply Planning and Planning Central work areas, the combinations also consist of items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
- In the Demand Management work area, the combinations could include both:
    - Items and locations that are collected from Oracle Fusion Cloud Product Lifecycle Management.
    - Customers and demand classes that are collected from Oracle Fusion Cloud Applications and external sources.

In the case of Replenishment Planning, the combinations consist of items and locations that are collected from Oracle Fusion Product Lifecycle Management. In the case of Demand Management, the combinations could also include customers and demand classes that are collected from Oracle Fusion Cloud Applications and external sources.

You can override segmentation results using the:

- Manage Segment Members page
- Edit-in-spreadsheet feature

Changes you make to the segments for combinations are overwritten the next time you run segmentation for the segment group unless you have selected the **Retain segment overrides** check box in the Execute Segmentation dialog box.

Override Segmentation Results Using the GUI

To override segmentation results through the Manage Segment Members page, follow this procedure:

1. Perform one of these steps:
    - On the Tasks panel tab, under Plan Inputs, select **Manage Segment Members**.

      The Manage Segment Members page opens.
    - On the Manage Segment Groups and Criteria page, select a segment group, and click **Actions** > **Manage Segment Members**.

      The Manage Segment Members page opens and displays the combinations for the segment group.
    - On the Segmentation Summary page, for the segment of a segment group, click the number under **Latest Count**, **Previous Count**, **Added in Latest Run**, **Removed in Latest Run**, **Manually Added to Segment**, **Manually Removed from Segment**, or **Final Count**.

      The Manage Segment Members page opens and displays the combinations corresponding to the number you clicked.
2. On the Manage Segment Members page, under Search, select the segment group for which you want to override the segmentation results, and click **Search**. You can further refine your search by the segment, previous segment, and levels for the dimensions in the segment group.

   The page is refreshed with the segmentation results. For each combination, the assigned segment in the latest segmentation run, assigned segment in the previous segmentation run, and segment override are displayed.
3. For each combination for which you want to override the segmentation results, under **Segment Override**, select the new segment.
4. Click **Save and Close**.

Override Segmentation Results Using a Spreadsheet

To override segmentation results through the edit-in-spreadsheet feature, follow this procedure:

> **Note:** You must first download and install the desktop integration installer that's available under **Navigator** > **Tools**. Otherwise, you can't override segmentation results using a spreadsheet.

1. Perform one of these steps:
    - On the Tasks panel tab, under Plan Inputs, select **Manage Segment Members**.

      The Manage Segment Members page opens.
    - On the Manage Segment Groups and Criteria page, select a segment group, and click **Actions** > **Manage Segment Members**.

      The Manage Segment Members page opens and displays the combinations for the segment group.
    - On the Segmentation Summary page, for the segment of a segment group, click the number under **Latest Count**, **Previous Count**, **Added in Latest Run**, **Removed in Latest Run**, **Manually Added to Segment**, **Manually Removed from Segment**, or **Final Count**.

      The Manage Segment Members page opens and displays the combinations corresponding to the number you clicked.

2. On the Manage Segment Members page, under Search, select the segment group for which you want to override the segmentation results, and click **Search**.

   The page refreshes with the segmentation results.
3. Under Search Results, click **Edit in Spreadsheet**.

   A dialog box opens and prompts you to open or save a Microsoft Excel file.
4. Open the spreadsheet.

   The Connect dialog box opens and prompts you to connect to the application URL.
5. Click **Yes**.

   A dialog box opens and prompts you to enter your credentials.
6. Sign in with your Oracle Applications Cloud credentials.

   The spreadsheet is refreshed with the combinations in the segment group displayed on the Manage Segment Members page. For each combination, the assigned segment in the latest segmentation run, assigned segment in the previous segmentation run, and segment override are displayed. Only the first 2,000 rows are displayed.
7. To narrow your search to a combination in the segment group, enter the details in the first table, and click **Manage Segment Members** > **Search**.

   You can use the percent sign as a wildcard character for your search.
8. For each combination for which you want to override the segmentation results, under the Segment Override column, select the new segment.

   A symbol appears in the cell under the Changed column for each changed row.
9. To upload your changes, click **Manage Segment Members** > **Upload**.

   The results of the upload for each row are displayed under the Status column.

   The symbol in the cell under the Changed column disappears for each successfully uploaded row.
10. Save and close the spreadsheet.
11. To view your changes on the Manage Segment Members page, click **View** > **Refresh**.

6 Supply Network Model

How You Maintain Your Supply Network Model

Use the Maintain Supply Network Model page to view your collected data that includes details of organizations, customers, suppliers, carriers, and interlocation shipping networks.

To open the Maintain Network Model page, navigate to a Supply Chain Planning work area. Click the Tasks panel tab and then select the **Maintain Supply Network Model** link.

You use organizations to represent your business facilities or functions. Typically, if your business has a single physical facility that performs two different functions, then you model it as two organizations. For example, you have one facility that's a manufacturing plant and a distribution center. You can model them as two separate organizations. Additionally, if your business has one function located in two separate physical facilities, you can model those as one organization. If you modeled your facilities as one organization, you can create separate subinventories to represent inventory for each facility.

Review the Collected Data

Based on your search results, use the Organization tab to do the following:

- Review organizations, including the time zones associated with the organizations, for all source systems.
- Create customer and supplier associations to organizations. This is used when creating the buy-sell transfers.
- Select the drop ship validation organization. For each source system, you can select only one organization as the drop ship validation organization. You can also assign a calendar to a drop ship validation organization.
- Set past due parameters for each organization, which include:
    - Past due forecast days
    - Past due sales order days
    - Past due supply days
- Set up organizations for subinventory-level replenishment planning by selecting **Yes** under **Plan Subinventories**.

Use the Customers and Supplier tabs to review collected data and assign time zones to customer sites and supplier sites. If the customer site or supplier site doesn't have an associated time zone, then the customer site or supplier site is assumed to be in the same time zone as the organization that's associated with the demand or supply.

Use the Carriers and Interlocation Shipping Networks tabs to review collected data on carriers, shipping methods, and transit times.

Manage Organization Groups

Click the **Manage Organization Groups** button on the Organizations tab to create and manage organization groups. Organization groups are managed within the source systems and are used to:

- Limit the net change data collection from a source system to specific organizations.

- Load planning data from files for a specific organization group when collection type is Targeted.

Enable Inventory Organization Tracking by Project

This parameter appears on the Maintain Supply Network Model page only when your organization is enabled for project-specific supply planning.

The Project Enabled parameter governs whether your inventory organization is enabled for inventory tracking by project. The value for this parameter can be Yes or No for an organization.

When the parameter value is Yes for an organization, the data collection process collects project-and-task-specific supplies and demands, and the project-specific planning releases planned orders to the organization. The value for this parameter is No for a supplier-modeled organization or a contract manufacturing organization.

Buy and Sell Transfers

You can conduct material transfers between two organizations in a single Oracle Fusion source system by using the purchase order and sales order documents. The sales order at the source organization is used to ship the transfer. The purchase order at the destination organization is used to receive the transfer.

In the supply network model for the purchase order supply at the receiver organization:

- Define the supplier to source organization relationship and for the sales order demand at the shipping organization. Post processing lead time is ignored for the supplier modeled organization.
- Define the customer to destination organization relationship.

To model an organization as a supplier, update the Supplier and Supplier Site columns of the associated organization.

To model an organization as a customer, update Customer and Customer Site columns of the associated organization.

Forecast and Consume Internal Orders

To forecast and consume internal orders, assign a customer and customer site to the organization that's the destination of the transfers. Use a customer name that makes sense for the destination organization, such as M1 Transfers. After you assign a customer and customer site on the Organizations tab, select the **Use Customer and Customer Site for Interorganization Transfers** check box for the organization.

Note: To complete the setup to forecast and consume internal orders, you must also do the following:

- On the Collect Planning Data page, Parameters tab, Demand Planning Data subtab, select the **Organization - Consumption Inventory Transactions to Include** check box.
- In the plan options for your plan, select the **Include transfer orders** check box in the Demand: Advanced Options dialog box. This check box is only available from a Demand Management, Planning Central, or Demand and Supply Planning work area.

Related Topics

- Overview of Data Collections for Supply Chain Planning
- How You Collect Different Data Types for Supply Chain Planning
- How You Load Planning Data from Files
- How You Define the Approved Supplier List for Supply Chain Planning
- Set Up Forecast Consumption for Transfer Orders

Past Due Sales Order Days Parameter

Past Due Sales Order Days parameter helps determine how far back from the collection run date, sales orders should be collected into Oracle Fusion Cloud Supply Chain Planning. It is defined in the Organization tab of the Maintain Supply Network task.

If a sales order's due date falls within the specified number of past due days, both open and shipped orders are collected in the planning process.

Let's look at an example to understand the effect of this parameter on collections. In this case, the Past Due Sales Order Days is set to 30. Open and shipped sales orders with due dates within the last 30 days are collected into the Planning Data Repository when collections are run.

Now, let's consider another example where the Past Due Sales Order Days parameter is not set. When collections are run, no past due open sales orders are collected. However, shipped sales orders with due dates within the past 40 days are collected due to the default settings.

Important Thing to Consider While Using the Parameter

If the Source for Including Past Due Demands field is set to Plan option values in the Supply tab of the Edit Plan Options page, and the Past Due Demand Bucket Type field is set to Month, you must ensure the value set for the parameter in the Maintain Supply Network Model task is large enough to have collected the necessary sales orders.

Let's look at an example to understand this. Suppose you want to collect all open sales orders from June 1st, and the collections are run on July 31st. If you set the parameter to 31 and the Past Due Demand Bucket Type is set to Month, the collection will only consider open sales orders from July, not June. To collect the open sales orders from June, you need to set the parameter to 62. This ensures that all open sales orders from June 1st are collected in Oracle Supply Planning.

How You Define the Approved Supplier List

An approved supplier list (ASL) is a repository of information that links items to the suppliers and supplier sites that provide them to either a specific ship-to organization or the entire enterprise.

An ASL can be global or specific to an organization; however, supply planning only recognizes global ASLs.

To determine the supplier and supplier sites for items, the planning process collects ASLs from the CSV file upload, Oracle Fusion Cloud Procurement, or both.

- Use the Load Planning Data from Flat Files process to load data directly into the planning ASL by using the Approved Supplier List CSV template (ScpApprovedSupplierListImportTemplate.xlsm).
- You can also define some ASL attributes in Oracle Procurement and then upload a CSV file that defines the attributes that you want supply planning to use. For example, define the following item-to-supplier relationships and order modifiers in Oracle Procurement:
    - Supplier
    - Supplier site
    - Minimum order quantity
    - Fixed lot multiple

To upload additional attributes for supply planning to use, you can create and collect the ASL from purchasing. You can then use the CSV file upload to define additional attributes such as the following:

- Item-supplier lead time
- Supplier capacity calendar
- Daily supplier capacity

Oracle Fusion Cloud Supply Planning supports the approved supplier list for a base model. However, approved supplier lists aren't supported for configured items and won't be copied into a supply plan.

Related Topics

- How You Maintain Your Supply Network Model
- Supplier Capacity Options

Assignment Sets, Sourcing Rules, and Bills of Distribution

You use assignment sets in a Supply Chain Planning work area to link sourcing rules and bills of distribution to items.

Using sourcing rules, bills of distribution, and assignment sets together, you can specify how material is supplied, manufactured, and transferred across a supply chain.

> **Note:** This topic is applicable to only the Planning Central, Sales and Operations Planning, Supply Planning, Demand and Supply Planning, and Replenishment Planning work areas.

When you create sourcing rules and bills of distribution, you create descriptions of the means by which you can replenish items. However, items aren't specified anywhere on the definition forms, and so a defined sourcing rule or bill of distribution can later be assigned to any item or group of items. Use assignment sets to associate specific items, categories, or organizations with the sourcing rules and bills of distribution.

You must use sourcing to describe the supply chain to the planning process. Use the following three structures to do so:

- Sourcing rules

- Bills of distribution
- Assignment sets

Sourcing Rules

Sourcing rules and bills of distribution determine the movement of material between organizations. These organizations include supplier, manufacturing, and distribution facilities.

You can navigate to a Supply Chain Planning work area and click **Manage Sourcing Rules** from the **Tasks** drawer to create or search for an existing sourcing rule. For more information, see *Create a Sourcing Rule*.

The three types of sources are:

- Transfer From: Interorganization shipping functionality accomplishes the transfer between internal organizations. Enter the source organization in the Organization column.
- Make At: The item is manufactured at this internal organization. Enter the manufacturing organization in the Organization column.

  Oracle Replenishment Planning doesn't support make at sourcing rules.
- Buy From: Purchase the item from an external enterprise. Data entry in the Supplier and Supplier Site columns is enabled, and the Organization column is disabled.

Allocation Percent and Rank: The total allocation percentage for all sources within a rank must add up to 100 percent. The sources with the highest rank (lowest numeric value) get the highest priority in allocations. Unconstrained supply planning and Replenishment Planning only consider sources of rank one. Replenishment Planning also doesn't support sourcing splits.

Bills of Distribution

When material flows through three or more organizations, bills of distribution describe supply chain links more efficiently than sourcing rules. However, any relationship that can be described by bills of distribution can also be described by a set of sourcing rules. Typically, most users use sourcing rules rather than bills of distribution. You can navigate to a Supply Chain Planning work area and click **Manage Bills of Distribution** from the **Tasks** drawer to create or search for existing bills of distribution.

Replenishment Planning supports bills of distribution of only rank one and doesn't support split bills of distribution.

Sales and Operations Planning doesn't support bills of distribution.

> **Note:** Despite the name, bills of distribution don't describe an outward bound or push type of sourcing relationship. Both sourcing rules and bills of distribution are used only to pull material from sources to destinations.

Assignment Sets

You use assignment sets to link sourcing rules and bills of distribution to items. In other words, you use assignment sets to link sourcing rules, items and supply nodes. The assignment set creates the sourcing and transfer links between organizations for each item involved in a supply chain plan. Alternative supply chains can be modeled by creating alternative assignment sets. You can navigate to a Supply Chain Planning work area and click **Manage Assignment Sets** from the **Tasks** drawer to create or search for existing assignment sets.

For more information, see *Create an Assignment Set*.

Sourcing Assignment Hierarchy

The planning process uses a sourcing assignment hierarchy to determine the actual source of a specific item. You can assign replenishment sources at the following levels. Specific sourcing assignments override general assignment levels. If the planning process doesn't find any sourcing assignment, then the make or buy item attribute is used to determine sourcing.

The following table lists the supply sourcing hierarchy.

Rank	Item or Category	Applies to
1	Item - Organization	1. Sourcing rule
2	Category - Organization	1. Sourcing rule
3	Item	1. Bill of distribution 2. Global sourcing rule
4	Category	1. Bill of distribution 2. Global sourcing rule
5	Organization	1. Global sourcing rule
6	Global	1. Bill of distribution 2. Global sourcing rule

When entering sourcing assignments at the category level, the catalog associated with the assignment set is used to determine the list of available categories.

When you source supplies for sales orders and forecasts (independent demands), then order promising and planning use a more detailed hierarchy. This hierarchy includes the demand class, customer, and customer site which are dimensions of independent demand.

The following table lists the demand sourcing hierarchy.

Rank	Item or Category
1	Item - Customer / customer site
2	Item - Customer
3	Item - Demand Class
4	Item - Region
5	Category - Customer / customer site
6	Category - Customer

Rank	Item or Category
7	Category - Demand Class
8	Item
9	Category - Region
10	Category
11	Customer / customer site
12	Customer
13	Demand Class
14	Region
15	Global

Using the demand sourcing hierarchy, if a demand line includes a value for demand class, then if no sourcing rule exists for Item - Customer / customer site or Item - Customer, but a rule exists for Item-Demand Class, then that rule is used to determine supply sources for the demand line.

When using the sourcing hierarchy, if two rules conflict, the more granular rule is used. To verify which source is used for an assignment set, from within the set, click the **View Sourcing** button after entering the following required parameters:

- Assignment set
- Organization
- Item
- Date

The dialog box displays which assignments apply to the item-organization-date that you selected. If multiple rules apply, then the Active Rule is marked in the form.

Related Topics

- Item Attributes and Order Modifiers for Supply Planning
- Support for Sourcing Rules and Bills of Distribution in Oracle Replenishment Planning

Specify Catalogs for Assignment Sets

A catalog is a group of categories that you can use to classify an item. Use it to organize your item into a hierarchy.

A catalog can have a flat or a one level structure of categories. You can also have a hierarchical structure of categories.

You must specify a catalog for each assignment set when you create the set. You associate the set with a catalog to:

- Use categories associated to that catalog in your assignment set.
- Link the sourcing assignments to the categories.

Use the Manage Assignment Sets task in the Global Order Promising work areas to create an assignment set and specify the catalog. Don't use assignment sets in the Demand Management work area.

If you don't specify a catalog, then the assignment set uses the Catalog for Sourcing Assignments (MSC_SRC_ASSIGNMENT_CATALOG) profile option as the catalog. To modify it, see *Manage Promising Profiles*.

A catalog is a collection of categories that you can use to classify your item. For example, you can assign the Floral Dress item to the Summer category in the Ladies Wear catalog. For details about catalogs and categories, including how to create a catalog and add categories and items to it, see *Assign Catalogs and Categories Using Item Rules*.

Create a Sourcing Rule

Learn how to create a sourcing rule.

1. Collect the reference data that you need to create your sourcing rule, such as organizations, items, and so on. Make sure the collected data is up to date on the server.
2. From a Supply Chain Planning work area, on the Tasks panel tab, click **Manage Sourcing Rules**.
3. On the Manage Sourcing Rules page, click **Actions** > **Create**.
4. On the Create Sourcing Rule page, enter a name and description.
5. Set the Organization Assignment Type to **Global** or **Local**.

   If you set it to **Local**, then you must set a value in the **Organization** field. Select the one organization that you'll apply this sourcing rule to.
6. In the Sourcing Rule Effective Dates section, click **Actions** > **Add Row**, then set the dates when you want the sourcing rule to be in effect.
7. In the Sources section, click **Actions** > **Add Row**, then set the values.

Attribute	Value
Type	Choose one: o Transfer from o Make at o Buy from

8. Set other attribute values in this row, as needed. The available fields will vary, depending on the type that you selected.

   > **Note:** Quantity-based sourcing isn't supported in supply chain planning. The following columns are used only by Oracle Global Order Promising:
   >
   > - From Quantity

- Less Than Quantity
- Quantity UOM

9. Click **Save** or **Save and Close**.

Related Topics

- How You Collect Different Data Types for Supply Chain Planning
- Support for Sourcing Rules and Bills of Distribution in Oracle Replenishment Planning

Export Planning Data to CSV Files

You can replicate sourcing rules and assignment set data from your Oracle Fusion Cloud Supply Planning instance to another instance. When exporting data to CSV files, you can export a subset of the measures that are listed in a plan's measure catalog.

Replicate Sourcing Rules and Assignment Set Data

You can replicate sourcing rules and assignment set data from your Oracle Fusion Cloud Supply Planning instance to another instance or application without manually reentering data. For example, you can replicate the sourcing rules in your Oracle Supply Chain Planning production instance into a reporting system or a test instance.

Use the Export Supply Chain Planning Data scheduled process job to extract sourcing rules and assignment set data into a comma-delimited values (CSV) file format. The generated file is in the standard file-based import (FBDI) file format that you can then use to do the following:

- Check for missing or incorrect sourcing rules or sourcing assignments. For example, does a particular item-organization have a valid sourcing assignment?
- Replicate and then modify existing sourcing rules and assignment sets in a spreadsheet. You can then upload the new setups into another instance or application to create new sourcing rule and assignment set setups.
- Copy the sourcing rule and assignment set setups from one instance to another instance or application, such as from a test instance to a production instance.

The format of the CSV files, including the header content, is the same as the format of the corresponding files in the source instance. This enables you to import the same data directly into another production or test instance. Use the Load Planning Data from Files process to upload your imported files to staging tables.

The following steps show you how to export sourcing rules and assignment set data to a CSV file:

1. In the Scheduled Processes work area, click the **Schedule New Process** button on the Overview page.
2. In the Schedule New Process dialog box, search for and select **Export Supply Chain Planning Data** and then click **OK**.
3. In the Process Details dialog box, Basic Options section, select **Sourcing Rules and Assignment Sets** from the **Entities to Export** drop down list.
4. Optionally, click the **Filter** button to filter your export with specific assignment sets. If you don't select any filters, then the process exports all sourcing rules and assignment sets.

5. In the Process Details dialog box, click the **Submit** button to submit the scheduled process job.

   After you submit your job, you will receive a confirmation with a confirmation number. The planning process appends the confirmation number to the extracted CSV file names, such as AssignmentSets_65960.csv and SourcingRules_65960.csv, where 65960 is the confirmation number.

Export Measures Along With Planning Data

While exporting planning data, you can include a subset of measures that are part of a plan's measure catalog.

You can assign a measure catalog other than a plan's extract measure catalog defined in Plan options, in the Manage Plans UI. This improves the versatility and quality of data extracts required for planning.

Depending on your planning cycle and data needs, extract only those measures that are most relevant for the planning activity. For example, for a given plan you can export demand related measures early in a planning cycle and supply related measures later in the cycle.

You can also assign a measure catalog when running the Prepare Planning Data for Export scheduled process.

Item Attributes and Order Modifiers for Supply Planning

Items represent the material that you use in manufacturing and distribution processes and store in inventory. Item attributes specify properties of each item. You set the item attributes for supply planning through the Product Information Management work area.

Use these steps to set item organization attributes for supply planning:

1. Navigate to the Product Information Management work area and open the **Manage Items** task from the Tasks drawer.
2. Search for your items.
3. Select an item and edit attributes on the specification tab. You can locate the Planning attributes under the planning section.

This table lists the attributes related to supply planning.

Item Attribute	Item Structure
Item Overview	Unit of Measure
Manufacturing	Structure Item Type
Manufacturing	Base Model
Manufacturing	Autocreated Configuration
Manufacturing	Assemble to Order
Manufacturing	Build in WIP

Item Attribute	Item Structure
Manufacturing	Supply Type
Inventory	Inventory Item
Inventory	Stockable
Inventory	Transactable
Order Management	Customer Orders Enabled
Order Management	Transfer Orders Enabled
Planning	Make or Buy
Planning	Safety Stock Method
Planning	Planner Code
Planning	Planning Method
Planning	Forecast Control
Planning	Time Fences: Demand
Planning	Time Fences: Release
Planning	Time Fences: Planning
Planning	Cost
Planning	Carrying Percentage
Planning	Shrinkage Rate
Planning	Acceptable Early Days
Planning	Lead Times: Processing
Planning	Lead Times: Preprocessing
Planning	Lead Times: Postprocessing

Item Attribute	Item Structure
Planning	Lead Times: Fixed
Planning	Lead Times: Variable
Planning	Minimum Order Quantity
Planning	Maximum Order Quantity
Planning	Fixed Order Quantity
Planning	Fixed Lot Multiplier
Planning	Fixed Days Supply
Planning	Rounding
Purchasing	Purchasable
Purchasing	Approved Supplier List

You can use these attributes for specific purposes:

- Make or Buy: This attribute is used by default if no sourcing rule is present.
- Planning Method: Use either MRP planned or MPS planned as the planning method.
- Time Fences: All are used by planning.
- Buy items use the processing lead times. Make items use fixed and variable.
- Make, buy, transfer all use preprocessing lead time. Buy and transfer use post processing lead time.
- Acceptable Early Days is used if you need to reschedule existing supplies. If the supply due date is within the acceptable early days, then no reschedule out recommendation is issued.

Order Modifiers

You use order modifiers to obtain planned orders that you're more likely to use in your environment. For example, you may purchase an item from a supplier who only provides it on pallets of quantity 100. If you're short in some quantity, say 72, you can set the planned order quantity to 100 instead of 72 to support your requirement. You can't apply order modifiers to phantoms and back-to-back items.

These are the order modifiers that you can use:

- Minimum Order Quantity
- Maximum Order Quantity
- Fixed Order Quantity
- Fixed Lot Multiplier

- Fixed Days Supply
- Rounding

Material planning uses a priority sequence (precedence) of order modifiers. It applies certain order modifiers before others and rules out certain order modifiers based on it using certain other order modifiers. The order modifier precedence is:

1. Fixed Days Supply: One planned order for this item must cover all the shortages for the number of days specified in the value. For example, if the net requirements are 50 on Monday, 100 on Wednesday, 70 on Thursday, and you've set Fixed Days Supply to 5, the planning process creates one planned order, with a quantity of 220 (50 + 100 + 70) and due on Monday. The period start dates aren't fixed. In the example, the next period of 5 days would not always start on the following Monday but would start on the next day after Friday that has net requirements. You can adjust the Fixed Days Supply value using the other order modifiers. Therefore, the next period of 5 days could be the following Wednesday through the second Tuesday.

   > **Note:** In Supply Planning, if there's a Fixed Days Supply, then the application doesn't split supplies based on sourcing rule percentages.

2. Fixed Order Quantity: You must always set the planned order quantity with this value. For example, if the net requirements are 1 and you've set Fixed Order Quantity to 200, the planning process creates one planned order with a quantity of 200. If set, the planning process skips to the Rounding order modifier.
3. Fixed Lot Multiplier: You must always have the planned order quantity with this value. For example, if the net requirements are 400 and you've set Fixed Lot Multiplier to 150, the planning process creates one planned order with a quantity of 450.
4. Minimum Order Quantity: The planned order quantity may never be less than this value. For example, if the net requirements are 100 and you've set Minimum Order Quantity to 150, the planning process creates one planned order with a quantity of 150. If set, the planning process skips to the Rounding order modifier.
5. Maximum Order Quantity: One planned order for this item may not have a quantity more than this value. For example, if the net requirements are 200 and you've set Maximum Order Quantity to 150, the planning process creates two planned orders, one with a quantity of 150 and the other with a quantity of 50.
6. Rounding: The planned order quantity must always be a whole number; the planning process always rounds fractional quantities up to the next highest whole number. For example, if the net requirements are 99.2 and you've selected Rounding, the planning process creates one planned order with a quantity of 100.

7 Bills of Resources

Automatically Generate Bills of Resources

You can generate bills of resources through an automated scheduled process that uses collected discrete work definitions and item and resource attributes.

Use the Create Bills of Resources scheduled process to create bills of resources for planning assembly items in a sales and operations plan.

Aggregate supply planning in sales and operations planning doesn't consider detailed bills of materials and routings. It uses bills of resources that collapse routing operations to focus on critical components and resources so that you can perform rough cut capacity planning at a strategic level. This process enables you to plan at an aggregate level and make strategic decisions in your sales and operations planning process.

The Create Bills of Resources scheduled process:

- Uses collected discrete work definition data in the form of routings and item structures as the primary source of input data.

  Routings are required input data. You can't run the Create Bills of Resources process with only bills of materials.
- Uses assignment set with Make at and Transfer from sourcing as input data. For example, the Create Bills of Resources scheduled process uses a sourcing assignment at an item or product category level with a Make at sourcing rule.

  Define sourcing assignments in an assignment set. An assignment set is required for aggregate supply planning in a sales and operations plan. To simplify data setup, Oracle recommends that you specify sourcing assignments at an aggregate level such as Category and Organization rather than at an item level. The planning process considers the Transfer from sourcing rule for subassemblies manufactured in upstream organizations.
- Considers critical components and bottleneck resources to narrow down the scope of the work definitions and ensure that constrained supply can meet strategic needs.
- Sends bills of resources data to the Aggregate Bill of Resources table in the output simulation set (not Plan Inputs) that you can associate with a sales and operations plan.

> **Note:** You can also upload the bills of resources entity by using the file-based data import (FBDI) template, ScpBillOfResourcesImportTemplate.xlsm. To create bills of resources at the category level, you must use the FBDI import template.

You can schedule and automate the Create Bills of Resources process. For example, define a job set that automates a scheduled process in which the Create Bills of Resources scheduled process is followed immediately by a batch run plan.

After you submit the scheduled process, refer to the log file associated with the Create Bills of Resources Process ID in Search Results on the Scheduled Processes page.

When the scheduled process completes, you can open the Aggregate Bill of Resources table in the output simulation set to review and modify the process output.

How You Create Bills of Resources

This topic provides information to run the Create Bills of Resources scheduled process. The Create Bills of Resources scheduled process creates bills of resources for planning manufactured items in a sales and operations plan.

Create Bills of Resources Scheduled Process Prerequisites

Before you can run the Create Bills of Resources scheduled process, you must do the following:

1. Identify assembly and subassembly items.

   You must first identify which assembly items to consider in the Create Bills of Resources process. Mark critical assembly and subassembly items in manufacturing organizations using the **Critical Component** attribute in the Items table in an input simulation set, unless already set in plan inputs. You can use the **Make or Buy** attribute to filter for make items in the Items table.

   Your selections must also include manufactured subassembly items that must be modeled with separate bills of resources for aggregate planning. For example, a subassembly consumed in an assembly item can have its own bill of resources if it has a long manufacturing lead time or it's produced in a different organization.
2. Identify which component items to include in the bills of resources for your assembly items.

   In an input simulation set, use the **Critical Component** attribute in the Items table to mark critical component items consumed in manufacturing organizations, unless already set in plan inputs. The Critical Component item attribute can be marked and collected from a Fusion source. You can use the **Make or Buy** attribute to filter for buy items in the Items table.

   A subassembly consumed in an assembly item should be modeled as a component in the assembly item's bill of resources.
3. Identify resources to include in the bills of resources in your assembly items.

   Mark resources as critical in manufacturing organizations using the **Bottleneck** attribute in the Resources table in the input simulation set, unless already set in plan inputs.

Configure the Create Bills of Resources Scheduled Process

Use these steps to configure the Create Bills of Resources Scheduled Process.

1. Open the Process Details dialog box for the Create Bills of Resources scheduled process.
2. From the Bills of Resources drop-down list, select the Item **Level for Aggregate Planning** predefined template to generate bills of resources.
3. Optionally, if you have already created a sales and operations plan, select the plan to automatically populate fields for the scheduled process.
4. In the Organizations section, select the source system and level members to use. You must select at least one level member.
5. In the Items section, select the catalog, level, and level members to use.
   - Oracle recommends that you select the level that's the category parent of the item.
   - You must select at least one level member.
6. In the Input Parameters section, select parameters for the following:

- **Assignment Set**: Select the assignment set for the scheduled process to use.

  Oracle recommends that the catalog selected in the Items section is also used for sourcing assignments configured in the assignment set.
- **Input Simulation Set**: Select the name of the input simulation set for the Create Bills of Resources scheduled process to use. An input simulation set is a set of adjustments to plan inputs read by the scheduled process, such as defining a resource as Bottleneck or a component as Critical.
- **Attribute Used to Include Components**: Select **Critical Components** to use in the scheduled process. If the planning bills of resources don't include components, select **Do no include components**.
- **Attribute Used to Include Resources**: Select **Bottleneck** to use in the scheduled process. If only components are constrained, select **Do not include resources**.

7. In the Output Parameters section, select parameters for the following:
   - **Bill of Resources Structure**: For Sales and Operations Planning, the resource structure is only within a single organization.

     The item assembly can only be defined within a single organization. For example, an assembly item is made in Location1 and a subassembly item used by the assembly item is made in Location2. You need separate bills of resources for each item-organization, one for the assembly item made in Location1 and another for the subassembly item in Location2. The subassembly made in Location2 is modeled as a component used in the assembly item's bill of resources in Location1.
   - **Planning Product Level**: If using the Item Level for Aggregate Planning template, the planning product level is set to Item.

     Bills of resources at a category level must be collected through the file-based data import process.
   - **Output Simulation Set**: You must select an output simulation set to contain the bills of resources created during the scheduled process. The output simulation set can be the same as the input simulation set.
8. Submit the scheduled process.

   Refer to the log file associated with the Create Bills of Resources Process ID in Search Results on the Scheduled Processes page.

   When the scheduled process completes, you can open the Aggregate Bill of Resources table in the output simulation set to review and modify the process output

How Bills of Resources are Generated

This topic provides some examples of how bills of resources are generated by the Create Bills of Resources scheduled process.

The following table displays the full supply chain bill and the critical status that we'll use in Example 1 and Example 2:

ORG	Assembly	Component	Resource	Critical	Usage Quantity	Resource Quantity
M1	AS301	CM153	n/a	Y	1	n/a
M1	AS301	n/a	R1	N	n/a	0.1

ORG	Assembly	Component	Resource	Critical	Usage Quantity	Resource Quantity
M1	AS301	n/a	R2	N	n/a	0.2
M1	AS301	SB111	n/a	Y	2	n/a
M1	AS301	SB112	n/a	N	1	n/a
M1	SB112	CM201	n/a	N	1	n/a
M1	SB112	CM202	n/a	N	1	n/a
M1	SB111	CM364	n/a	N	1	n/a
M1	SB111	CM365	n/a	N	1	n/a
M1	SB111	n/a	R3	N	n/a	0.15
M1	SB111	n/a	R4	Y	n/a	0.25

Example 1: Single Bill of Resources in a Manufacturing Organization

In this example, a bill of resources is created from a multiple-level bill in a single manufacturing organization where:

- M1 is the manufacturing organization
- AS301 is an assembly item and marked as a Critical Component in the Items table
- CM153 is a component used in AS301 and marked as a Critical Component in the Items table
- SB111 is a subassembly with 2 units used in AS301
- R4 is a resource with 0.25 hour used per unit in SB111 and marked as a Bottleneck in the Resources table

ORG	Assembly	Components	Resource	Usage Quantity	Resource Quantity
M1	AS301	CM153	n/a	1	n/a
M1	AS301	n/a	R4	n/a	0.5

Note that the Resource Quantity for resource R4 is 0.5 hour. Two units of subassembly SB111 are required, even though the subassembly isn't included in the bill of resources.

Example 2: Multiple Bills of Resources in a Manufacturing Organization

In this example, bills of resources are created from a multiple-level bill in a single manufacturing organization where:

- M1 is the manufacturing organization
- AS301 is an assembly item and marked as a Critical Component in the Items table
- CM153 is a component used in AS301 and marked as a Critical Component in the Items table
- SB111 is a subassembly with 2 units used in AS301 and is marked as a Critical Component in the Items table
- R4 is a resource with 0.25 hour used per unit in SB111 and marked as a Bottleneck in the Resources table

ORG	Assembly	Components	Resource	Usage Quantity	Resource Quantity
M1	AS301	CM153	n/a	1	n/a
M1	AS301	SB111	n/a	2	n/a
M1	SB111	n/a	R4	n/a	.25

Note that the Resource Quantity for resource R4 is .25 hour in the bill of resources for subassembly SB111.

Example 3: Multiple Bills of Resources in Multiple Manufacturing Organizations

In this example, multiple bills of resources are created for multiple manufacturing organizations where:

- AS301 is an assembly item and marked as a Critical Component in the Items table
- CM153 is a component used in AS301 and marked as a Critical Component in the Items table
- SB111 is a subassembly with 2 units used in AS301 and is marked as a Critical Component in M1 and S1 in the Items table
- R4 is a resource with 0.25 hour used per unit in SB111 and marked as a Bottleneck in the Resources table

The following table displays the full supply chain bill and the critical status that we'll use in this example:

ORG	Assembly	Component	Resource	Critical	Usage Quantity	Resource Quantity
M1	AS301	CM153	n/a	Y	1	n/a
M1	AS301	n/a	R1	N	n/a	0.1
M1	AS301	n/a	R2	N	n/a	0.2
M1	AS301	SB111	n/a	Y	2	n/a
M1	AS301	SB112	n/a	N	1	n/a

ORG	Assembly	Component	Resource	Critical	Usage Quantity	Resource Quantity
M1	SB112	CM201	n/a	N	1	n/a
M1	SB112	CM202	n/a	N	1	n/a
S1	SB111	CM364	n/a	N	1	n/a
S1	SB111	CM365	n/a	N	1	n/a
S1	SB111	n/a	R3	N	n/a	0.15
S1	SB111	n/a	R4	Y	n/a	0.25

Subassembly SB111 is produced in organization S1 and transferred to M1 where it's a component in assembly AS301. In this case, the bill or resources for subassembly SB111 is created in organization S1 instead of M1:

ORG	Assembly	Components	Resource	Usage Quantity	Resource Quantity
M1	AS301	CM153	n/a	1	n/a
M1	AS301	SB111	n/a	2	n/a
S1	SB111	n/a	R4	n/a	.25

Setups to Generate a Production Plan

This topic explains required setups to generate a production plan in your sales and operations plan. Note the following points:

- Create bills of resources for assembly items using the Create Bills of Resources scheduled process. If an assembly item consumes a manufactured subassembly as a component item, then that subassembly must also have its own bill of resource. Verify bill of resource data in the Aggregate Bill of Resource table in the simulation set that contains the process output.

  Alternatively, you can load bill of resource data by using the file-based data import (FBDI) template for Supply Chain Planning Bill of Resources (ScpBillOfResourcesImportTemplate.xlsm). Verify collected bill of resource

data in the Aggregate Bill of Resource table in Plan Inputs. If you plan some assemblies at the category level, then you must load bill of resource data from flat files.

After you run a plan to refresh with current data, open the Aggregate Bill of Resource table to verify the bill of resource data.

- Resources are modeled in the bill of resources. If a resource isn't used in any bill of resources, then it's not included in the plan.

  Consider modeling only critical resources to simplify your bill of resources.
- Oracle recommends that you start with an unconstrained plan before turning on resource and supplier capacity constraints in the Supply tab of plan options. If resources are heavily overloaded, then you should review the loaded resource availability.

  In a constrained plan, resource available capacity is constrained at the work center level. Resource availability for a work center is the sum of the resource availability for its individual resources modeled in the bill of resources.

  Constrained supplier items must be defined in the Approved Supplier List (ASL). Verify these supplier items in the Suppliers table in Plan Inputs and in your sales and operations plan.
- Make at sourcing rules are required for assembly and manufactured subassembly items.

  Review the effective dates for sourcing rules. No production can occur prior to the effective start date. If a sourcing rule has an effective end date that doesn't span a plan horizon, then it's possible for early production and inventory prebuilding.
- Transfer from sourcing rules must be assigned in the plan's assignment set to create shipping lanes between organizations.
- If you plan some assemblies at the category level, Make at and Transfer from sourcing rules must be assigned at the category level in the plan's assignment set.

  To transfer aggregate items, you must define at least one bill of resource record for a category level bill of resource per inventory organization. This requirement also applies to purchased items that are planned at the category level.
- Aggregate supply planning uses the End Item Demand measure specified in the demand schedule.

  Review the End Item Demand field in Supply Plan Input in the Supply tab of plan options. By default, the Consensus Forecast measure is used as the demand schedule. If you created a new demand forecast measure and must use it for the demand schedule, then ensure that it's added to the End Item Demand measure group on the Manage Planning Measures page.

  Review the Net Demand measure in a plan table. This measure displays the higher quantity between sales orders and demand schedule measure.
- Check for warning messages related to possible data set up issues in the Review Plan Messages table or on the Manage Plans page.

8 Planning Analytics

Overview of Planning Analytics

Configuring planning dimensions and hierarchies on the Configure Planning Analytics page is a key setup to use the analytics in Supply Chain Planning work areas.

It has a unified dimensional hierarchy for various uses. Depending on your security privilege, you can also open the Configure Planning Analytics page from the Setup and Maintenance work area by selecting the following:

- **Offering**: Supply Chain Planning
- **Functional Area**: Supply Chain Planning Configuration
- **Task**: Configure Planning Analytics

To run plans successfully, you must complete the following Configure Planning Analytics tasks:

- Set Up Dimension Catalogs
- Set Up Measure Catalogs
- Set Up Levels and Attributes

You can use the default hierarchies for most of the dimensions.

If the default product catalog named Product is not collected, then you must select at least one product hierarchy. If a default product catalog is collected, then the predefined Product hierarchy is selected as a product hierarchy by default. You can optionally add or change the product hierarchy. You must include at least one product hierarchy when creating a dimension catalog.

On the Configure Planning Analytics page, Levels and Attributes tab, you can configure your planning table and graphs to display descriptions instead of codes for the following entities: Items, Organizations, Resource, Work Center, and Work Area.

Related Topics

- Considerations for Setting Up Dimension Catalogs
- Configure Planning Analytics
- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- How You Use Levels and Attributes in Supply Chain Planning
- Can I modify the default dimension catalog?

Configure Planning Analytics

To run plans successfully, you must set up dimensions and dimension catalogs, measure catalogs, and levels and attributes.

You can open the Configure Planning Analytics task from one of the Supply Chain Planning work areas. Depending on your security privilege, you can also open the Configure Planning Analytics page from the Setup and Maintenance work area.

> **Note:** Default Catalog is the name of the predefined dimension catalog. It contains predefined hierarchies. Oracle recommends that you make a copy of the Default Catalog if changes are required, instead of editing the default catalog.

To configure planning analytics:

1. In the Navigator, click one of the Supply Chain Planning work areas or click the Setup and Maintenance work area.
    - If you clicked one of the Supply Chain Planning work areas, do the following:
        i. Click the Tasks panel tab.
        ii. In the Tasks panel drawer, click the **Configure Planning Analytics** link.
    - If you clicked the Setup and Maintenance work area, select the following:
        - **Offering**: Supply Chain Planning
        - **Functional Area**: Supply Chain Planning Configuration
        - **Task**: Configure Planning Analytics
2. On the Configure Planning Analytics page, Dimension Catalogs tab, do the following:
    a. Create a dimension catalog using the **Add Row** button, or duplicate the default dimension catalog using the **Duplicate** button.
    b. Specify what hierarchies to use in the dimension catalog by moving hierarchies from the Available pane to the Selected pane.
    c. Assign the dimension catalog to a plan that will use the set of hierarchies for analysis during the plan creation from Manage Plans.
3. Each Supply Chain Planning work area has a default measure catalog. Create a new measure catalog to add or remove measures.
    a. Use the **Add Row** button to create a new catalog or use the **Duplicate** button to duplicate an existing catalog.
    b. Specify the measures for the catalog by moving the measures from the Available pane to the Selected pane.
    c. Assign the measure catalog to a plan that will use the set of measures during the plan creation from Manage Plans.

    After you create and define a measure catalog, you can select the measure catalog for a plan from the Edit Plan Options page.
4. Click the Levels and Attributes tab and select the desired dimension and hierarchy.
    a. In the **Dimension** list, select a dimension.
    b. Optionally, in the **Hierarchy** list, select a hierarchy.
    c. Click the **Search** icon button.
    d. To change how the level name appears in pivot tables and graphs, select the row and enter the level name in the **Level Name to Display** field.

        > **Note:** You can't edit the Level Name to Display field for the lowest level of the hierarchy.

e. To display a particular member identifier in your tables and graphs, select a dimension (Product, Organization, or Resource) and level, and then select a value in the **Member Identifier to Display** column:

Dimension	Level	Member Identifier to Display Options
Product	Item	Item Name, Item Description, Item Name and Description, or Item Description and Name
Organization	Organization	Organization Name or Organization Code
Resource	Resource	Resource Code, Resource Name, or Resource Description
Resource	Work Center	Work Center Code, Work Center Name, or Work Center Description
Resource	Work Area	Work Area Code, Work Area Name, or Work Area Description
Resource	Organization	Organization Name or Organization Code
Time	Quarter	Quarter Name or Start Date The display name you configured on this page appears for quarter name on the Fiscal, Manufacturing, and Hybrid calendars.
Time	Month	Month Name or Start Date The display name you configured on this page appears for month name on the Fiscal, Manufacturing, and Hybrid calendars.

> **Tip:** The organization level in the Organization dimension and the organization level in the Resource dimension are separate settings. Oracle recommends that you set them to use the same identifier.

f. To add an attribute for the lowest level of the hierarchy, click the **Edit Page** button in the Attributes column.

   i. In the Manage Attribute List dialog box, click the **Add Row** button.
   ii. In the Attribute list, select an attribute.
   iii. In the Attribute Label text box, enter a label name and click **OK**.

5. On the Configure Analytics page, click the **Save and Close** button.

Related Topics

- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- Considerations for Setting Up Dimension Catalogs
- How You Use Levels and Attributes in Supply Chain Planning
- Overview of Planning Analytics
- How You Use Measure Catalogs in Supply Chain Planning

Dimensions and Dimension Catalogs

How You Use Dimensions and Dimension Catalogs in Supply Chain Planning

Oracle Fusion Cloud Supply Chain Planning has hierarchy levels by which you can view, compare, and analyze demands and supplies of your products over various dimensions, such as geography and organizations.

Oracle Supply Chain Planning uses a single set of dimensions and hierarchies to drive aggregation context for demand planning, supply planning, embedded analytics, and management analytics.

Oracle Supply Chain Planning provides predefined planning dimensions. Each of those dimensions has a predefined hierarchy. When you implement the Oracle Supply Chain Planning offering, you must decide which dimensions and hierarchies to use for demand and supply analysis.

Each dimension catalog has a collection of hierarchies in different dimensions that is enabled for use in the plan options. By default, all predefined hierarchies are available in Planning Analytics. You can disable certain dimensions that are not relevant for your plans. For example:

- If you are only using demand plans, then supplier, resource, and order type dimensions may not be relevant
- If you are using sales and operations plans, then the order type dimension is not relevant

The following hierarchies are predefined in Oracle Supply Chain Planning:

- Customer
- Demand Class
- Exception Type
- Order Type
- Organization
- Plan
- Product
- Resource
- Supplier
- Source
- Time

Access the Configure Planning Analytics page from a Supply Chain Planning work area. Depending on your security privilege, you can also open the Configure Planning Analytics page from the Setup and Maintenance work area.

- To access the Configure Planning Analytics page from a Supply Chain Planning work area:
    a. Click the Tasks panel tab.
    b. In the Tasks panel drawer, click the **Configure Planning Analytics** link
- To access the Configure Planning Analytics page from the Setup and Maintenance work area, select the following:
    - **Offering**: Oracle Supply Chain Planning
    - **Functional Area**: Supply Chain Planning Configuration
    - **Task**: Configure Planning Analytics

In the Dimension Catalogs tab, several hierarchies are available in various dimensions. You can specify which hierarchy to use in a particular dimension catalog. For example, you can select an organization type hierarchy, a product type hierarchy, or a customer hierarchy to use in plans for analysis. After you define a dimension catalog, you can assign it to a plan that will use the set of hierarchies for analysis.

You can select one of your dimension catalogs to be used as the default dimension catalog in plans. If you do not select a default catalog, the predefined catalog named Default Catalog is used.

Related Topics

- Considerations for Setting Up Dimension Catalogs
- How can I use dimensions in Supply Chain Planning?
- Overview of Planning Analytics
- What's a dimension in Supply Chain Planning?
- Why You Disable or Enable Dimensions for Supply Plan Measures

Considerations for Setting Up Dimension Catalogs

Oracle Fusion Cloud Supply Chain Planning provides predefined dimensions, and those dimensions have predefined hierarchies. The predefined hierarchies are included in the Default Catalog.

Hierarchy Selections for the Customer Dimension

The default Customer hierarchy has the Customer Site, Customer, and Customer Class levels. This default hierarchy is defined in the Oracle Fusion Trading Community Model, and you can modify it there.

Hierarchy Selections for the Exception Type Dimension

The default Exception Type hierarchy has the Exception Type level.

Hierarchy Selections for the Order Type Dimension

The default Order Type hierarchy has the Order Type and Order Group levels.

Hierarchy Selections for the Organization Dimension

The default Enterprise hierarchy has the Organization, Business Unit, and Legal Entity levels. This default hierarchy is defined in Oracle Fusion Cloud HCM, and you can modify it only there. Optionally, you can enable other Organization hierarchies (based on regions, one per country).

Hierarchy Selections for the Product Dimension

The default Product hierarchy has the Item, Category Level 1, and Category Level 2 levels. You can collect other catalogs for the Product dimension into Oracle Supply Chain Planning and select the resulting hierarchies.

For Oracle Sales and Operations Planning, the Lifecycle Phase attribute is also included in the default hierarchy.

The default Product catalog is populated into the Product hierarchy.

If you haven't set up the default Product catalog, the predefined Product hierarchy of the Product dimension is used. The predefined Product hierarchy has only one predefined item. In this situation, your items won't be available in the default Product hierarchy, and your items will be available through the other hierarchies that are created for collected catalogs.

For information on setting up the default Product catalog, see the topic titled *Guidelines for Setting Up Catalogs for Collections*

Hierarchy Selections for the Resource Dimension

The default Resource hierarchy has the Resource, Work Center, Work Area, and Organization levels. This default hierarchy is defined in Oracle Manufacturing and you can't modify it.

Hierarchy Selections for the Source Dimension

The default Source hierarchy has the Source level.

Hierarchy Selections for the Supplier Dimension

The default Supplier hierarchy has the Supplier Site and Supplier levels.

Hierarchy Selections for the Time Dimension

The Gregorian Calendar hierarchy has the Day, Month, Quarter, and Year levels. You can collect other hierarchies for the Time dimension into Oracle Supply Chain Planning and select them. These hierarchies include workday calendars of inventory organizations collected from Oracle Fusion Cloud SCM and fiscal calendars collected from Oracle Fusion Cloud Financial Management.

Related Topics

- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- How can I use dimensions in Supply Chain Planning?
- Can I modify the default dimension catalog?
- Overview of Planning Analytics
- Why You Disable or Enable Dimensions for Supply Plan Measures

What's a dimension in Supply Chain Planning?

A dimension is a structure that organizes data. It categorizes data to enable you to answer business questions. Commonly used dimensions are customers, products, and time.

Related Topics

- Configure Planning Analytics
- How can I use dimensions in Supply Chain Planning?
- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- Considerations for Setting Up Dimension Catalogs

How can I use dimensions in Supply Chain Planning?

Oracle Fusion Cloud Supply Chain Planning applications come with predefined hierarchies in the Product dimension.

These predefined hierarchies are part of the Dimension catalog structure in Oracle Product Model. Integrations with Oracle E-Business Suite and third-party systems where the product dimensions can still be maintained and uploaded for use by the Oracle Supply Chain Planning applications is supported.

Related Topics

- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- Considerations for Setting Up Dimension Catalogs
- What's a dimension in Supply Chain Planning?

What's a dimension catalog in Supply Chain Planning?

In Oracle Fusion Cloud Supply Chain Planning, a dimension catalog is a selected list of dimensions enabled for use in plans.

In Oracle Supply Chain Planning, a dimension catalog is a selected list of hierarchies in different dimensions that is enabled for use in plans. The Default dimension catalog appears by default, but can be changed to another dimension catalog that has been defined.

Related Topics

- Can I modify the default dimension catalog?
- What's a dimension in Supply Chain Planning?
- Considerations for Setting Up Dimension Catalogs
- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning

Can I modify the default dimension catalog?

Yes, you can modify the Oracle Fusion Cloud Supply Chain Planning default dimension catalog. However, if you want to make any changes, Oracle recommends that you create a duplicate of the default dimension catalog.

Related Topics

- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- Considerations for Setting Up Dimension Catalogs
- What's a dimension catalog in Supply Chain Planning?

Measure Catalogs

How You Use Measure Catalogs

The measure catalog is similar to the dimension catalog.

Each measure catalog has a collection of measures that you can use in plans in one of the Oracle Fusion Cloud Supply Chain Planning work areas. The measure catalog can contain predefined and user-defined measures.

On the Measure Catalogs tab on the Configure Planning Analytics page, you can create a measure catalog and add or remove measures from a measure catalog.

> **Note:** In the **Status** column, the count indicates only those plans that include the measure catalog on the Scope tab on the Plan Options page. The count doesn't indicate the plans in which the measure catalog is used for archiving the plans or extracting them.

This table lists some predefined measure catalogs for Oracle Supply Chain Planning:

Work Area	Predefined Measure Catalogs
Demand and Supply Planning	• Default Demand and Supply Catalog • Default Demand Management Catalog • Default Supply Planning Catalog • Supersession Forecasting Catalog
Demand Management	• Default Demand Management Catalog • Supersession Forecasting Catalog
Planning Central	• Default Demand and Supply Catalog • Default Demand Management Catalog • Default Planning Central Catalog

Work Area	Predefined Measure Catalogs
	• Default Supply Planning Catalog
Replenishment Planning	• Default Replenishment Planning Archive Catalog • Default Replenishment Planning Catalog • Incremental Replenishment Planning Default Catalog • Supersession Forecasting Catalog
Sales and Operations Planning	• Default S&OP Archive Catalog • Default S&OP Catalog
Supply Planning	Default Supply Planning Catalog

Related Topics

- Can I modify the default measure catalog?

Can I modify the default measure catalog?

No. Although you cannot modify the default measure catalog, you can create a measure catalog, modify the list of measures, and assign it to plans on the Plan Options page.

Related Topics

- How You Use Measure Catalogs in Supply Chain Planning

Levels and Attributes

How You Use Levels and Attributes

On the Levels and Attributes tab, you can enable certain item attributes (standard fields or flexfields) and organization attributes (standard fields) to be available in Planning Analytics as filters.

For example, you can enable PLANNER_CODE to use in an analysis to group metrics and measures by that particular attribute.

You can create a display name to use in the various pivot tables and graph configurations. For example, if the predefined level name is Product Category 2, you can enter a display name of Laptops. You can also configure which identifier to display in tables and graphs for selected hierarchies. For example, you can choose to display item name or item description in your tables and graphs.

Displaying Descriptions in Tables and Graphs

You can analyze planning data in planning tables and graphs by using the description fields of selected entities in hierarchies, such as items and organizations. You can use the description fields when their primary identifier is a difficult to understand alphanumeric code.

For each dimension level (Item, Organization, Resource, Work Center, or Work Area) you can select only one member identifier option to display in a planning table or graph. To see a list of the Member Identifier to Display options, refer to the Configure Planning Analytics topic in this guide.

> **Tip:** The organization level in the Organization dimension and the organization level in the Resource dimension are separate settings. Oracle recommends that you set them to use the same identifier.

Changing a member identifier can impact the advanced criteria in tables and graphs. If you use an advanced filter criteria in a table or graph, then the criteria will be compared to the new member identifier, which can affect the search results. The change to the member identifier can result in different or no members meeting the filter criteria. For example, many names might start with AB, but no descriptions start with AB. After you make this change, you should verify that any advanced filter criteria used are still valid.

> **Note:** In the Selector Tool, the member values displayed are based on what's configured in the Member Identifier to Display column on the Configure Planning Analytics page, Levels and Attributes tab. For example, for item, you can configure your tables and graphs to show item description instead of item name, which is what also appears when you're in the Selector Tool.

Related Topics

- Overview of Planning Analytics
- Configure Planning Analytics

User-Defined Hierarchies

Overview of User-Defined Hierarchies

You can create and update user-defined hierarchies for your demand, demand and supply, sales and operations, or supply plan using the file-based data import (FBDI) template named Supply Chain Planning User-Defined Hierarchy (ScpUser-DefinedHierarchyImportTemplate.xlsm).

You can do the following using the import template:

- Create a user-defined hierarchy for these dimensions:
  - Customer

    > **Note:** You can't use user-defined hierarchies for the Customer dimension in a demand, demand and supply, or sales and operations plan in which you're using the functionality for aggregating data for non-key customers.

  - Demand Class
  - End Demand Organization

    - End Demand Product
    - Organization
    - Product
    - Resource
    - Sales Organization
    - Supplier
- Add members to or remove members from an existing level in the user-defined hierarchy.
- Change the user-defined hierarchy by adding or deleting levels.
- Delete the user-defined hierarchy.

Note: After creating your user-defined hierarchy, you can't rename its levels and level members. If the hierarchy is configured in a planning level profile with the Enabled or Ready status, you can't change the structure of the hierarchy or delete it.

Related Topics

- Create a User-Defined Hierarchy
- Add or Remove Members
- Add or Delete Levels
- Delete a User-Defined Hierarchy
- Overview of Planning Level Profiles

Create a User-Defined Hierarchy

You can't create a user-defined hierarchy with only the lowest level.

To create the user-defined hierarchy, do these steps:

1. In the Supply Chain Planning User-Defined Hierarchy import template (ScpUser-DefinedHierarchyImportTemplate.xlsm), enter the structure of the user-defined hierarchy on the User-DefinedHierarchyMaster_ worksheet.

   The lowest level for each supported dimension is LEVEL_0, and the name for this level is predefined and can't be changed. The highest-possible level is LEVEL_10.

   If the hierarchy is for the Product dimension, you can enter **Yes** in the **Default Indicator** column to enable the hierarchy by default in the Selector Tool.
2. Enter the details of the level members on the User-DefinedHierarchyDetail_ worksheet.
3. Generate the .csv files for the import template, and compress them into a single file.
4. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
5. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
    a. In the Process Details dialog box, in **Source System**, select the source system.
    b. In **Collection Type**, select **Net change**.
    c. In **Data File**, select the compressed file.

d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.

6. Click **Submit**.

   The user-defined hierarchy is created.

7. Add the user-defined hierarchy to the dimension catalog that's used by your plan.

   > **Note:** If you've created your demand, demand and supply, or supply plan in the Planning Central work area, add the hierarchy to the Default Catalog, which is the only dimension catalog that can be used in plans that are created in this work area.

8. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.

   Select other options as required.

9. Modify your selections on the Hierarchies and Members tabs in the Selector Tool for the affected tables and graphs.

Related Topics

- Overview of User-Defined Hierarchies
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets

Add or Remove Members

You can add members to or remove members from any level of your user-defined hierarchy.

Note these points about adding members to or deleting members from your user-defined hierarchy:

- At the lowest level (LEVEL_0), you can add only those members that have already been collected from Oracle Fusion Cloud Applications or your third-party source system. When you delete members at the lowest level of your user-defined hierarchy, the deletion is restricted to the user-defined hierarchy, and the members continue to exist in your source system.

  If you're only adding or deleting members at Level_0, you must run the **Load Planning Data from Flat Files** scheduled process in the Net change mode.

  In the Supply Chain Planning User-Defined Hierarchy import template (ScpUser-DefinedHierarchyImportTemplate.xlsm), you don't need to enter anything on the User-DefinedHierarchyMaster_ worksheet or generate the .csv file for this worksheet. On the User-DefinedHierarchyDetail_ worksheet, you can enter **Yes** in the **Delete Indicator** column for the members you're going to delete.

- If you're only adding members to an intermediate level or the top level of your user-defined hierarchy, you must run the **Load Planning Data from Flat Files** scheduled process in the Net change mode.

  In the Supply Chain Planning User-Defined Hierarchy import template, you don't need to enter anything on the User-DefinedHierarchyMaster_ worksheet or generate the .csv file for this worksheet. On the User-DefinedHierarchyDetail_ worksheet, you need to enter only the details for the new members. If required, for the new members at intermediate levels, you can also enter child members at lower levels.

- If you're only deleting members from an intermediate level or the top level of your user-defined hierarchy, you must run the **Load Planning Data from Flat Files** scheduled process in the Targeted mode. Effectively, you're going to delete and recreate the user-defined hierarchy.

  In the Supply Chain Planning User-Defined Hierarchy import template, you must enter all the levels on the User-DefinedHierarchyMaster_ worksheet and all the level members on the User-DefinedHierarchyDetail_ worksheet and generate the .csv files for both worksheets.

  You must also delete all members for which you're deleting the parent member. Otherwise, you'll have orphaned members in your user-defined hierarchy. You can delete the members by not including the applicable rows on the User-DefinedHierarchyDetail_ worksheet instead of entering **Yes** in the **Delete Indicator** column.
- If your user-defined hierarchy is configured in a planning level profile, and you've used the **Load Planning Data from Flat Files** scheduled process to add or delete hierarchy members for the Customer dimension, you must manually run the **Aggregate Collected Planning Data** scheduled process. Then, you must manually run the **Create Trees for Dimensions** scheduled process in the net change mode for the Customer dimension.

To add members to or remove members from levels of the user-defined hierarchy, do these steps:

1. If you previously imported measure values using the Supply Chain Planning Measures import template (ScpMeasuresImportTemplate.xlsm) for existing members that you're going to delete, delete the measure data for these members using the same import template.

   On the Measures_ worksheet, for the values that you want to delete, enter **Yes** in the **Delete Indicator** column.
2. Generate the .csv file for the import template, and compress it.
3. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
4. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
   a. In the Process Details dialog box, in **Source System**, select the source system.
   b. In **Collection Type**, select **Net change**.
   c. In **Data File**, select the compressed file.
   d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
   e. Click **Submit**.

   Data is removed for the level members that you're going to delete.
5. In the Supply Chain Planning User-Defined Hierarchy import template, enter information as required on the User-DefinedHierarchyMaster_ and User-DefinedHierarchyDetail_ worksheets.
6. Generate the .csv files for the import template, and compress them into a single file.
7. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
8. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
   a. In the Process Details dialog box, in **Source System**, select the source system.
   b. In **Collection Type**, make the required selection.
   c. In **Data File**, select the compressed file.
   d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
   e. Click **Submit**.

   The members are created or deleted.
9. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.

   Select other options as required.

10. Add members to or remove members from the Selected Members pane on the Members tab in the Selector Tool for the affected tables and graphs.

Related Topics

- Overview of User-Defined Hierarchies
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Overview of Planning Level Profiles

Add or Delete Levels

To change the levels of an existing user-defined hierarchy, you must delete and recreate the entire hierarchy using the Targeted collection type for the **Load Planning Data from Flat Files** scheduled process.

You can't delete the lowest level (LEVEL_0) of the user-defined hierarchy.

If the user-defined hierarchy is configured in a planning level profile with the Enabled or Ready status, you can't change the hierarchy structure.

> **Note:** Oracle doesn't recommend deleting a level from the user-defined hierarchy if you've loaded or stored data at that level because level deletion also requires data removal.

To modify the user-defined hierarchy by adding or deleting levels, do these steps:

1. If your measures are storing data for a level that you're going to delete, delete the level data in these measures using the Supply Chain Planning Measures import template (ScpMeasuresImportTemplate.xlsm).

   On the Measures_ worksheet, for the values that you want to delete, enter **Yes** in the **Delete Indicator** column.

   If you previously imported measure values for an existing level that's going to move up or down in your user-defined hierarchy, you don't need to reimport measure values for that level because the IDs for the level and level members remain unchanged.

2. Generate the .csv file for the import template, and compress it.
3. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
4. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
   a. In the Process Details dialog box, in **Source System**, select the source system.
   b. In **Collection Type**, select **Net change**.
   c. In **Data File**, select the compressed file.
   d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
5. Click **Submit**.

   Measure values are deleted.

6. In the Supply Chain Planning User-Defined Hierarchy import template (ScpUser-DefinedHierarchyImportTemplate.xlsm), enter the levels that must be added or deleted on the User-DefinedHierarchyMaster_ worksheet.

   Consider an example in which your user-defined hierarchy structure for the Organization dimension is Organization (LEVEL_0), District (LEVEL_1), and Region (LEVEL_2):

   - To add a level called State that's at the highest level, you should enter Organization (LEVEL_0), District (LEVEL_1), Region (LEVEL_2), and State (LEVEL_3).
   - To add a level called Borough that's in between Organization and District, you should enter Organization (LEVEL_0), Borough (LEVEL_1), District (LEVEL_2), and Region (LEVEL_3).
   - To delete the District level, you should enter Organization (LEVEL_0) and Region (LEVEL_1).

   If the hierarchy is for the Product dimension, you can enter **Yes** in the **Default Indicator** column to enable the hierarchy by default in the Selector Tool.

   You don't need to enter anything on the User-DefinedHierarchyDetail_ worksheet for the deleted levels. For the new and modified (existing) levels, you must enter the all the level members on the User-DefinedHierarchyDetail_ worksheet.

7. Generate the .csv files for the import template, and compress them into a single file.
8. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
9. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
   a. In the Process Details dialog box, in **Source System**, select the source system.
   b. In **Collection Type**, select **Targeted**.
   c. In **Data File**, select the compressed file.
   d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
10. Click **Submit**.

    The user-defined hierarchy is deleted and recreated.

11. Using the Supply Chain Planning Measures import template, import measure values for newly added levels if you need to.
12. Generate the .csv file for the import template, and compress it.
13. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
14. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
    a. In the Process Details dialog box, in **Source System**, select the source system.
    b. In **Collection Type**, select **Net change**.
    c. In **Data File**, select the compressed file.
    d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
15. Click **Submit**.

    Measure values are populated.

16. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.

    Select other options as required.

17. Modify your selections on the Hierarchies and Members tabs in the Selector Tool for the affected tables and graphs.

Related Topics

- Overview of User-Defined Hierarchies
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Overview of Planning Level Profiles

Delete a User-Defined Hierarchy

This topic explains how you can delete a user-defined hierarchy.

Across your user-defined hierarchies, the IDs of the lowest levels and their members are the same. You can't delete the lowest levels, their members, and the measure data that's associated with these members. These members are shared across your user-defined hierarchies.
The intermediate levels and top level of your user-defined hierarchy are specific to it. These levels and their members have unique IDs and aren't shared. When you delete the user-defined hierarchy, the intermediate levels and top level and their members are deleted.

If the user-defined hierarchy is configured in a planning level profile with the Enabled or Ready status, you can't delete the hierarchy.

To delete a user-defined hierarchy, do these steps:

1. If your measures are storing data for an intermediate level or the top level that you're going to delete, delete the data in these measures, and reload them at an existing level of a different user-defined hierarchy using the Supply Chain Planning Measures import template (ScpMeasuresImportTemplate.xlsm).

   On the Measures_ worksheet, make the changes that you require.

2. Generate the .csv file for the import template, and compress it.
3. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.
4. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
   a. In the Process Details dialog box, in **Source System**, select the source system.
   b. In **Collection Type**, select **Net change**.
   c. In **Data File**, select the compressed file.
   d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
5. Click **Submit**.

   Measure values are deleted or populated.

6. In the Supply Chain Planning User-Defined Hierarchy import template (ScpUser-DefinedHierarchyImportTemplate.xlsm), on the User-DefinedHierarchyMaster_ worksheet, enter the name and level names of the user-defined hierarchy that you want to delete.

   Enter **Yes** in the **Delete Indicator** column.

   You don't need to enter anything on the User-DefinedHierarchyDetail_ worksheet or generate the .csv file for this worksheet.

7. Generate the .csv file for the import template, and compress it.
8. Click **Navigator** > **Tools** > **File Import and Export**, and import the compressed file.

9. In the Scheduled Processes work area, run the **Load Planning Data from Flat Files** scheduled process.
    a. In the Process Details dialog box, in **Source System**, select the source system.
    b. In **Collection Type**, select **Net change**.
    c. In **Data File**, select the compressed file.
    d. Ignore the fields for organization group collection because this functionality isn't relevant to user-defined hierarchies.
10. Click **Submit**.

    The user-defined hierarchy is deleted from dimension catalogs that it exists in.

    > **Note:** The user-defined hierarchy is still available in tables and graphs that are using it.

11. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box. Select other options as required.

    The user-defined hierarchy is removed from the tables and graphs of the plan.

12. Modify your selections on the Hierarchies and Members tabs in the Selector Tool for the affected tables and graphs.

Related Topics

- Overview of User-Defined Hierarchies
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Overview of Planning Level Profiles

9 Planning Measures

Predefined Measures in Supply Chain Planning

When you use one of the Supply Chain Planning work areas, you have access to many predefined measures.

To review the details of each predefined measure, use the following:

- The Manage Planning Measures task
- A spreadsheet available at My Oracle Support

The Manage Planning Measures Task

On the Manage Planning Measures page, select a measure, and then select edit. You can review the details of the measure on the Edit Measure page even if you can't make changes to the measure.

A Spreadsheet Available at My Oracle Support

Use Doc ID 2374816.1, Oracle Supply Chain Planning Cloud: List of Predefined Measures.

The List of Predefined Measures spreadsheet contains only the core measure attributes. You can use the Edit Measures page to view all the attributes associated with a particular measure.

How You Manage Planning Measures

Use the Manage Planning Measures task to review Supply Chain Planning measures.

You can edit several measures, but some measures you can only view. You use the pivot table to view the data you edited at different aggregations. The results of the edits are stored based on definitions of a measure.

This topic discusses how you can perform these tasks:

- Update the definition of a measure
- Update aggregation parameters
- Update disaggregation parameters
- Edit data of a measure

Update the Definition of a Measure

To update the definition of a measure:

1. In a Supply Chain Planning work area, click the Tasks panel tab.
2. In the Tasks panel, click the **Manage Planning Measures** link.
3. Expand a measure group and scroll manually or use the search option to find all measures that match the search criteria.
4. Select the measure that you want to modify and then click the **Edit** icon.

> **Note:** Look for a check mark next to **Allow editing** at the top of the measure definition controls to confirm that the measure is editable.

5. Click the **Aggregation and Disaggregation** tab to view measure definitions.

   The dimensions, hierarchies, and levels at which data persists vary from measure to measure. For the dimensions with a check mark, the measure is defined on the current dimension. For these dimensions, each measure is defined on a single hierarchy as listed on the dialog box.
6. Click **Save and Close**.

Update Aggregation Parameters

Aggregation parameters control the way in which data of a measure is aggregated from the storage level to a table, graph, or infotile. Calculation Order enables you to chose between the following options:

- **Calculate and Aggregate**: Calculates the measure's expression at the lowest data level and then aggregate up.
- **Aggregate and Calculate**: Aggregates all measures referenced in the measure's expression and then calculate the expression.

Update Disaggregation Parameters

The disaggregation methodology is driven by the definitions of the disaggregation parameters. Disaggregation for definitions that include time can be different from disaggregation for definitions that don't include time. For noneditable measures there are no configuration in the disaggregation parameters.

Here are the four different allocation methods:

- **Same**: Indicates that all lower-level entries into which the data is being saved will receive the same value. Service level would be a good measure to use Same Value settings as the percentage being entered should not be allocated between different items and organizations.
- **Equal**: Spreads the edited value among the lower level entries into which data is being saved. Each entry receives an equal share of the update. This could commonly be seen on the time dimension, where data may be updated for a week or month, but there is no guidance on how it should be allocated to the common storage level of days. It is typically set to the time dimension to equal value to support equal allocation between the days.
- **Self**: Uses a measure's own pre-calculated values to allocate the data to the dimension member combinations.

  For example, item-organization. The weights for each combination are calculated and stored for the measure during plan run. These weights are used to allocate the data. For example, the forecasts for P1-Org1 and P2-Org1 are 40 and 60 respectively. Therefore, the weights used for allocation would be 40% for P1-Org1 and 60% for P2-Org1.
- **Measure**: Uses values of a different measure to allocate.

Edit Data of a Measure

To edit the data of a measure, open a table containing the measure, double-click the cell where the data is to be entered and then enter the data. In a table, editable and noneditable cells look similar. However, when you double-click a cell of an editable measure, the cell enables you to enter values.

Copy Data from One Measure to Another

In a Supply Chain Planning table, you can update the value of one measure by using values from another measure. In several cases, a measure can have other related measures that enable you to override the value of a base measure. For example, Sales Forecast is one of those measures:

- Sales Forecast: Base measure.
- Adjusted Sales Forecast: You can override what's in Sales Forecast.
- Final Sales Forecast: The planning process takes the Adjusted Sales Forecast, if there is one, or uses the Sales Forecast. The planning process uses the Final Sales Forecast, which takes into account any manual adjustments that you made.

You can specify the data source whose values you want to copy to the selected range of cells in the target measure. Using a table containing the three measures listed in our previous example, select a range of cells associated with the Adjusted Sales Forecast measure, click Actions and then select Edit. In the Edit Measures dialog box, use the Sales Forecast measure as the source measure for Adjusted Sales Forecast and increase it by 10 percent. If your Sales Forecast is 200, then Adjusted Sales Forecast now reflects 220.

For a measure to appear in the list of values for Source Measure in the Edit Measures dialog box, the measure must be included in the table. The measure must also conform to the same dimensions as the measure you're editing.

When editing a measure's value at an aggregate level, the value is allocated down to the lowest level. For example, when editing weekly data, the value will be allocated down to the day.

You can also edit multiple measures at a time; however, you can't have circular references. In the following example, Measure3 is used as a source measure for Measure1. But, Measure3 is also being edited at the same time to increase the measure by 10 percent.

Measure	Source Measure	Action	Value
Measure1	Measure3	Increase by percentage	10
Measure2	Measure2	Increase by percentage	10
Measure3	Measure3	Increase by percentage	10

In this scenario, the planning engine won't know which value of the source measure to use: the original Measure3 value, or the value of Measure3 after increasing it by 10 percent. To avoid circular references, you must handle these edits separately.

Related Topics

- Configure Units for a Measure
- Configure Currencies for a Measure
- Configure Conditional Formatting for a Measure
- Configure Color by Measure to Display in Graphs

Import Measure Data Into a Planning Table

When working with large volumes of data, you can export data from a planning pivot table to Microsoft Excel.

After you export the data, you can edit and make adjustments to any planning measure in the spreadsheet. When you're done making changes offline in the spreadsheet, you can then import the updated planning data back into the same table. To initiate the Upload Planning Table Data scheduled process, click the **Import** icon on the toolbar in the opened table and then select the spreadsheet.

The spreadsheet that you import must have the same structure and format as the planning table. The imported spreadsheet can be at any level of aggregation, as long as the levels match all of the levels displayed in the table. After you select the file to import, the Upload Planning Table Data scheduled process updates the table in the background in batch mode. While the import process uploads data in the background, you can work on other supply chain planning tasks. When the upload process completes, the **Import** icon in the table displays a green check mark for the planner who uploaded the data.

> **Note:** To see the uploaded data in your planning table, refresh the table after the Upload Planning Table Data scheduled process completes.

Importing data into planning tables is available for all pivot tables in Supply Planning, Sales and Operations Planning, Demand Management, Replenishment Planning, and Planning Central. Importing data isn't available for non-pivot views like standard grids or other views such as the Build Plan table.

Tips for Importing Measure Data

Here are some tips to successfully import data from a spreadsheet into a planning table:

- The imported file must be a Microsoft Excel file with the .xlsx file extension.
- The import process only updates editable measures.
- The imported file must have the exact same format at the planning table. This includes the following:
    - The uploaded file and the target table must contain the same number of rows and columns.
    - The levels specified in the spreadsheet must match. The level names, such as Item or Organization, don't have to appear as the header columns, but the columns and rows that represent the level must match.
    - The members in each of the level rows and columns must be identical and in the same order. No member can be omitted and new members can't be added.
    - The measures column must have the same measures as the planning table for all combinations.
- The imported file must have the exact member combinations and their order listed in the column and row headers of the table. All member names, such as item names and time periods, must be present in the same order in the file being imported even if there are no updates for those combinations. Typically, you can achieve the required order by exporting the table, making the edits offline, and then using the same file for import.
- All date values must be in the correct date format.
- If you update data directly in a table when the update process is still in progress, your updates can be overwritten if they're for the same combination and measure.

- If multiple users import files into the same table, the import process that finishes last overrides the others. For planning tables that need frequent updates by multiple users, Oracle recommends that you create different tables with appropriate filters.

Additional Information about the Import Process

Here's some additional information about importing data into planning tables:

- Tables with page filters aren't enabled for import. To use the table for import, remove the page filter or use member filters in the table configuration. Filters specified as member filters in the table configuration are respected.
- The import process evaluates and imports only the first worksheet in the workbook. If the workbook contains other worksheets, the import process ignores them.
- The worksheet can contain native Excel comments and conditional formatting. The import process ignores these comments and conditional formatting.
- If a cell has a formula based on another cell, the import process evaluates the formula and uses the result. The other cell can be in the same worksheet or a different worksheet in the same workbook.
- The import process uses the data security rules assigned to the planner doing the import.

Configure Units for a Measure

You can view a measure in several units of measure (UOM) and currencies side by side without needing separate measures. By converting a single measure into various values and currencies, you get superior data consistency and don't require recalculation and data synchronization.

In addition, sometimes different products and organizations have data that's loaded externally using different units of measure. For example, vitamins sold in Europe may be shipped in bottles, while in Asia the quantities are by pill count. By defining units, you enable these values to be converted into a cohesive value, which can be aggregated in a seamless manner.

To configure units for a measure:

1. In a Supply Chain Planning work area, click the **Tasks** panel tab.
2. In the **Tasks** panel, click **Manage Planning Measures**.
3. Locate the measure for which you want to configure units and click **Edit**.
4. On the **Advanced** tab, select the **Properties** tab.
5. Select **UOM** from the list as the default value for the **Base Units of Measure**.
   The base units of measure define the default unit of measure to which displayed data is converted. It is editable only for numeric measures, which don't have product and organization-based levels. For measures that have product and organization, the definition comes from the data source. When using the measure, you must attempt to select only the relevant UOM entries for the measure to streamline the user process.
6. Select the relevant units of measure from the **Display Unit of Measure**.
   You completed defining the unit of measure. You can view the measure using a specific table or graph.

Note: To show the same measure with different unit of measures, you can create a copy from the original measure. Rename the duplicated measure to use another unit of measure of your choice. You can show the same measure as both numbers and currencies.

To override the default unit of measure:

1. Open a table and select **View**, **Format Measures** to find the measure.
2. Click the measure you want to modify and select the value from the **Unit of Measure** list.
3. Click **Save and Close**.

Related Topics

- How You Manage Planning Measures

Configure Currencies for a Measure

You can view a measure in several units of measure and currencies side by side without having separate measures. By converting a single measure into various values and currencies, you get superior data consistency and don't require recalculation and data synchronization.

To configure currencies for a measure:

1. In a Supply Chain Planning work area, click the **Tasks** panel tab.
2. In the Tasks panel, click the **Manage Planning Measures** link.
3. Locate the measure for which you want to configure currencies and click **Edit**.
4. On the **Advanced** tab, select the **Properties** tab.
5. Select **Currency** from the list as the default value for the **Base Currency**.

   The base currency defines the default currency to which displayed data is converted and is editable only for currency type measures.
6. Select the relevant currencies from the Display Currency.

   You completed defining the currencies for a measure. You can view the measure using a specific table or graph. The currency value is editable only if the measure type is Currency. For numeric measures, you can change the type from Number to Currency. Select the currency that you want to use in this instance of the measure.

> **Note:** To show the same measure with different currencies, you can create a copy from the original measure. Rename the duplicated measure to use another unit of measure of your choice. You can show the same measure as both numbers and currencies.

To override the default currency:

1. Open a table and select **View**, **Format Measures** to find the measure.
2. Click the measure you want to modify and select the value from the **Currency** list.
3. Click **Save and Close**.

Related Topics

- How You Manage Planning Measures

Configure Conditional Formatting for a Measure

Use conditional formatting to change the background color of a cell when a specific condition happens.

Conditional formatting is useful to draw the attention of the user to information that requires action. You define conditions for an individual measure. The measure can have one or more conditional formats applied. The condition is evaluated at the table level with the use of the configured units and currencies. Two tables with different units of measure (UOMs) or currencies defined can have different cells trigger the conditional formats. The conditional format for the measure can be based on the measure value, the value for another measure, or the values for two other measures.

You can configure conditional formatting for the measure at the global level in the Plan Inputs, Demand Management, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area. You can also configure conditional formatting for the measure at the level of a pivot table or graph for a demand, demand and supply, replenishment, sales and operations, or supply plan. Conditional formatting for the measure at the level of a pivot table or graph takes precedence over conditional formatting for the measure at the global level.

Configure Conditional Formatting for the Measure at the Global Level

To configure conditional formatting for the measure at the global level, perform these steps:

1. In an applicable work area for Oracle Fusion Cloud Supply Chain Planning, on the **Tasks** panel tab, click **Manage Planning Measures**.

   The Manage Planning Measures page opens.
2. Select the measure for which you want to apply conditional formatting, and click the **Edit** icon.

   The Edit Measure dialog box opens.
3. On the Advanced tab, click the Conditional Formatting subtab.
4. Click the **Add Row** icon.

   A new row appears for the conditional format that you want to add.
5. Provide these details:

Field Name	Description
Measure	The measure for the condition.
Condition	The condition for comparing the measure in the **Measure** field to another measure or a value.
Compare-to Measure	The measure to which the measure in the **Measure** field is compared. **Note:** For the conditional format to be applied, the granularity of the measures in the **Measure** and **Compare-to Measure** fields must be the same, meaning the measures must have the same set of dimensions and stored levels. If you select a measure in this field, you can't enter a value in the **Value** field.

Field Name	Description
Value	The value to which the measure in the **Measure** field is compared. If you enter a value in this field, you can't select a measure in the **Compare-to Measure** field.
Color	The background color for a cell containing the measure that you're editing when the condition is met.

6. Click **Save and Close**.

Configure Conditional Formatting for the Measure in a Pivot Table or Graph

To configure conditional formatting for the measure in a pivot table or graph, perform these steps:

1. In an applicable plan for Oracle Supply Chain Planning, open a pivot table or graph.
2. Click **View** > **Format Measures**.
   The Format Measures dialog box opens.
3. Select the measure for which you want to configure conditional formatting, and then select the check box in the **Use Override Conditional Formatting** column.
   The Conditional Formatting section appears.
4. Click the **Add Row** icon.
   A new row appears for the conditional format that you want to add.
5. Provide these details:

Field Name	Description
Measure	The measure for the condition.
Condition	The condition for comparing the measure in the **Measure** field to another measure or a value.
Compare-to Measure	The measure to which the measure in the **Measure** field is compared. **Note:** For the conditional format to be applied, the granularity of the measures in the **Measure** and **Compare-to Measure** fields must be the same, meaning the measures must have the same set of dimensions and stored levels. If you select a measure in this field, you can't enter a value in the **Value** field.
Value	The value to which the measure in the **Measure** field is compared.

Field Name	Description
	If you enter a value in this field, you can't select a measure in the **Compare-to Measure** field.
Color	The background color for a cell containing the measure that you're editing when the condition is met.
Apply	This column appears only if you're editing the Build Plan table for these plan types: o A demand and supply plan in the Demand and Supply Planning work area o A supply plan in the Demand and Supply Planning or Supply Planning work area The value controls whether the conditional format should be applied always or only when the provided name is selected in the **Highlight Exceptions** field on the toolbar. When you select **When selected** in the **Apply** column, the **Highlight Exceptions** field appears on the toolbar.
Name	This column appears only if you're editing the Build Plan table for these plan types: o A demand and supply plan in the Demand and Supply Planning work area o A supply plan in the Demand and Supply Planning or Supply Planning work area The column is available only if you selected **When selected** in the **Apply** column. In this case, you must provide a name in the field. The provided name appears in the **Highlight Exceptions** field on the toolbar. For example, if you set up a conditional format named Resource Overload, this name appears in the **Highlight Exceptions** field.

6. Click **Save and Close**.

Related Topics

- How You Manage Planning Measures
- Build Plan View

Load Measures from Other Plans

Overview of Loading Measures from Other Plans

You can copy data from a plan in one Oracle module to another plan in a different Oracle module. You can also copy data between measures in the same plan in an Oracle module. When you load measures, you can:

- Copy a stored measure into another stored measure across plans or within the same plan.
- Copy a calculated measure into a stored measure across plans or within the same plan.

By doing so, you can reduce the time taken for calculating and displaying the table or graph that displays the stored measure.

- Copy a calculated measure into another calculated measure across plans.
- Take snapshots of measure values for comparison at a later time.

You've two options to load measures between plans or within a plan:

- Use the Load Measures from Other Plans page in a Sales and Operations Planning, Demand Management, or Demand and Supply Planning work area.

  This page in turn submits the parent scheduled process named **Orchestrate Load Measures Processes** in the Scheduled Processes work area.
- Use the scheduled process named **Orchestrate Load Measures Processes** in the Scheduled Processes work area.

The target measure is refreshed only when you use the page or scheduled process. Therefore, you should use the page or scheduled process whenever the value of the source measure changes. Usually, you must use the page or scheduled process after a plan run with a data refresh.

The load measures from other plans functionality provides you with visibility of data from a measure across different planning modules. For example, you can make the constrained forecast from Oracle Sales and Operations Planning visible to demand planners in Oracle Demand Management for reference. You can also enable further refinement of the operations forecast. After you copy a calculated measure into a stored measure, you can perform aggregate or disaggregate analysis of the tactical planning data.

You can load a source measure to a different target measure. For example, you can load the Constrained Forecast source measure from a demand and supply plan to a target measure called Tactical Constrained Forecast in an aggregate sales and operations plan. You can then compare the aggregate constrained forecast with the tactical constrained forecast to drive effective decision-making.

Also, you can create measure mappings and save them to a measure copy set to reuse in subsequent scheduled process runs. You can modify measure mappings in an existing measure copy set. By using measure copy sets, you can quickly submit the scheduled process.

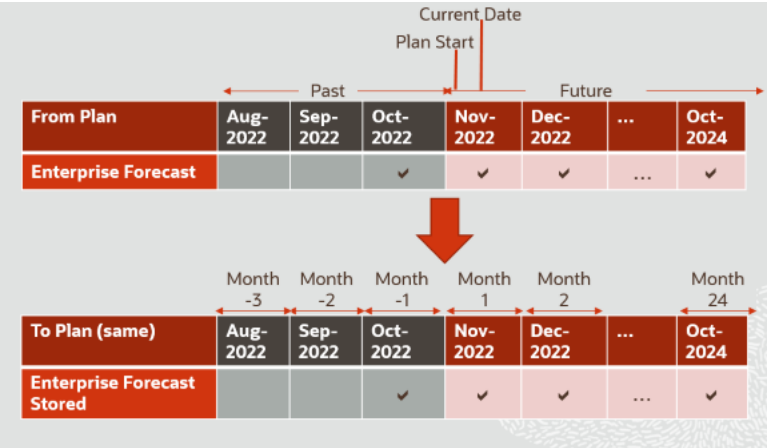
Specify Time Range When Loading Measures from Other Plans

You can specify the time range when copying the measure data between plans. You can include either the entire or a specific time range. You can copy the measure data for the past and future periods to support period-to-date reporting and analysis.

The context of the copy is based on the target plan. If you copy the data between different plans, the copy time level is the higher time level of the two plans. For example, you want to copy the measure data from a demand plan at a hybrid time level to a sales and operations plan at a monthly time level. Here, the data is copied at the higher time level, that is, the monthly time level. However, if you copy the measure data from a sales and operations plan at a monthly time level into a demand plan at a daily or hybrid time level, the data is copied at the monthly time level. Once this data gets copied, it gets disaggregated to the daily or hybrid time level.

If you copy the data in the same plan, the copy time level is the planning time level of the plan.

For example, you've the following sales and operations plan with a monthly time level and need to copy the measure data from a calculated measure to a stored measure within the same plan. The plan start date is November 2, 2022, and the current date is November 14, 2022.



- Suppose the source forecast measure spans both forecast and history. You must use a negative value when you select the past time period. Specify -1 to identify the month prior to the current month, that is, October 2022. Set the time level range end as 24 to include the entire future in the monthly range.
- If the source forecast measure spans the forecast, specify the time level range start as 1. The measure values in the November 2022 period are copied from the plan start rather than from the current date forward.

Note: Enter time range start and end values that are nonzero integers.

Source and Target Measure Mapping

Here's some more information about source and target measure mapping:

- When you're copying measure data between plans, if the target plan's measure catalog contains a measure with the same name as the source measure, it's automatically selected as the target measure. If a measure with the same name as the source measure isn't available in the target plan's measure catalog, then you must manually select the target measure.
- If none of the target measures is shared, only forecast data is copied. If at least one target measure is shared, both forecast and historical data are copied.
- When you copy data from a calculated measure to a stored measure, select a calculated measure for which the resulting value doesn't change often.

  Calculated measures that use collected, historical data are good choices as source measures. Calculated measures that change when you generate a forecast or do a manual override aren't good choices as source measures.
- When you want to copy data from a calculated measure to a stored measure, you can duplicate the calculated measure to create the stored measure. Remove the calculations from the copy, and retain the other settings.
- You can't use a source measure in more than one mapping row of a measure copy set. Also, you can't use a target measure in more than one mapping row of a measure copy set.
- Source and target measures can be predefined or user-defined.

This table summarizes how the list of available target measures is determined and displayed:

When	Then
The source and target plans are the same	• The source measure isn't available for selection because the source measure and target measure must be different. • No calculated measures are available for selection.
• The source and target plans are the same • The source and target plan types are different	• The available target measures are of the same type as the source measure. • The available target measures are in the measure catalog of the target plan. • The available target measures have the same calculation order for aggregation as the source measure. • If the source measure is stored, then only stored or editable measures are available as the target measures. • If the source measure is calculated, then the available target measures are: o Stored or editable o Calculated and with the same dependent measures as the source measure when the source plan and target plan types are different In this case, the dependent measures are in the measure catalog of the target plan, and one of the dependent measures must be stored or editable. • The available target measures have at least one hierarchy level in common with the source measure. • If the source measure contains the Day level of the Time dimension, then the available target measures must also contain the Day level of the Time dimension. • The available target measures can be shared. • If the planning time level of the target plan is higher than Day, then the available target measures can be shared. If the planning time level of the target plan is Day, then the available target measures can't be shared. • The available target measures aren't archived.

Source and Target Plan Type Mapping

When the planning time level of the source plan is Day, the target plan can have any planning calendar and planning time level.

When the planning time level of the source plan isn't Day, the target plan is selected as follows:

- If the planning time level of the target plan is Day, the planning calendar can be anything.
- If the planning time level of the target plan isn't Day, the planning calendar of the target plan and source plan must be the same.

You can copy measure data between a demand plan with a hybrid time hierarchy and a sales and operations plan with an aggregate time level. The planning calendar for each available sales and operations plan is one of the calendars on the basis of which the hybrid time hierarchy for the demand plan is created. The planning calendar and planning time level of the sales and operations plan determine the level at which measure data is copied.

For example, if you copy measure data from a demand plan for which the planning calendar is a Gregorian hybrid hierarchy to a sales and operations plan that's defined at the Gregorian month, measure data gets copied at the Gregorian month level. If you copy measure data from a sales and operations plan defined at the fiscal Quarter level to a

demand plan with a fiscal hybrid hierarchy, measure data gets copied at the fiscal Quarter level and disaggregated to the Hybrid time level.

The functionality for copying measure data between plans can also be used with planning level profiles. For information, see *Overview of Planning Level Profiles*.

This table summarizes how you can copy measure data from work areas and between plan types:

From Work Area	Source Plan Type	Target Plan Type
Demand Management Demand and Supply Planning	Demand plan	Demand plan The source and target plans are the same.
Demand and Supply Planning Sales and Operations Planning	Demand and supply plan	Sales and operations plan
Demand and Supply Planning	Demand and supply plan	Demand and supply plan The source and target plans are the same.
Demand Management Demand and Supply Planning	Sales and operations plan	Demand plan
Demand and Supply Planning Sales and Operations Planning	Sales and operations plan	Demand and supply plan
Sales and Operations Planning	Sales and operations plan	Sales and operations plan The source and target plans are the same.
Sales and Operations Planning	Demand plan	Sales and operations plan
Sales and Operations Planning	Supply plan	Sales and operations plan

Related Topics

- Load Measures from Other Plans
- Orchestrate Load Measures Processes
- Overview of Combining Calendars in Demand Plans with Aggregate Time Levels

Load Measures from Other Plans

This topic provides steps to load measures from one plan to another or within a plan.

Note: Before you copy the measure data, ensure that the source and target plans have run without any errors.

1. Navigate to the Load Measures from Other Plans page:
   a. In the Navigator, click one of the following work area links, and then open a plan:
      - Sales and Operations Planning
      - Demand Management
      - Demand and Supply Planning
   b. On the Tasks panel tab, click the **Load Measures from Other Plans** link.
2. On the Load Measures from Other Plans page, select a source plan and a target plan.

   The target plan is automatically selected as the source plan and can't be changed in these cases:
   - In the Demand Management or Demand and Supply Planning work area, you selected a demand plan as the source plan.
   - In the Demand and Supply Planning work area, you selected a demand and supply plan as the source plan.
   - In the Sales and Operations Planning work area, you selected a sales and operations plan as the source plan.
3. (Optional) To insert new combinations in the target plan, select the **Create new combinations** check box.

   Selecting the **Create new combinations** check box doesn't insert new item and organization combinations from the source plan into the target plan. Instead, the planning process inserts new demand combinations from the source plan that don't already exist in the target plan. If you don't select this check box, source plan combinations aren't created in the target plan if they don't already exist there, and measure data isn't copied for these combinations.
4. In the Copy Range Relative to Start Date section, do the following:
   a. **Copy Time Level**: Copy Time Level conveys the time level at which measure data is copied. It is read-only and informational.
   b. **Time Level Range Start**: Enter the range start value to copy the measure data for either the history or future time period.
   c. **Time Level Range End**: Enter the range end value to copy the measure data for either the history or future time period.

   Note: For history, enter negative values for both **Time Level Range Start** and **Time Level Range End**.
5. In the Measure Mapping section, click the **Add Row** icon to add a source and target measure mapping row.
   a. In the **Source Measure** field, select the name of source measure. Don't select a measure that's already used as a source measure in another mapping row.
   b. In the **Target Measure** field, select the name of the target measure. Don't select a measure that's already used as a target measure in another mapping row.

      If you're copying measure data between plans, by default, the source measure is automatically selected as the target measure if it's in the measure catalog of the target plan.

      If you're copying measure data within the plan, the source measure isn't available for selection as the target measure.
6. (Optional) To save the mapping to reuse later to quickly load data into your plan, click **Save as Measure Copy Set**.
   a. In the Save as Measure Copy Set dialog box, enter a name and description for your measure copy set.

b. To replace an existing measure copy set, select the **Overwrite existing** check box.
c. Click **Save and Close** to return to the Load Measures from Other Plans page.

7. Click **Submit** to run the **Load Measures from Other Plans** scheduled process.

   The Status dialog box opens and displays the request number. You can use this request number to search for the result of the parent scheduled process (Orchestrate Load Measures Processes) in the Scheduled Processes work area.

Related Topics

- Overview of Loading Measures from Other Plans

Orchestrate Load Measures Processes

This topic provides steps to load measures between plans or within a plan using the Orchestrate Load Measures Processes scheduled process.

> **Note:** Before you copy the measure data, ensure that the source and target plans have run without any errors. Also ensure that the measure copy set has been created on the Load Measures from Other Plans page.

1. In the Scheduled Processes work area, click the **Schedule New Process** button on the Overview page.
2. In the Schedule New Process dialog box, search for and select **Orchestrate Load Measures Processes**, and then click **OK**.
3. In the Process Details dialog box, Basic Options section, do the following:

   a. **From Plan**: Select a source plan name.
   b. **To Plan**: Select a target plan name.

      You can select the source plan as the target plan if you want to copy measure data within the plan.
   c. **Measure Copy Set**: Select a measure copy set.

      If you're copying measure data within the plan, the source measure and target measure in a row of the measure copy set can't be the same.
   d. **Create new combinations**: Optionally, select the check box to insert new combinations in the target plan.

      When you're copying measure data between plan types, if you select this check box, source plan combinations are created in the target plan if they don't already exist there before the measure data is copied. If you don't select this check box, source plan combinations aren't created in the target plan if they don't already exist there, and measure data isn't copied for these combinations.
4. Click the **Advanced** button and navigate to the Schedule tab. You can set up the process to run as soon as possible or establish a schedule.
5. When done, click **Submit**.

   The Confirmation dialog box opens and displays the process number. You can use this process number to search for the process result in the Scheduled Processes work area.

Related Topics

- Overview of Loading Measures from Other Plans
- Load Measures from Other Plans
- Orchestrate Load Measures Processes

View the Audit Trail for a Measure

Use the Audit Trail of Measure Updates table to view the audit trail for a measure.

The table displays details of changes made to measure values for auditing purposes. You can view the audit trail for all measure types, such as numeric, date, and string.

The Audit Trail of Measure Updates table is available for Demand Plan, Supply Plan, Demand and Supply Plan, and Sales and Operations Plan types. You can access the audit trail from your respective Supply Chain Planning work area.

Only editable measures that are part of the plan's measure catalog appear in the Audit Trail of Measure Updates table.

> **Note:** Only the user who updated the measure can view the previous value and new value in the audit row. Other users, who have permissions to view the audit trail, must open the Audit Trail Details page to view the details.

The security permissions are set according to the job roles on a measure group or on a specific hierarchies, such as Item, Organization, Customer or Supplier. For additional details, open the Administer Planning Security page from the task drawer of the Plan Inputs work area.

Use the following steps to view the audit trail for a measure:

1. From a Supply Chain Planning work area, click the **Open** button and then select a pane.
2. In the Open Table, Graph, or Tile Set dialog box, search for the Audit Trail of Measure Updates table. Select the table and then click **OK**.
3. On the Audit Trail of Measure Updates tab, type a specific measure name and click **Search**.

   You can click the Search button without typing any search criteria to display all the measures that have the audit trails.
4. In the Search Results region, you can view the audit trails for a measure, which includes the following information:
   - Measure Name: Name of the measure on which the updates were made.
   - Last Updated Date: Date and time when updates were made to the measure.
   - Updated By: Name of the user who made the updates.
   - Previous Value: Previous value for the measure.
   - New Value: New value for the measure.
   - Details: When you click **Details**, the Audit Trail Details page opens. You can review additional details, such as levels, members, filtered levels, and filtered members.

Guidelines for Setting the Calculation Order

How you set the calculation order for a measure affects its computation of data.

On the Aggregation and Disaggregation tab on the Create Measure page, in Aggregation Parameters, you can select **Calculate then aggregate** or **Aggregate then calculate** in the **Calculation Order** field. If you make an incorrect selection in this field, the measure value won't be correct.

Note these guidelines for setting the calculation order of the measure:

- When the measure's calculation order is Calculate then aggregate, all dependent measures must also use the same order.
  Dependent measures are all the measures (and their dependent measures, in turn) that are used in the main measure's expression.
- On the Expression tab, your selection of the calculation order along with your use of the Lag and Lead functions can affect the calculation of data.
  The Lag and Lead functions have two parameters. The first parameter contains the measure the function is applied to. The second parameter contains the number of time buckets.
  When you use the Calculate then aggregate order, the second parameter is interpreted as being in days. For example, Lag(Bookings History Average, 10) returns the value of the Bookings History Average measure from 10 days prior to the time period of the table cell.
  When you use the Aggregate then calculate order, the second parameter is interpreted as being in the time level that the measure data is displayed at in the table. For example, in a table that displays monthly time buckets, Lead(Consensus Forecast MAD, 6) returns the value of the Consensus Forecast MAD measure 6 months after the month of the table cell.
  If you've configured the table so that time buckets can be expanded or collapsed, then the time buckets can be interpreted at different levels. For example, if you've configured the table to display both quarterly and monthly time buckets and can expand a quarter to see the underlying months, Lag(Shipments History, 2) returns the value of the Shipments History measure from 2 quarters prior to the cell being reviewed if the quarters are collapsed or 2 months prior to the cell being reviewed if the quarters are expanded.

Manage User-Defined Measures

Create Measures and Assign to a Measure Catalog

In addition to reviewing measures, you use the Manage Planning Measure task to create, edit, duplicate, and delete measures. You can also create measure groups and add predefined and user-defined measures in them.

This topic discusses the following:

- Creating measures
- Assigning measures to a measure catalog

Create Measures

If you have the required privileges, you can create measures if the predefined ones don't meet your requirements. The measures that you create have the same features and functionality as predefined measures.

To create a measure:

1. In a Supply Chain Planning work area link, click the **Tasks** panel tab.

   You can create measures from one of the following work areas: Demand Management, Replenishment Planning, Supply Planning, Sales and Operations Planning, Demand and Supply Planning, or Plan Inputs.
2. In the Tasks panel, click the **Manage Planning Measures** link.
3. Click **Create** from the Actions menu.

   a. On the Create Measure page, enter a measure name and description.
   b. Select a measure group.
   c. Select a data type.
   d. Select the **Allow editing** check box if you want the measure to be editable in a pivot table.
   e. Select **Edit Range** to enable the Edit Lock tab, which controls the editable status of the measure

      The Edit Range value determines the time range over which the measure is editable. The available values are: History, Future, History and Future.
   f. On the Aggregation and Disaggregation tab, define the dimension parameters. Select the dimensions, hierarchy, and hierarchy level within the dimension to store the measure data. When a dimension and hierarchy are selected, the default setting for the Stored Level is the lowest level of the dimension's hierarchy. You can modify the level to store by selecting the hierarchy from the list and setting the stored level parameter within that hierarchy.

      - Aggregation Parameters: The Aggregation parameters control the way a measure's data is aggregated. You have two options:

        - Calculate and aggregate: Calculate and Aggregate calculates the measure's expression at the lowest data level and then aggregate up.
        - Aggregate then calculate: Aggregate and Calculate aggregates all measures referenced in this measure's expression and then calculate the expression.

      In the Time Dimension field, select the aggregation function that controls how data is aggregated for the time dimension. The Other Dimensions fields are the same as the Time dimension fields. These options control how the data is aggregated across all the dimensions except for time. The Weighted By field is enabled only if you select Weighted Average as the aggregation parameter for either Time or Other Dimensions. It enables you to select the measure to drive the weighted average calculation.

      The aggregation types include: Sum, Average, Weighted Average, Minimum, Maximum, Count, Latest, Median, Variance, and Standard Deviation.
      - Disaggregation Parameters: The Disaggregation Parameters control how changes to the data at an aggregated level are allocated down for storage. This is used when data changes are made in a pivot table, but also when made by the demand forecast. The weights for each combination, such as item-organization, are calculated and stored for the measure during plan run. These weights are used to allocate the data. For example, the forecasts for P1-Org1 and P2-Org1 are 40 and 60

respectively. Therefore, the weights used for allocation would be 40% for P1-Org1 and 60% for P2-Org1.

The parameters for the Disaggregation Type field are: By Measure, By Self, Equal, and Same Value. The default parameter is Equal.

The Disaggregation Basis field is enabled only if you select the Disaggregation Type as By Measure. Select the measure to use as the disaggregation basis from the list of measures.

The Secondary Basis field is enabled only if you have selected the Disaggregation Type field as By Measure or By Self. The values for Secondary Basis are Booking History Average or Shipment History Average.

The Secondary Basis measure is selected in case the basis measure has no value. You can select only measures that contain pre-calculated proportions as a secondary basis. That is, they're calculated during plan run.

g. On the Expression tab, define any new expressions for a measure. You create an expression when you have to show any value other than its stored information. The expression provides a flexible framework for an extensive variety of calculations and information. An expression for a measure references other measures, operators, and numbers.

   For example, to create a user defined measure that shows archived time periods, you need to use an archive expression. See the *View Planning Measures from Archived Time Periods* topic to learn more.

   In the Expressions subtabs:

   - The Functions tab lists the available functions, a description, an example of the function's use.
   - The Measures tab lists the available measures, their descriptions, and data type. The Insert button inserts the highlighted measure into the expression building area where functions or arithmetic operations can be specified.
   - The Attribute tab lists the attributes available for the Product dimension at Item level. The description and data type of the attribute is shown in the description pane.

   After you complete the expression, use the Validate button to ensure the syntax is correct. An error or succeeded messaged is displayed.

h. On the Edit Lock tab, you can define a new expression similar to the measure expression. The difference is rather than evaluating and displaying the expression result, the expression result is used to control or refine the editable status of the measure. If the expression evaluates as true, the measure is locked from editing. The expression is evaluated every time the table is run, and may change as relevant measures or attributes are modified.

i. On the Advanced tab, click the **Properties** tab and review the following parameters:

   - If you select the **Shared measure** check box, then the measure is shared across plans. By default, the parameter isn't selected, and the measure is plan-specific.

     > **Note:** You can share measures across only demand plans with the day planning time level or across demand and supply plans. In such plans, shared measures are common, and the entries you make in one plan apply to other plans. For plans of other types, even if you select the check box, the measures are plan-specific.

   - If you select the **Refresh with current data** check box, then the current measure value needs a placeholder to store the result in the application. For example, a noneditable measure where the

data is imported from a legacy or other application. Selecting this check box allocates a space to store the measure by the defined dimensions.

- Conversion Type enables you to define the valid Unit of Measure (UOM) and Currency conversions that are available for a measure in a table.

  Base Units of Measure defines the default unit of measure used to convert displayed data. The field is editable only for Numeric measures, which don't have Product and Organization-based levels (for measures that have product and organization, the definition comes from the data source). Select any relevant units of measure, which may be useful in a table, graph, or tile. Only the UOMs that you select are available for selection in a table or graph.

  Base currency defines the default currency to which displayed data are converted. The field is editable for only Currency type measures.

  You use Price lists to convert quantities into values, which are then converted to a currency.
- **Data Lookup** value enables you to identify a data lookup source that displays the measure as a list of value. The source attributes have 3 options: None (Default), Level, and List.
  - If Source=Level, you must identify the level and the attribute to display in the measure list.
  - If Source=List, then you can create and maintain the list of values. You can either add or remove members in this list.

j. On the Advanced tab, click the **Goals** tab to define if low or high values are better for measure goals.

k. On the Advanced tab, click the **Conditional Formatting** tab to define conditional formatting settings for the measure.

4. Click **Save and Close**.

Assign Measures to a Measure Catalog

To use the user-defined measure in your plan, add the new measure to the plan's measure catalog. Navigate to Configure Planning Analytics, find the plan's measure catalog on the Measures Catalog tab. In the Available Measures pane, search for the new user-defined measure, and add it to the Selected Measures. After you perform a plan run you can create a table or use an existing table, and add your new measure to the table.

Related Topics

- Configure Global Goals for Measures
- Duplicate, Edit, and Delete Measures
- Create Measure Groups

Duplicate, Edit, and Delete Measures

You can duplicate, edit, or delete user-defined measures using the Manage Planning Measures task, which is available in the Tasks drawer.

To duplicate the measure: Select a measure from the list of measures, select the **Action** menu on the toolbar, and then click **Duplicate**. Duplicating the existing measure gives you a starting point for creating a new measure definition. When you duplicate a measure the default name is Copy of <original measure name>. Other definitions of the duplicated measure remain the same as the original measure.

To edit the measure: Select a measure from the list of measures, select **Actions** menu, and then click **Edit**. Editing a measure enables you to select an existing measure and edit its attributes.

To delete the measure: Select a measure from the list of measures, select **Actions** menu, and then **Delete**. A complete list of all objects including tables and measure groups are be displayed to ensure you are aware of impacts of deleting a measure.

Related Topics

- Create Measure Groups
- Configure Global Goals for Measures

Create Measure Groups

Use Manage Planning Measures task to create a measure group. Measure groups are created to group measures together that you need frequently. Depending on your business need you can create measure groups and associate measures with appropriate groups.

To create a measure group:

1. In the Navigator, click a Supply Chain Planning work area link.
2. Click the Tasks panel tab.
3. In the Tasks panel drawer, select the **Manage Planning Measures** link.
4. Select **Create Group** from the **Actions** menu.
    - Enter a name and description.
    - From the Available Measures pane you can select measures and move them to the Selected Measures pane.
5. Click **Save and Close**.

Related Topics

- Create Measures and Assign to a Measure Catalog
- Duplicate, Edit, and Delete Measures

Configure Global Goals for Measures

You can define global goals for a measure using the Goals tab when you create or edit a measure. On the Create Measure page, click the Advanced tab and then select the Goals tab to configure global goals.

Define if low or high values are better. For example, a high value is good for revenue; a low value is good for expenses.

For global goals, you can provide a low range or a high range.

Goals option is available only for measures of type Currency, Number, and Percent. Using Global Goals, you can first define if low or high values are better for a measure. The ranges are displayed on the page when you are viewing a measure in comparison with its goal, for example, in an infotile. Global goals are measure level parameters and are not defined specifically for a subset of the data. For example, you cannot have a goal of 1000 for one organization and 50000 for another.

Related Topics

- Create Measures and Assign to a Measure Catalog
- Duplicate, Edit, and Delete Measures

10 Planning Exceptions

Exceptions in Plans

Overview of Plan Exceptions

Exceptions are a key element to evaluate and improve your plan in Oracle Fusion Cloud Supply Chain Planning.

After you run a plan, view the exceptions to understand the quality of the plan and to get visibility of key problem areas. You can focus on key exceptions to understand their root causes. From the exceptions tables, you can drill down to other plan views for more details into the problem areas. After taking actions to resolve exceptions, run the plan again to evaluate whether the plan is now acceptable.

Oracle provides several predefined exceptions that the Oracle Supply Chain Planning processes compute after you run a plan. View these exceptions to identify problem areas in the plan that might need your attention. To view a list of the exceptions, open your plan and then open the Exceptions table.

The exception types and their calculation logic are predefined. However, to ensure that only significant deviations are highlighted, you can edit the conditions under which the exceptions are generated. You control which exceptions to calculate for a plan by specifying an exception set on the Plan Options page. View the metrics associated with exceptions, such as by count or by quantity, in tables or graphs at different hierarchical levels.

You can also create user-defined exceptions based on specific conditions in the supply chain that you want to identify. Base these user-defined exceptions on your business requirements and focus on specific areas to improve your supply chain planning capabilities. Use the Configure Exception task to create a user-defined exception.

> **Note:** You can't create user-defined exceptions in the Planning Central work area. Also, there are no predefined exceptions for Replenishment Planning.

Plan Exception Types

From within your plan, you can open the Exceptions table to view the exceptions grouped within the following folders:

Exception Folder	Accessible from these work areas:
Demand Planning Exceptions	Demand Management Planning Central Sales and Operations Planning
Replenishment Planning Exceptions	Replenishment Planning (user-defined exceptions only)
Sales and Operations Planning Exceptions	Sales and Operations Planning
Supply Planning Exceptions	Supply Planning

Exception Folder	Accessible from these work areas:
	Planning Central
Views for Multiple Exceptions	Supply Planning Planning Central

Exception Categories

There are two categories of exceptions:

- Measure-based exceptions
- Order-based exceptions

Oracle provides several predefined exceptions for most Supply Chain Planning modules. You can also create user-defined exceptions from most Supply Chain Planning work areas. The following table lists the Supply Chain Planning modules, the type of exception, whether the product has predefined exceptions, and whether you can create user-defined exceptions.

Module	Type of Exception	Predefined Exceptions	User-Defined Exceptions
Oracle Demand Management	Measure-based exceptions	Yes	Yes
Oracle Planning Central	Measure-based exceptions	Yes	No
Oracle Replenishment Planning	Measure-based exceptions	No	Yes
Oracle Sales and Operations Planning	Measure-based exceptions	Yes	Yes
Oracle Supply Planning (constrained and unconstrained)	Order-based exceptions Measure-based exceptions	Yes	Yes

View Exceptions for Your Plan

When you open the exceptions table, the number of exception records generated are shown after the exception name, in parentheses. Clicking the exception name displays a table with details of the exception. From the Exceptions tab, you can:

- Search for exceptions for a specific item and organization within a specified date range
- Search for measure-based exceptions based on various attributes such as Planner, Planner Description, Catalog, and Category. If a measure-based exception is created at the category level, categories specific to the catalog selected in the hierarchy parameter appear in search results. If a measure-based exception is created at the Item level, then you can filter the records based on Item, Catalog, and Category Level attributes. If a measure-based exception is created with no product dimension, then you can filter the records based on other attributes except Item and Category level

- Save the search criteria for future searches
- Export the table to a spreadsheet, rearrange columns, and perform other standard table actions on the table

Predefined views within the Views for Multiple Exceptions folder enable you to view all exceptions for an item, resource, or supplier within the same table. The folder is available only in the Supply Planning and Planning Central work areas.

From tables that show exception data, you can navigate in context to other plan data. This navigation capability is useful when, for example, you view exceptions for an item and you also want to see its supply or resource availability.

Related Topics

- How You Edit Exceptions
- Configure Exception Thresholds
- Overview of Exceptions and Exception Sets
- Overview of Predefined Planning Exceptions
- Overview of User-Defined Exceptions

Configure Exception Thresholds

You can control the number of exceptions that your plan generates by changing the levels at which an exception is computed and its threshold value. A higher threshold value typically results in fewer exceptions.

To configure exception thresholds, do the following:

1. From a Supply Chain Planning work area, select the **Configure Exceptions** task.
2. On the Configure Exceptions page, select an exception.
3. Click **Actions** and then select **Edit**.

Demand planning, replenishment planning, and sales and operations planning exceptions are measure-based exceptions. A base measure forms the foundation for these exceptions.

In the Planning Central work area, you can't change the base measure, but you can edit the level at which the exception is computed and its threshold value.

Most supply planning exception calculations are for a specific order and aren't associated with a base measure. For these types of exceptions, select the fact associated with the exception and modify the condition that specifies when to generate the exception. Think of a fact as an attribute of the exception. Typical facts are quantity and value.

Related Topics

- How You Edit Exceptions
- Overview of Plan Exceptions
- Overview of User-Defined Exceptions

Create Tables and Graphs for Exceptions

Create a table or graph for plan exceptions based on their measures, such as number of exceptions generated and the quantity associated with the exception.

Create a Table for Exceptions

1. In a Supply Chain Planning work area, open a plan.
2. Click the **Actions** button and select **Manage Tables, Graphs, and Analysis Sets** from the list.
3. In the Manage Tables, Graphs, Analysis Sets dialog box, click **Actions**. Next, select **Create** and then select **Table**.
4. On the Create Table page, do the following:
    - Enter a name for your table.
    - Select a group.
    - Enter a description.
    - Select the type of access (public or private).
5. On the Measures tab, do the following:
    a. In the Available Measures section, expand the Overall Plan Health folder.
    The Overall Plan Health folder contains the measures associated with exceptions.
    b. Select the exception facts that you want to view in the table.
6. On the Hierarchies tab, include the Exception Type hierarchy.
7. On the Members tab, select the exception types to display in the table.
8. Click **Save and Close**.

Create a Graph for Exceptions

1. In a Supply Chain Planning work area, open a plan.
2. Click the **Actions** button and select **Manage Tables, Graphs, and Analysis Sets** from the list.
3. In the Manage Tables, Graphs, Analysis Sets dialog box, click **Actions**. Next, select **Create** and then select **Graph**.
4. On the Create Graph page, do the following:
    - Enter a name for your graph.
    - Select a group.
    - Enter a description.
    - Select the type of access (public or private).
5. On the Measures tab, do the following:
    a. In the Available Measures section, expand the Overall Plan Health folder.
    The Overall Plan Health folder contains the measures associated with exceptions.
    b. Select the exception facts that you want to view in the graph.
6. On the Hierarchies tab, include the Exception Type hierarchy.
7. On the Members tab, select the exception types to display in the graph.
8. On the Layout tab, do the following:
    a. In the Graph Layout Options section, select a type of graph.
    b. Configure your graph in the horizontal panels below the Graph Layout Options.
    The horizontal panels below the Graph Layout Options section vary, depending on the type of graph that you select. For example, if you select Pie Graph for your graph type, the horizontal panels include General Options, Pie Slice, and Formatting.

9. Click **Save and Close**.

Related Topics

- How You Edit Exceptions
- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Overview of Plan Exceptions

Exceptions and Exception Sets

Overview of Exceptions and Exception Sets

On the Configure Exceptions page, you can select an exception and edit the thresholds for reporting. You can configure only those exceptions that are relevant to your Supply Chain Planning work area.

On the Configure Exception Sets page, you can restrict the exceptions that are computed as part of the plan run. You can also control the organizations, item categories, time period, and so on for which to compute exceptions.

A defined exception set is associated with a plan. The plan evaluates the exceptions using the filters associated with the exception set. Select the exception set to use during the plan run on the Plan Options page, Scope tab.

Related Topics

- How You Edit Exceptions
- Configure Exception Sets
- Set Filters on Planning Dimensions for Exceptions
- Overview of User-Defined Exceptions
- Define Scope Plan Options

How You Edit Exceptions

To edit exception parameters, select an exception on the Configure Exceptions page. You can configure only those exceptions that are relevant to your Supply Chain Planning work area.

In the Edit Exception dialog box, there is an area for General Properties and Exception Detail. Depending on the Supply Chain Planning work area that you're in, you can see the following tabs in the Exception Detail section:

- Demand Management work area: Level, Threshold, and Notification
- Planning Central work area: Level and Threshold
- Replenishment Planning work area: Level, Threshold, and Notification
- Sales and Operations work area: Level, Threshold, and Notification
- Supply Planning work area: Level, Threshold, and Notification

You can edit Level and Threshold only for those exceptions whose basis is Measure. For exceptions whose basis is Order, you can edit only the Threshold.

Level Tab

On the Level tab, the dimensions for the exception are derived from the base measure. You can edit the default values for hierarchy and level. You can also enable and disable each of the available dimensions to control the level that the exception is evaluated at.

> **Note:** Ensure that the selected hierarchy is in the dimension catalog for the plan. The Configure Exceptions task is outside of the plan context. It's possible to select a product hierarchy that's not used in the plan's dimension catalog, in which case the plan exceptions output won't display data for items.

Threshold Tab

On the Threshold tab, the base measure used in the exception is compared to either a value or another measure. If the threshold is specified in terms of a value, the value is interpreted in terms of the data type of the base measure. To ensure that exceptions return meaningful values, set the threshold to an appropriately high or low value.

Notifications Tab

On the Notification tab, set up notification rules for exceptions. Configure exceptions to trigger notifications to specific users or roles. In the Details section specify the entity and condition for notifications. Notifications are automatically sent at the end of the plan run.

Related Topics

- Configure Exception Sets
- Set Filters on Planning Dimensions for Exceptions
- Overview of Predefined Planning Exceptions
- Overview of User-Defined Exceptions
- Overview of Plan Exceptions

Configure Exception Sets

Use the Configure Exception Sets page to create, modify, or copy an exception set.

The set of exceptions and their scope that's calculated by the plan is configured on the Create or Edit Exception Set page. When creating an exception set, you must first specify the exceptions to include in the set, which can include user-defined exceptions. User-defined exceptions aren't available in Planning Central.

The exception set also enables you to restrict the generation of exceptions for specific organizations, categories, suppliers, and customers. You can then point to the exception set on the Plan Options page for a plan.

When you create a constrained supply plan in Supply Planning, the Exception Set plan option defaults to the Constrained Supply Planning Default exception set.

Use the following steps to configure exception sets:

1. In a Supply Chain Planning work area, click the Tasks panel drawer and click **Configure Exception Sets**.

2. On the Configure Exception Sets page, select an existing exception set. Next, click **Actions** and select **Duplicate**.
3. In the Create Exception Sets dialog box:
    a. Expand the group of exceptions in the Available Exceptions section. For example, expand Supply Planning Exceptions.
    b. Select the exception from the Available Exceptions section and move it to the Selected Exceptions section.
4. Click **Save and Close** to return to your plan.

Note: To generate exceptions, you must include the exception set in the plan options for your plan.

Related Topics

- How You Edit Exceptions
- Set Filters on Planning Dimensions for Exceptions
- Overview of Plan Exceptions
- Overview of Predefined Planning Exceptions
- Overview of User-Defined Exceptions

Set Filters on Planning Dimensions for Exceptions

After selecting available exceptions for an exception set to use in a plan, you can add filters on some of the key planning dimensions. The levels on which you can define filters are organizations, categories, suppliers, and customers.

On the Configure Exception Sets page, Filters tab, select one or more organizations, suppliers, categories, and customers in each of the tables for which to generate exceptions. If you don't specify a filter for a level, you will generate exceptions for all records in that level. For example, if you don't specify an organization, exceptions will be generated for all planning organizations when you run the plan. If any of the organizations, categories, suppliers, or customers in the exception set aren't available in the plan, they will be ignored.

In the **Exception Cutoff Days** field, specify the number of calendar days, starting from the plan start date, from which to generate the exceptions. If this field is blank, exceptions will be generated for the full planning horizon.

Related Topics

- Configure Exception Sets
- How You Edit Exceptions
- Overview of Plan Exceptions

Predefined Planning Exceptions

Overview of Predefined Planning Exceptions

The planning process computes several predefined exceptions after you run a plan.

View these exceptions to obtain quick visibility of problem areas in the plan that might need your attention. To view a list of the exceptions, from a Supply Chain Planning work area, open a plan and then open the Exceptions table.

The Exceptions table is grouped into different folders, depending on the plan type:

- Demand Planning Exceptions
- Sales and Operations Planning Exceptions
- Supply Planning Exceptions
- Views for Multiple Exceptions: View exceptions for an item, resource, or supplier within the same table. (This folder is available only in the Supply Planning and Planning Central work areas.)

Note: There are no predefined exceptions for Replenishment Planning, only user-defined exceptions that reside in the Replenishment Planning Exceptions folder.

Related Topics

- Overview of Plan Exceptions
- How You Edit Exceptions
- Predefined Sales and Operations Planning Exceptions
- Predefined Demand Planning Exceptions
- Predefined Supply Planning Exceptions

Predefined Sales and Operations Planning Exceptions

The basis for all predefined sales and operations planning exceptions is Measure. The following table lists the predefined sales and operations planning exception reports, their descriptions, the base measure used for the exception, and the levels.

Sales and Operations Planning Exception Name	Description	Base Measure	Levels
Demand Quantity Not Satisfied	The satisfied demand (Constrained Forecast measure) is less than the required demand (Net Demand measure) for a planning time bucket. This exception can occur if lead times are enforced or capacity constraints are considered. When	Unmet Demand	Month Organization Item

Sales and Operations Planning Exception Name	Description	Base Measure	Levels
	this occurs, demand is backordered (Backorder measure).		
Items Below Safety Stock	The projected available balance (Projected Available Balance measure) is below the specified safety stock (Safety Stock measure) level for a planning time bucket. If the exception extends beyond one time bucket then the planning process reports one exception with the start and end dates to reflect the duration.	Projected Available Balance	Month Organization Item
Items with a Shortage	The projected available balance (Projected Available Balance measure) has a negative value for a planning time bucket. It's unlikely for this exception to occur in a sales and operations plan.	Projected Available Balance	Month Organization Item
Resource Overloaded	The resource utilization (Resource Utilization Percentage measure) exceeds 100 percent for a planning time bucket. If the exception extends beyond one time bucket then the planning process reports one exception with the start and end dates to reflect the duration. In a sales and operations plan that considers work center capacity constraints, it's still possible for resources in a work center to be overloaded.	Resource Utilization Percentage	Month Organization Resource
Work Center Overloaded	The work center utilization (Resource Utilization Percentage measure) is greater than or equal to 100 percent for a planning time bucket. If the exception extends beyond one time bucket then the planning process reports one exception with the start and end dates to reflect the duration. In a sales and operations plan that considers work center capacity constraints, it's still possible for resources in a constrained work center to be overloaded. Additionally, only the capacity for Constrained Work Center Level Members are considered, whereas other work centers are unconstrained and can exceed 100 percent.	Resource Utilization Percentage	Month Organization Work Center

Sales and Operations Planning Exception Name	Description	Base Measure	Levels
Supplier Capacity Overloaded	The supplier item capacity utilization (Supplier Capacity Utilization Percentage measure) exceeds 100 percent for a planning time bucket. If the exception extends beyond one time bucket then the planning process reports one exception with the start and end dates to reflect the duration. In a sales and operations plan that considers supplier capacity constraints, it's still possible for supplier items in a category to be overloaded.	Supplier Capacity Utilization Percentage	Month Supplier Site Item
Supplier Category Capacity Overloaded	The supplier category capacity utilization (Supplier Capacity Utilization Percentage measure) is greater than or equal to 100 percent for a planning time bucket. If the exception extends beyond one time bucket then the planning process reports one exception with the start and end dates to reflect the duration. In a sales and operations plan that considers supplier capacity constraints, it's still possible for supplier items in a category to be overloaded.	Supplier Capacity Utilization Percentage	Month Supplier Site Category 1
Lead Time Compression	This exception can occur for a planning time bucket when purchasing and transfer lead time compression is allowed. The exception quantity is the number of time buckets that have been compressed. For example, if a supplier item has a 3-month lead time and the item is required in 2 months, then the exception quantity is 1. If the Allow purchasing and transfer lead time compression plan option isn't selected, then a Demand Quantity not Satisfied exception can occur.	Lead Time Compression	Month Supplier Site Organization Item
Consensus MAPE Exceeds Threshold	The mean absolute percentage error (MAPE) value for the consensus forecast exceeds 20 percent for an item in an organization.	Consensus Forecast MAPE	Organization Item
Significant Deviation between Final Sales Forecast and Consensus Forecast	The deviation between the Final Sales Forecast quantity and the Consensus Forecast quantity exceeds 20 percent for a planning time bucket.	Deviation Between Final Sales Forecast and Consensus Forecast	Month Zone Organization

Sales and Operations Planning Exception Name	Description	Base Measure	Levels
			Item
Significant Deviation between Final Marketing Forecast and Consensus Forecast	The deviation between the Final Marketing Forecast quantity and the Consensus Forecast quantity exceeds 20 percent for a planning time bucket.	Deviation Between Final Marketing Forecast and Consensus Forecast	Month Item
Significant Deviation between Shipments History and Consensus Forecast	The deviation between the Shipments History quantity and the Consensus Forecast quantity exceeds 20 percent for a planning time bucket.	Deviation Between Shipment History Shipped Items by Requested Date and Consensus Forecast	Month Zone Organization Item
Significant Deviation between Financial Forecast and Operating Plan Value	The deviation between the Financial Forecast Value and the Operating Plan Value exceeds 20 percent for a planning time bucket.	Deviation Between Financial Forecast and Operating Plan Value	Month Organization Item
Significant Deviation between Financial Forecast and Unconstrained Operating Plan Value	The deviation between the Financial Forecast Value and the Unconstrained Operating Plan Value exceeds 20 percent for a planning time bucket.	Deviation Between Financial Forecast and Unconstrained Operating Plan Value	Month Organization Item
Significant Deviation between Last Year Shipments and Operating Plan Value	The deviation between the Shipments History Value 1 Year Ago and the Operating Plan Value exceeds 20 percent for a planning time bucket.	Deviation Between Last Year Shipments and Operating Plan Value	Month Zone Organization Item
Significant Deviation between Current and Prior Consensus Forecast Value	The deviation between the Consensus Forecast Value and the archived Consensus Forecast Value exceeds 20 percent for a planning time bucket.	Deviation Between Current and Prior Consensus Forecast Value	Month Zone Organization Item
Significant Deviation between Current and Prior Operating Plan Value	The deviation between the Operating Plan Value and the archived Operating Plan Value exceeds 20 percent for a planning time bucket.	Deviation Between Current and Prior Operating Plan Value	Month Zone Organization Item

User-Defined Exceptions

Overview of User-Defined Exceptions

You can create your own exceptions to improve supply planning capabilities using specific conditions in the supply chain.

Use the Configure Exception task to create a user-defined exception.

You can create and use exceptions for these modules:

Module	Exception Type
Oracle Demand Management	Measure-based exceptions
Oracle Replenishment Planning	Measure-based exceptions
Oracle Sales and Operations Planning	Measure-based exceptions
Supply Planning (constrained and unconstrained)	Order-based exceptions Measure-based exceptions

Note: User-defined exceptions aren't available for Oracle Planning Central.

For user-defined exceptions that are measure based, the measure forms the foundation for that exception. After you select a measure, you can specify the dimension hierarchy and level for that measure, and the threshold value or measure to generate the exception. You can create an exception based on the following thresholds:

- Value: Set the value and the specific operation, such as less than, equal, and larger than, against the base measure.
- Measure: Select the measure based on your business requirement and select the specific operation that meets the condition against the base measure.

For example, you can create a date-type, measure-based exception such as launch date or discontinuation date. You then can set the threshold value with date and select a date-type measure from the Measure parameter.

Consider the Forecast Start Date before Launch Date date-type exception. You can define the parameters as:

- Base Measure = Forecast Start Date
- Operation = Before (Available values for date type exceptions are: After, Before, Equals, On or after, and On or before)
- Threshold Measure = Product Launch Date

Related Topics

- Configure Measure-Based Exceptions

Configure Measure-Based Exceptions

This topic covers how to configure measure-based exceptions in Supply Planning, Sales and Operations Planning, Demand Management, and Replenishment Planning.

You can create measure-based exceptions where the measure forms the foundation for that exception. After you select a measure, you can specify the dimension hierarchy and level for that measure, and the threshold value or measure to generate the exception. For example, you can create an exception to identify resource overloads when the resource utilization percentage is greater than 110%.

Configure Exceptions That Are Measure Based

Use the following general steps to configure a user-defined exception that's measure based.

1. In a Supply Chain Planning work area, click the Tasks panel drawer and click **Configure Exceptions**.
2. On the Configure Exceptions page, click **Actions** and then select **Create**.
3. In the Create Exception dialog box, General Properties section, specify or enter information for the following fields:
    a. Exception
    b. Display Name
    c. Exception Group
    d. Base Measure
4. In the Exception Detail section, on the Level tab, select the dimension and its corresponding hierarchy and level to use for your exception

    What you select for levels determines the combination at which the exception condition is evaluated. For example, if you select levels Item and Organization, then the exception criteria is evaluated for each unique combination of Item and Organization.

    > **Note:** Configure Exceptions is a task defined outside of plan context. When configuring exceptions for measure-based plans, ensure the selected hierarchy is in the plan's dimension catalog in plan options. Otherwise item level exceptions might be blank after running a plan.

5. On the Threshold tab:
    a. Select an operation.
    b. Define a threshold for the base measure, which can be defined based on a value or another measure.
6. On the Notification tab, define the notification attributes.
7. When done, click **Save and Close**.

Exception Detail Section

In the Create Exception dialog box, the Level tab in the Exception Detail section is populated based on the base measure. The Level tab consists of dimension, hierarchy, and level.

For example, for the user-defined exception Fill Rate Shortfall Percentage, the details are populated based on the base measure Fill Rate Shortfall Percentage. As defined on the Threshold tab, the planning process generates this exception when the Fill Rate Shortfall percentage is greater than 10%.

For this exception, the populated dimensions are Organization and Product. You can select dimensions and their corresponding hierarchy and levels. In this example for the Product dimension, you can select either Item or Category as the level.

If you select the Item level, the planning process generates this exception for any item with the Fill Rate Shortfall Percentage of greater than 10% as defined in the Threshold tab. This case enables you to analyze the plan output in more detail. At the same time, the number of exceptions could be large enough that analyzing each exception might not be possible.

On the other hand, if you select the Category level, the planning process generates this exception for any category with the Fill Rate Shortfall Percentage of greater than 10%. In this case, the number of exceptions is lower than the item level scenario. But, potentially some issues that exists at the item level aren't visible since the planning process generates an exception only when the specified criterion holds at the category level.

Related Topics

- Overview of User-Defined Exceptions
- Overview of Plan Exceptions

Configure Exceptions Based on User-Defined Measures

You might have a scenario where you need to define a user-defined measure and then configure an exception based on that measure.

For example, you want to identify the items that have demands with a risk of not being satisfied, and the value of these demands are 10 percent more than their quarterly revenue.

Step 1: Configure a User-Defined Measure

In our example, the first step is to define a user-defined measure that represents the percentage value of demands at risk. This percentage can be calculated as follows:

Demand at Risk Value Percentage = (Demand at Risk Value / Revenue) x 100

Use the following steps to configure a user-defined measure.

1. Navigate to the Tasks panel. In the Configuration section, click the **Manage Planning Measures** link.
2. On the Manage Planning Measures page, click **Actions** and then select **Create**.
3. In the Create Measure dialog box, enter or select the following:

Parameter	Value
Measure	Demand at Risk Value Percentage
Description	Enter a description

Parameter	Value
Data Type	Percent
Enable in Work Area	Supply Planning
Measure Groups	Overall Plan Health

4. On the Aggregation and Disaggregation tab in the Dimension Parameters section, select the **Customer** and **Demand Class** dimensions.
5. On the Expression tab, Functions subtab, define the Demand at Risk Value Percentage equation:

   Safe_Division (Demand at Risk Value, Revenue, null) * 100.
6. Click **Save and Close**.

Step 2: Configure a User-Defined Exception

The next step is to configure a user-defined exception using Demand at Risk Value Percentage as the base measure.

1. Navigate to the Tasks panel. In the Configuration section, click the **Configure Exceptions** link.
2. On the Manage Planning Measures page, click **Actions** and then select **Create**.
3. In the Create Exceptions dialog box, in the General Properties section, enter or select the following:

Parameter	Value
Exception	Demand at Risk Value over 10 Percent of Revenue
Display Name	Demand at Risk Value over 10 Percent of Revenue
Exception Group	Supply Planning Exceptions
Base Measure	Demand at Risk Value Percentage

4. In the Exception Detail section, on the Level tab, specify the dimension and its corresponding hierarchy and level.
5. On the Threshold tab, define the threshold for the base measure as Demand at Risk Value Percentage Greater than 10%:

Parameter	Value
Base Measure	Demand at Risk Value Percentage
Description	Demand at Risk Value Percentage

Parameter	Value
Operation	Greater than
Threshold Value	10%

6. Click **Save and Close**.

Calculate User-Defined, Measure-Based Exceptions

After you modify, add, or delete one or more user-defined, measure-based exceptions in your plan's exception set, you can recalculate these exceptions independent of running the plan. These calculations are based on the current definitions of the exceptions and include any changes since the plan was last run.

This calculation is based on the current definition of exceptions that includes any changes since the plan was last run. By default, the process calculates all exceptions in the plan exception set. You can change the exception set parameters of the process to calculate a subset of those exceptions.

Note: The Calculate Measure-Based Exception process doesn't recalculate predefined order-based exceptions.

The Calculate Measure-Based Exception process is available from the Supply Planning, Demand Planning, Replenishment Planning, and Sales & Operations Planning work areas.
You can recalculate user-defined, measure-based exceptions from these pages:

- Scheduled processes: By default, scheduled process recalculates all exceptions in the exception set. However, you can also recalculate exceptions of a subset by changing the exception set parameters.
- Actions menu on the header of the open plan
- Actions menu on Manage Plans page

Note: The Calculate Measure Based Exception process and Plan Run process cannot run simultaneously for the same plan.

11 Planning Cycles

Overview of Planning Cycles

Sales and Operations Planning is a process of recurring planning cycles consisting of activities, tasks, and participants.

Manage your Sales and Operations Planning process by using the predefined, but configurable, process activities and dashboards. The planning cycle combines reviews of product development, demand, and supply with a focus on future actions, and aligns operating plan performance with financial goals.

The planning cycle combines reviews of product development, demand, and supply with a focus on future actions, and aligns operating plan performance with financial goals.

Create a sales and operations planning cycle on the Manage Planning Cycle page in the Sales and Operations Planning work area. Define your template on the Manage Planning Cycles page: What are your activities, what are the tasks, and who are the participants for each stage. You can edit the planning cycle later, as needed. Create templates from templates used in prior planning cycles, which you can configure to align with your Sales and Operations Planning process as it evolves.

The following table describes the five preconfigured review stages of a Sales and Operations Planning process that is managed by the planning cycle.

Review Stage	Description
Product Review	Perform a cross-functional review of new products and the life cycle of maturing products.
Demand Review	Analyze forecasts for new and existing products based on the inputs from sales and marketing to reach consensus on the future unconstrained demand plan.
Supply Review	Use the latest consolidated, unconstrained demand plan and analyze the feasibility of internal and external supply capacity to fulfill demands. For example, you analyze whether there is sufficient supplier and resource capacity and inventory to balance supply with demand.
Financial Review	Compare the profitability of operational plans for the current fiscal year relative to the financial forecast target.
Executive Review	Make decisions and approve operational plans.

The Sales and Operations Planning process does not require you to have all of the review stages. If you do not have a product review or a formal executive review, then do not add any participants or tasks for those review stages.

You can use the Configure Planning Cycle Stages dialog box to rename or hide a review stage. For example, you can rename Demand Review to Demand and Supply Balancing. To rename or hide a review stage, navigate to the Manage Planning Cycles page, open the planning cycle, and then click **Actions** > **Configure Stages**.

Related Topics

- Create a Planning Cycle
- Demand Reviews
- Supply Reviews
- Executive Reviews
- Configure Planning Cycle Stages

Create a Planning Cycle

Use the predefined planning cycle template called Default_PlanCycle to initially create a planning cycle. You can modify the planning cycle to model the activities, tasks, and participants that you want to use in your Sales and Operations Planning process.

Use links to associate a task with a relevant dashboard or report to carry out each task. You can link to graphs, tables, tile sets, and layouts. Use your user-defined planning cycle as a template for future planning cycles to copy over all activities, tasks, and participants.

> **Note:** When you copy a planning cycle, changes that you made to that planning cycle's stage names and your choices to display stage names or not are copied over to the new planning cycle. Use the Configure Planning Cycle Stages dialog box to rename or display a review stage in your new planning cycle.

Follow these steps to create a planning cycle using the predefined Default_PlanCycle template:

1. Navigate to the Manage Planning Cycles page:
    a. In the Navigator, under Supply Chain Planning, click the **Sales and Operations Planning** work area link.
    b. In the Sales and Operations Planning work area, click the **Tasks** panel tab.
    c. In the Tasks panel drawer, under Planning Cycles, click the **Manage Planning Cycles** link.
2. On the Manage Planning Cycles page, in the **Actions** menu, select **Create**.
3. In the Create Planning Cycle dialog box, enter or select the following values:

Field	Definition
Planning Cycle to Copy	Select the planning cycle template from which to copy. Use the predefined planning cycle template called Default_PlanCycle to initially create a planning cycle.
Planning Cycle	Enter a name for your planning cycle, such as: SOP FY2019 January.
Description	Enter a description for the planning cycle that you are creating.
Start Date	Enter a start date for your planning cycle in the following format: mm/dd/yy.
End Date	Enter an end date for your planning cycle in the following format: mm/dd/yy.

Field	Definition
Plan	Select a sales and operations plan to associate with the current planning cycle. The link that you set up for an activity or task ties that report to the plan. You can select multiple plans. For example, you can select the current baseline plan and alternative plans under consideration for the current planning cycle.

4. When done entering or selecting values, click **Save and Continue**.

   The Manage Planning Cycles page, Product Review tab appears where you can configure your planning activities, tasks, and participants.
5. To create an activity, do the following:
   a. Click the Create icon and select **Activity**.
   b. In the Create Activity dialog box, enter or select the following values:

Field	Description
Title	Enter a title for your activity.
Category	Displays the name of the planning cycle category, such as Product Review, Demand Review, Supply Review, and so on.
Owner	Select the owner of the activity.
Assignee	Select the assignee for the activity.
Type	Select General or Meeting.
Link	Select a table, graph, tile set, layout, or URL to which to link. The link that you set up for the activity ties that report to the plan.

   c. When done, click **Save and Close** to return to the Manage Planning Cycles page, Product Review tab.
6. To create a task, do the following:
   a. Click the Create icon and select **Task**.
   b. In the Create Task dialog box, enter or select the following values:

Field	Description
Activity Title	Select an activity to which to associate the task.

Field	Description
Title	Enter a title for your task.
Owner	Select the owner for the task.
Assignee	Select the assignee for the task.
Due Date	Select one of the following for a date by which the task must be completed: - Offset days from cycle start: Enter the number of days from the start of the cycle. - Fixed: Enter a specific date.
Type	Select General or Meeting.
Link	Select a table, graph, tile set, layout, or URL to which to link. The link that you set up for the task ties that report to the plan.

c. When done, click **Save and Close** to return to the Manage Planning Cycles page, Product Review tab.

7. To configure the participants for your plan:
   a. Click the Edit icon to access the Participants: Product Review dialog box.
   b. Select participants and either add them to or delete them from the Participants list.
   c. When done, click **Save and Close** to return to the Manage Planning Cycles page, Product Review tab.
8. When you are done configuring the planning cycle for the Product Review stage, click the other tabs to configure the other stages: Demand Review, Supply Review, Financial Review, and Executive Review.

> **Note:** The Sales and Operations Planning process does not require you to have all of the review stages. If you do not have a product review or a formal executive review, then do not add any participants or tasks for those review stages.

9. When you have completed configuring the planning cycle for all stages, click **Done**.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Configure Planning Cycle Stages
- How You Work in a Planning Cycle

Link Planning Cycle Tasks to Demand and Supply Plans

You can link the planning cycle tasks to demand and supply plans using the following steps:

1. On the Manage Planning Cycles page, select the **Name** of the planning cycle.
2. In the Actions menu, select **Edit**.
3. In the Edit Planning Cycle dialog box, select **Plans**.

Select the demand and supply plans to associate with the current planning cycle. You can link the planning cycle activities and tasks with demand and supply plans used in your Sales and Operations Planning process.

You can select multiple plans. For example, you implement the Demand Management, Supply Planning or Replenishment Planning plans. You can use these detailed plans together with, or without, the sales and operations plans.

Link Planning Cycle Tasks to External Systems

You can link planning cycle activities, tasks, action items, and decision items in Sales and Operations Planning to external systems outside of Oracle Cloud Supply Chain Planning. You can select a configured link from an open planning cycle task to open the link in a new tab.

For example, if you have a task to review and adjust the financial forecast in Oracle Cloud Enterprise Performance Management (EPM), you can configure a task link from Sales and Operations Planning to your EPM application.

When you create a planning cycle link to an external system in Sales and Operations Planning, follow these steps:

1. In **Name**, enter the link to view when you navigate from a planning cycle task.
2. In **Application Name**, select the name that you create in **Manage Integration of Additional Applications**. The name must start with SCP_EXT_LINK_. Refer to the Set Up the Application Integration for an External System topic for further instructions.
3. In **Base URL**, the base URL that was configured for the **Application Name** is displayed.
4. In **Page Path**, enter the remaining path with a plan token (#PlanName# or #PlanId#) or without plan context.
    - #PlanName#: Use this token to pass the plan member name.
    - #PlanId#: Use this token to pass the internal ID of the plan member.

The **Page Path** in a planning cycle link to an external system either can have a plan context or no plan context. For example, a URL link to a web page doesn't require plan context. When specifying plan context in the **Page Path**, use a plan token. The system will replace the token with a selected plan when navigating to an external system with a plan context. The potential targets of navigation are displayed if you specify the plan context. If you go to a link with no plan context, you can't see any of the plans associated with the planning cycle as there's no plan context in the configured page path.

Related Topics

- Set Up the Application Integration for an External System

Configure Planning Cycle Stages

Sales and Operations Planning provides five preconfigured review stages in a planning cycle: Product Review, Demand Review, Supply Review, Financial Review, and Executive Review.

You can change the review stage names to better align with your organization's planning processes. For example, you can rename Demand Review to Demand and Supply Balancing. You can also choose to not display a review stage tab in your planning cycle. Use the Configure Planning Cycle Stages dialog box to rename or hide a review stage, which you navigate to from the Manage Planning Cycles page.

In Manage Planning Cycles, you create a planning cycle by using an existing planning cycle as a template. When you copy a planning cycle, changes that you made to the planning cycle stage names and your choices to display stage names or not are copied over to the new planning cycle.

> **Note:** You can only have up to five review stages in a planning cycle, and you must display at least one stage. Also, the planning cycle stage name must be unique; the name can't already exist in the planning cycle.

Use the following steps to rename your review stages or to hide a stage for the planning cycle:

1. Open the Configure Planning Cycle Stages dialog box:
    a. From the Sales and Operations Planning work area, click the Tasks drawer and then click **Manage Planning Cycles**.
    b. On the Manage Planning Cycles page, search for and select your planning cycle.
    c. When the planning cycle opens, click **Actions** and then select **Configure Stages**.

    The Configure Planning Cycles Stages dialog box opens.
2. In the **Stage Name Override** column, enter a new name to use instead of the predefined review stage name.

    The planning cycle stage name that you enter must be unique. The name cannot already exist in the planning cycle.
3. In the **Enabled** column, select **Yes** to display the tab or **No** to hide the tab for that stage on the user interface.

    You must have at least one planning cycle review stage set to **Yes**.
4. When done, click **Save and Close**.

    Your changes appear on the Manage Planning Cycles page. If you use this planning cycle as a template for a new planning cycle, your changes carry over to the new planning cycle.

    > **Note:** If you're working in an open planning cycle, you must close the planning cycle and then reopen it to see your changes.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Create a Planning Cycle
- How You Work in a Planning Cycle

How You Work in a Planning Cycle

After you create and configure your planning cycle in Sales and Operations Planning, open it to monitor the progress of your activities and tasks. You can see where you are in the planning process and create action items, if needed.

You can see how many steps have completed, as well as the time to get work done to close a task.

When you open a planning cycle from the Sales and Operations work area, you will see only the review tabs for which you have participants and tasks assigned. For example, you have no participants assigned for the Executive Review, so the Executive Review tab does not appear when you open the planning cycle. If needed, you can modify the planning cycle and add participants and tasks for the Executive Review.

The tabs for a planning cycle are:

- Overview
- Product Review
- Demand Review
- Supply Review
- Financial Review
- Executive Review
- Notes

You can access the Overview and Notes tabs and the tabs for the stages in which you are a participant. For example, a demand planner might be a participant in the product, demand, and supply reviews but not for the financial or executive reviews.

The Overview tab displays an overview of the overall Sales and Operations process where you can monitor progress to date. The Overview tab also provides a timeline, list of assigned tasks, and participants. You can filter the Worklist and Timeline sections by review phase, such as Supply Review.

The Product Review, Demand Review, Supply Review, Financial Review, and Executive Review tabs all have the same user interface. Each tab contains editable lists of planning activities, tasks, and action items. Each task is associated with an owner, due date, and status.

Each review type displays the following panes:

- **Planning Activities**: Displays the list of activities and tasks for the review process. This list is editable, so you can insert additional tasks when needed.
- **Action Items**: Lists action items assigned during the review process and their status. Each task has an owner, assignee, due date, and status. Action items can have a link to a relevant dashboard or report to carry out each task.
- **Decision Items**: Displays a list of recommendations and alternatives to consider for discussion in an upcoming review meeting. You can escalate the decision items from the review stage. If you cannot make a decision about the item, you can defer the decision and push the decision item out to a later stage.

The Notes tab is where you can document and communicate important information. For example, use Notes to document why there was a change to the plan or record decisions and assumptions that led to those changes. In Sales and Operations Planning, you can associate notes with objects, such as product categories. With such documentation, you can understand why decisions were made and who made them.

To open a planning cycle:

1. In the Navigator, click the Sales and Operations Planning work area link.
2. In the **Tasks** panel drawer, click the **Open Planning Cycle** link.
3. In the Open Planning Cycle dialog box, select a planning cycle.
4. Click **OK**. Your planning cycle opens on the Edit Plan page.

Related Topics

- Product Reviews
- Demand Reviews
- Supply Reviews
- Financial Reviews
- Executive Reviews

Planning Cycle Phases

Product Reviews

The Sales and Operations Planning product review process helps channel new product development by providing decision makers with visibility into the key revenue and profitability metrics associated with the new product introduction.

You can measure the profitability of a new product through an analytic that shows the revenue for new product items.

The predefined Product Review dashboard in the Sales and Operations Planning work area enables you to perform a cross-functional review of new products and the life cycle of maturing products. The dashboard has four predefined infotiles that enable you to monitor the health across the product life cycle from prelaunch planning to postlaunch performance. You can also view metrics associated with end-of-life items.

The four infotiles on the Product Review Summary dashboard are:

- *New Product Vitality*: Displays the percentage of revenue contributed by a new product. New product revenue is the revenue from expected sales for products that have their Lifecycle Phase item attribute set to Prelaunch, Postlaunch, or Growth.
- *Shipments Forecast Value Change*: Displays the difference in Shipments Forecast Value between the current estimate and its value in the last MAPE archive across all prelaunch items.
- *Bottom MAPE for Postlaunch Items*: Displays Bottom Shipments Forecast MAPE for postlaunch items associated with shipments forecast.
- *Periods of Cover for Declining Items*: Displays the Projected Available Balance Periods of Cover for Decline Item measure. This measure is calculated as the ratio of the projected available balance to the total demand.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Create a Planning Cycle
- How You Work in a Planning Cycle
- Overview of Plan Archival in Supply Chain Planning
- Use the Manage Product Launch Page

Demand Reviews

The Sales and Operations Planning demand review process enables the collaboration within an enterprise required to develop an unconstrained consensus forecast. The consensus forecast is a single set of forecast numbers that the enterprise determines.

Use the Demand Review Summary dashboard in the Sales and Operations Planning work area to identify significant gaps between lagged consensus forecast and actual sales. From the dashboard, you can drill down to various tables to make forecast adjustments.

The four infotiles on the Demand Review Summary dashboard are:

- *Unconstrained versus Forecast*: Displays the comparison between the Unconstrained Operating Plan Value and the Financial Forecast Value. The Unconstrained Operating Plan Value is the value of all of the demand planned for. The Financial Forecast value is the forecast estimate (in currency).
- *Consensus Forecast Value Change*: Displays the change between the Consensus Forecast Value, the current consensus forecast, and the previous value in the last MAPE archive.
- *Forecast Value Comparison*: Displays the comparison between the Consensus Forecast Value and the Final Sales Forecast Value.
- *Stakeholder Forecast MAPE*: Displays the comparison between the forecast accuracy performance and stakeholders. This infotile compares the sales, marketing, and consensus forecasts.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Create a Planning Cycle
- How You Work in a Planning Cycle

Supply Reviews

The Sales and Operations Planning supply review process helps you to measure and improve key metrics to produce according to your plan. Use the latest consolidated, unconstrained demand plan and analyze the feasibility of internal and external supply capacity to fulfill demands.

For example, you can analyze whether there is sufficient supplier and resource capacity and inventory to balance supply with demand.

The supply review process uses the demand plan from the Demand Review and the available supplier and resource capacity and other supply information for supply planning. The process also determines the ability to meet the

consensus-based demand plan, compares future supply planning performance with archived, historical measures. After you make the consensus forecast adjustments in the demand review process, you can rerun the supply plan. Running the supply plan enables you to evaluate where you can create sufficient additional supply to meet increased demand.

Use the Supply Review Summary dashboard in the Sales and Operations Planning work area to view the following graphs:

- **Demand and Supply**: View the total demand compared to the total supply to determine if there are any gaps.
- **Resource Overloading**: Drill down into detailed graphs that show you organizations with overloaded resources. For example, you can drill down to the Resource Plan by Month table. In the Resource Plan by Month table, you can identify the resources and the time buckets in which resources are constrained.
- **Supply Overloading**: View the key time periods and supplier items that have a large number of exceptions. You can drill from individual items in the Exceptions Top Utilized Items graph to view the plan for the associated suppliers of that item.
- **Inventory Turnover**: View this graph to monitor inventory cover.
- **Cost Comparison**: View the manufacturing, purchase, carrying, and shipping costs.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Create a Planning Cycle
- How You Work in a Planning Cycle

Financial Reviews

The Sales and Operations Planning financial review process provides visibility into financial metrics. You can compare operational plans with the business plan and financial budget. You can review revenue, costs, margins, inventory value, and other performance measures.

You can identify whether overall revenue and profits are tracking to plan, and identify key areas of improvement.

The Financial Review dashboard in the Sales and Operations Planning work area has five predefined infotiles that provide you with visibility into revenue and profit details:

- **Plan versus Forecast**: Compares the Operating Plan Value and Financial Forecast Value. The Operating Plan Value is the sum of the values of Shipment History and the Constrained Forecast value.
- **Unmet Revenue**: Displays unmet revenue, which is calculated based on the value of demand that cannot be met on time.
- **Cost Comparison**: View the manufacturing, purchase, carrying, and shipping costs.
- **Gross Margin**: Displays the overall gross margin between revenue and cost.
- **Revenue and Gross Margin Percentage**: Displays the revenue and gross margin percentage.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Create a Planning Cycle
- How You Work in a Planning Cycle

Executive Reviews

The Executive Review dashboard supports the Sales and Operations Planning meeting. This meeting occurs every planning cycle in which senior stakeholders meet. The dashboard, which you access from the Sales and Operations work area, provides executive visibility to performance indicators, forecast issues, and operational issues.

The Executive Review dashboard provides visibility into key performance indicators, business trends, new product development metrics, and supply and demand mismatches across the process stages. The Executive Review dashboard contains seven predefined infotiles:

- **Plan versus Forecast**: Compares the Operating Plan Value and Financial Forecast Value. The Operating Plan Value is the sum of the values of Shipment History and the Constrained Forecast value.
- **New Product Vitality**: Displays the percentage of revenue contributed by a new product. New product revenue is the revenue from expected sales for products that have their Lifecycle Phase item attribute set to Prelaunch, Postlaunch, or Growth.
- **Forecast Value Comparison**: Displays the comparison between the Consensus Forecast Value and the Final Sales Forecast Value.
- **Cost Comparison**: View the manufacturing, purchase, carrying, and shipping costs.
- **Gross Margin**: Displays the overall gross margin between revenue and cost.
- **Revenue and Gross Margin Percentage**: Displays the revenue and gross margin percentage.
- **Inventory Turnover**: View this graph to monitor inventory cover.

Related Topics

- Overview of Planning Cycles in Sales and Operations Planning
- Create a Planning Cycle
- How You Work in a Planning Cycle

12 Sales and Operations Plans

Overview of Sales and Operations Plans

Before you can run a sales and operations plan, you must create the plan and define its options. Plan options determine the actions of the planning services by specifying the type of plan to run.

These options specify the scope of the plan in terms of organizations, items, resources, time horizon, planning measures, and more. Plan options also configure whether to plan demand and supply separately or sequentially within a plan. Use the Create Plan page in the Sales and Operations Planning work area to create the plan and define its options.

Navigate through the following tabs on the Create Plan page to set up plan options for your sales and operations plan:

- Scope: Specify plan organizations, items, time horizon, and measures used in the plan.
- Demand: Specify forecasting profiles to include when planning demand.
- Supply: Specify general and organization-specific options for planning supply.

The Manage Plans page in the Sales and Operations Planning work area is for integrated plan management. The following are some of the tasks that you can perform from the Manage Plans page:

- Create and define plans
- Create a copy of existing plans
- Open an existing plan
- Run plans in batch mode
- Perform data refresh on your plans
- Approve plans

For existing sales and operations plans, use the Manage Plans task to search for and open a plan. To access the Manage Plans page and open an existing sales and operations plan, do the following:

1. From the Navigator click the **Sales and Operations Planning** work area link.
2. Click **Manage Plans** from the Tasks drawer.
3. On the Manage Plans page, provide the appropriate search criteria and click **Search**.
4. In the search results area, select your plan and click the **Actions** button.

Related Topics

- Actions to Manage Your Plans

Manage Plans

Actions to Manage Your Plans

The Actions menu on the Manage Plans and the Edit Plan pages are integrated plan management pages for all plan types. When you open the Edit Plan page, note that only the plan name displays in the heading.

Note: Not all action options are available on both the Manage Plans page and the Edit Plan page. For example, the Compare action is only available when you're in an open plan on the Edit Plan page. Also, not all action options are available for all plan types or work areas. For example, the Planning Central work area doesn't include Archive, Compare, or Copy to Simulation Set in the Actions menu.

The following table lists the available options in the Actions menu and the description of each option.

Action	Description
Approve	Initiate and complete the approval process for a plan. When you rerun the plan, the Approved status is removed from the Approval Status column.
Archive	Archive a plan.
Cancel Compare	Cancel the comparison of plan data.
Close	Close a loaded plan from memory. This option isn't available for Demand Plan types.
Compare	Compare plan data with another plan.
Copy to Simulation Set	Open the Copy to Simulation Set dialog box to copy plan data to an existing simulation set. Plan data includes items, resource availability, bill of resources, and so on. This option is available only for Supply Plan and Demand and Supply Plan types.
Create	Open the Create Plan dialog box where you can define the plan options for your new plan. Depending on your plan type, define the scope, demand, safety stock, and supply options. The Safety Stock tab isn't available for Sales and Operations Plan types.
Delete	Delete a plan and its archive versions. This irrevocable action purges the plan from memory and the database.
Duplicate	Create a copy of an existing plan to leverage previously defined plans or to perform what-if simulation analysis. You can decide whether you want to copy only the plan options or copy the plan options including plan data.
Edit Plan Options	Open the Plan Options dialog box where you can edit your plan options. Depending on your plan type, you can change the scope, demand, safety stock, and supply options.
Export	Export the data from the Search Results table on the Manage Plans page to a spreadsheet.
Export Plan Data	Extract all multidimensional plan data from a plan into a set of files for offline reporting and analysis.
Load	Load the plan into memory. This option is available only for Supply Plan, Sales and Operations Plan, and Demand and Supply Plan types.
Manage Tables, Graphs, and Analysis Sets	Open the Manage Tables, Graphs, and Analysis Sets dialog box. You can search for tables, graphs, tiles, tile sets, and analysis sets and manage them.

Action	Description
Open	Open the Edit Plan page for an existing plan. Note that only the plan name displays in the page heading.
Publish Order Forecast	Starts the Publish Order Forecast job. You can publish the order forecast without saving the plan to the database. This option is available in the Actions menu on the Items, Supplies and Demands, and Manage Plans page. This option is available only for Supply Plan, and Demand and Supply Plan types.
Publish Data	Export measure data from a plan based on a pivot table. You can export the data available in planning data measures at any aggregation level based on an existing pivot table to a file in a comma delimited (CSV) file format.
Release	Release the plan from the Supply Chain Planning work area to another plan execution system. This option is available only for Supply Plan, and Demand and Supply Plan types. The Release action integrates Supply Chain Planning with other plan execution systems by publishing approved planning recommendations to execution systems. These plan recommendations can be in the form of new planned orders, rescheduled existing supplies, and canceled existing supplies.
Request Approval	Request approval of a plan. This option is available only for Sales and Operations Plan types.
Reset Approval Status	Reset the approval status. This option isn't available for Supply Plan types.
Review Plan Messages	Open the Review Plan Messages tab to review the warning and error messages generated by the planning processes, such as forecast generation and supply plan generation. You can also review the recommendations to address the warning and error conditions.
Run	Run the plan and generate data. When you click Run, the Run Plan dialog box opens. In the Run Plan dialog box, you can select data refresh options, scope options, and demand and supply plan run options to generate planning data.
Save Plan to Database	Save the plan from the memory to the database. The benefit of saving a plan to the database is that you can perform plan analysis without first loading the plan. This option is available only for Supply Plan and Demand and Supply Plan types.
View Status Details	Open the Plan Status Details dialog box to view all of the actions performed by any user for the selected plan. You can also export status details to a spreadsheet.

Related Topics

- Overview of Supply Chain Planning Plan Types

Create a Plan

You can create plans and then duplicate them to save time and perform planning activities incrementally. For example, you have defined the line of business associated with an existing plan, such as organizations and items.

You can create a copy from that existing plan rather than define a new plan.

Use this generic procedure to create a plan.

1. In a Supply Chain Planning work area, click the **Tasks** panel tab.
2. In the **Tasks** panel drawer, click the **Manage Plans** link.
3. In the **Search Results** region, from the Actions menu, select **Create**.
4. On the Create Plan page, complete the general information for the plan:
    a. Enter a name.
    b. (Optional) Provide a description for the plan.
    c. Select the plan type.
    d. Select a supply planning mode.

        > **Note:** The Supply Planning Mode attribute is only available for a supply plan, demand and supply plan, or a sales and operations plan type.

        - Supply plan and demand and supply plan types: Options are Constrained and Unconstrained. Constrained is only available if you have opted in for Constraint-Based Supply Planning. Otherwise, the supply planning mode defaults to Unconstrained.
        - Sales and operations plan type: The supply planning mode defaults to Aggregate.
    e. (Optional) Select the **Enable for OTBI reporting** check box to make measures from a plan available in Oracle Transactional Business Intelligence (OTBI) for reporting.
    f. Select the owner.
    g. Define the access level:
        i. Select **Public** to make the plan accessible for all users.
        ii. Select **Private** to restrict the plan accessible to you and to a list of users that you want to provide access.
5. Based on the type of plan that you selected, complete the required information in one or more tabs (Scope, Demand, Safety Stock, and Supply).

    If you're planning to show archived measures in your plan, you need to set the duration in days for the archived time periods and enable viewing the past days on the plan table. See the *View Planning Measures from Archived Time Periods* topic to learn more.
6. Click **Save and Close**.

Related Topics

- Copy a Plan
- View a Plan

Copy a Plan

You can create plans and then duplicate them to save time and perform planning activities incrementally.

For example, you have defined the line of business associated with an existing plan, such as organizations and items. You can create a copy from that existing plan rather than define a new plan.

Use the Duplicate procedure to:

- Create a copy of an existing plan that includes the plan data.
- Create only a copy of plan options.

Use these steps to copy a plan.

1. Navigate to the Duplicate Plan dialog box:
    a. In a Supply Chain Planning work area link, click the **Tasks** panel tab.
    b. In the Tasks panel drawer, click the **Manage Plans** link.
    c. Enter the search parameters and click the **Search** button.
    d. In the Search Results region, select the plan that you want to copy, click **Actions**, and then select **Duplicate**.
2. In the Duplicate Plan dialog box, complete the following information for the plan:
    a. Select a copy type:
        - **Copy plan options only**: The planning process copies plan options to the duplicate plan, but not the plan data.

          Typically, when you duplicate the plan with the Copy plan options only option, the next step is to edit the plan options before running the plan.
        - **Copy plan with reference to base plan**: When you duplicate the plan with reference to the base plan, the next step is to open the copied plan as you're likely to make edits before running the plan. On the Manage Plans page, the Copied From column displays the name of the plan that you copied from.

          > **CAUTION:** If you delete the base plan or rerun the base plan with the Refresh with current data option, plans copied from the base plan become invalid.

        - **Copy all plan data with no reference to base plan**: The planning process makes a full, standalone copy of the plan, which can include archived measures. For approved sales and operations plans,

this option enables you to create a full backup copy of your plans at the end of every planning cycle.

On the Manage Plans page, the Copied From column is empty for the new plan because it's a standalone copy of the base plan. Therefore, there's no reference to the base plan.

The Copy all plan data with no reference to base plan option isn't available for demand plan types.

b. Enter a name and a description.
c. Define the access level:
   - Select **Public** to make the plan accessible for all users.
   - Select **Private** to restrict the plan accessible to you and to a list of users that you want to provide access.
d. (Optional) Select the **Load plan after copy** check box to load the copied plan to memory. This check box isn't available for demand plan or sales and operations plan types.
e. Select the owner.
f. (Optional) Select the **Include archives** check box to make a standalone copy of your plan that includes archived measures. The copies of the archived versions are relabeled to remain consistent with the new plan name. This relabeling applies to both scheduled and ad hoc archive versions.

   The transaction history of when archived versions were created in the original plan isn't copied to the new plan. However, the new archived version names retain the date stamp and sequence number of when the archives were originally run.

   The **Include archives** check box is available only when:

   - The **Enable for archiving** check box is selected in the Scope: Advanced Options dialog box in the plan options.
   - The **Copy all plan data with no reference to base plan** is selected as the copy type in the Duplicate Plan dialog box.

3. Click **Save and Close**

Related Topics

- Create a Plan
- View a Plan

View a Plan

If you already have an existing plan, you can open the plan from the Plans drawer or by using the Manage Plans task. You must always run a plan before you can view it.

To open an existing plan from the Plans drawer to view it, do the following:

1. In a Supply Chain Planning work area link, click the **Plans** drawer.
2. Expand **Plans**, and select the plan of your choice.

3. Click the **Actions** button and select **Open**.

> **Tip:** If you have many plans, you have an option to search a plan by using the **Manage Plans** task. In this case, provide appropriate search criteria and click **Search**. In the search results area, select your plan and click the **Action** button and select **Open**. Oracle recommends this method to view sales and operations plans.

> **Note:** If you're planning to show archived measures in your plan, you need to set the duration in days for the archived time periods and enable viewing the past days on the plan table. See the *View Planning Measures from Archived Time Periods* topic to learn more.

Related Topics

- Create a Plan

Enable Plans for OTBI Reporting

Oracle Transactional Business Intelligence (OTBI) is a real-time, self-service reporting solution that helps you create user-defined and interactive reports.

You can enable OTBI reporting for plans created in your Supply Chain Planning work area to:

- Run reports in real-time to analyze supply, demand, and sales and operations planning plans
- Generate user-configurable and easy-to-use reports by using business intelligence tools and charts
- Analyze key metrics, such as exception metrics, inventory balances, pegged quantity, and orders to be released
- Compare two or more plans that are enabled for OTBI reporting

To improve your supply chain performance, you can monitor and identify problem areas by using strategic insights into live and operational data. Compare different scenarios in real-time by using key measures to decide the best course of action. You can respond to changes by modeling complex strategies and plans to analyze and compare them. You can also define native OTBI capabilities like alerts based on exception conditions, user-defined measures, and conditional formatting to monitor or track problem areas.

To create OTBI reports, navigate to the Reports and Analytics work area. You can build reports by using the base measures available in your Supply Chain Planning work area. You can also create user-defined measures based on the base measures by using the standard business intelligence tools.

To open OTBI reports in a Supply Chain Planning work area, save the OTBI reports into the Report Components subfolder within the Transactional Analysis Samples folder. The Report Components folder is located in the shared Supply Chain Planning folder in the Reports and Analytics work area.

To enable OTBI reporting for plans, you must do the following:

- Select the **Enable for OTBI reporting** check box on the Plan Options page of your supply, demand, or sales and operations plan.

  > **Note:** You must run the plan after you enable it for OTBI reporting.

- Set up reporting hierarchies by configuring the Product and Time hierarchies in the dimension catalog named Reporting Catalog. To configure the Product and Time hierarchies, use the Configure Planning Analytics task in your Supply Chain Planning work area. Depending on the reports that you want to generate, move the Product and Time hierarchies from the Available Hierarchies pane to the Selected Hierarchies pane. If you select

multiple Product and Time hierarchies, ensure that you select a default hierarchy for the Product and Time hierarchies. The default hierarchies are used by default in the predefined reports.

You can build reports by using the base measures available in your Supply Chain Planning work area. You can also create user-defined measures based on the base measures by using the standard business intelligence tools.

Accessing the OTBI Reports

Perform these steps to access the OTBI reports:

1. In a Supply Chain Planning work area, open a plan that is enabled for OTBI reporting.
2. Click the **Open** button and then select a pane.
3. In the Open Table, Graph, or Tile Set dialog box, do one of the following:
    - Search for your report.
    - Filter the list by selecting **Type** and then **Report**.
4. Select a report and then click **OK**.

    The OTBI report opens in the context of the current, open plan.

When you search for reports, the list of reports in the search results includes predefined reports and user-defined reports created by you. You must save the user-defined reports into the Reports Components subfolder within the Transactional Analysis Samples folder to make them available in the Supply Chain Planning work areas. The following predefined reports are available only in the Supply Planning and Planning Central work areas:

- Build Plan by End Item
- Exception Summary by Item Order
- Details by Item
- Pegging Details by End Item
- Plan Recommendations Summary Graph

Available Measures

The following measures are available in the Reports and Analytics work area:

- *Configure to Order Forecast Metrics*: The following configure to order forecast metrics are available for demand plans, and demand and supply plans:
    - Final Option Demand Forecast
    - Final Planning Percent
    - Option Demand Forecast

      Configure to order forecast metrics support dimensions, such as Plan, Time, Product, Organization, Customer, Top Model, and Demand Class.
- *Demand Management Metrics*: The following demand management metrics are available for demand plans, and demand and supply plans:
    - Bookings Forecast
    - Bookings History
    - Bookings History Value

- Final Bookings Forecast
- Final Shipments Forecast
- Shipments Forecast
- Shipments Forecast Value
- Shipments History
- Shipments History Value

  Demand management metrics support dimensions, such as Time, Product, Organization, Customer, and Demand Class.

- *Exception Metrics*: The following exception metrics are available for supply plans, and demand and supply plans:
  - Exception Count
  - Exception Quantity
  - Exception Days
  - Exception Ratio
  - Exception Value

    Exception metrics support dimensions, such as Plan, Time, Product, Organization, Customer, Supplier, Manufacturing Resource, and Exception Type.
- *Order Metrics*: The following order metrics are available for supply plans, and demand and supply plans:
  - Order Quantity
  - Implemented Supply Quantity
  - Order Value

    Order metrics support dimensions, such as Plan, Time, Product, Organization, Order Details, and Order Type.
- *Pegging Metrics*: The following pegging metric is available for supply plans, and demand and supply plans:
  - Pegged Quantity

    Pegging metric supports dimensions, such as Plan, Time, Product, Organization, Customer, Supplier, End Demand, and Order Type.

- *Sales and Operations Planning Metrics*: The following sales and operations planning metrics are available for sales and operations plans:
  - Consensus Forecast
  - Consensus Forecast Value
  - Final Sales Forecast
  - Final Sales Forecast Value
  - Sales Forecast
  - Sales Forecast Value
    Sales and operations planning metrics support dimensions, such as Plan, Time, Product, Organization, Customer, and Demand Class.

Define and Manage Plan Options

Define Scope Plan Options

Scope options determine the scope of the sales and operations plan. Define or modify scope plan options on the Create Plan page, Scope tab or the Edit Plan Options page, Scope tab.

You can configure plan organizations, items, time horizon, and planning level for demand forecasting. You can also define the filters for a plan, such as the hierarchy, level, and level members.

On the Scope tab, indicate which dimension catalog to use for your sales and operations plans. The dimension catalog is a grouping of dimensions and hierarchies for use in plans. Use either the Default Catalog or create your own dimension catalog.

The Scope tab includes the following sections for sales and operations plans:

- Plan Organizations
- Plan Items
- Plan Parameters

Plan Organizations

Specify a hierarchy, level, and level members by which to filter the plan. Also, select the source system code to use for filtering organizations. Fields in the Plan Organizations section are required. If you select a level that's above the organization level, then the plan includes organizations that belong to that parent level.

Plan Items

Specify a hierarchy, level, and level members by which to filter specific items for demand planning. Your selections are used in conjunction with your selections in the Plan Organizations section. Items that belong to a parent level are included. Fields in this section are required for sales and operations plan types.

Plan Parameters

You can set up your sales and operations planning at a weekly, monthly or quarterly level. For better performance, Oracle recommends that you run your sales and operations plans at a monthly level. If you run your plan at the weekly

level for two years, you have 104 weeks worth of data. The processing engine must process a larger volume of data, which impacts performance. If you run your plan at the monthly level for two years, you have only 24 buckets, which means better performance. For a long-range strategic planning horizon of three or more years, consider quarter-level planning.

Note: When you define your sales and operations plans for longer horizons using a Gregorian calendar, you might need to extend the calendar. Select the Build Gregorian Calendar schedule process to extend your Gregorian calendar to ensure it goes out far enough for planning.

The following table describes the plan parameters for sales and operations plan types.

Parameter	Definition
Plan Horizon Days	Number of days in the plan. Set horizon days to forecast and plan for future needs. Minimize horizon days to avoid long-running plans. Default is 550 days.
Planning Calendar	Calendar used for forecasting and setting time level. The calendar must belong to the dimension catalog associated with the plan.
Planning Time Level	Planning time level that's used in a plan and is used by forecasting profiles. The sales and operations plan can be generated in weekly, monthly, or quarterly time buckets. Time levels vary, depending on the forecasting calendar that you select. Default value is Gregorian Month.
Measure Catalog	Group multiple sets of measures for use in a plan. By enabling only those measures that are needed for any specific plan, you can perform a focused analysis with improved performance. A planning administrator can create and modify measure catalogs. Default value is Default S&OP Catalog.
Price List	Price list used in revenue calculations. The default price list for use in value calculations is Item List Price, defined in Items table for Organization and Item. Item List Price is always used to calculate revenue, even if a collected price list is marked as the primary. However, if a collected price list is marked as the primary and the Include When Deriving Selling Price checkbox is marked, the revenue is calculated using the derived price.
Exception Set	Lists exceptions to compute as part of a plan and also filters on Organizations and Categories for computing exceptions.
Simulation Set	Lists simulation sets to use in your plan. A simulation set is a set of adjustments to plan inputs. Apply a simulation set to a plan to model different business scenarios, such as increasing available resource capacity.

Related Topics

- How You Use Dimensions and Dimension Catalogs in Supply Chain Planning
- Considerations for Setting Up Dimension Catalogs
- Configure Archiving Parameters

Demand Plan Options

Use the Demand tab in Plan Options to define the demand plan options. Demand planning is a separate planning process from supply planning in many companies.

Define or modify demand plan options on the Create Plan or Edit Plan Options page, Demand tab in a Sales and Operations Planning work area.

Related Topics

- Forecasting Profile Options for Demand Plans

Use Demand Plan Measures for Consensus Forecasting

Instead of generating a statistical forecast in your sales and operations plan, use a forecast measure in Oracle Demand Management Cloud as the baseline for consensus forecasting in Sales and Operations Planning.

After you develop a consensus demand forecast in your sales and operations planning cycle, run your sales and operations plan and then review and adjust the consensus forecast.

You can use a demand forecast measure as an input for aggregate supply planning. For example, your unconstrained demand forecast might be calculated in a user-defined measure in your demand plan. You can run the sales and operations plan with this demand forecast and then review the plan output. If you need to override this baseline forecast, then you can edit the Adjusted Consensus Forecast measure and run the plan again to simulate the supply impact due to this change in demand.

By loading a forecast measure from a Demand Management plan as the baseline of your consensus forecast, the planning process recognizes that statistical demand forecasts are generated in your demand plan and not your sales and operations plan. For example, the demand plan measure includes data for new product forecasts and modeled events. In this case, you can't associate a forecasting profile with a sales and operations plan when loading a demand measure to the Shipments Forecast.

Configure the Demand Plan Measure

Navigate to the Plan Options page, Demand tab to configure the demand plan measure for your sales and operations plan.

- **Load measure data from demand plan to target measure**: Select the check box to load a forecast measure from a Demand Management plan to the Shipments Forecast measure in a sales and operations plan.

  When selected, all associated forecast profiles are removed from your sales and operations plan.
- **From Plan**: Select the Demand Management plan to use as the source of the forecast measure to load measure data into a sales and operations plan.

  The field displays any demand plan that uses a hybrid time hierarchy if the planning calendar of your sales and operations plan is one of the calendars that was used in the creation of the hybrid time hierarchy. The planning

calendar and planning time level of the sales and operations plan determine the level at which measure data is copied.

For example, if you copy measure data from a demand plan for which the planning calendar is a Gregorian hybrid hierarchy to a sales and operations plan that's defined at the Gregorian month, measure data gets copied at the Gregorian month level.

- **Demand Measure**: Select a forecast measure to load from a Demand Management plan.

> **Note:** If the forecast measure to load from the demand plan is user-defined then you must ensure that the measure is added to the End Item Demand measure group. This step adds the measure to the list that appears in the **Demand Measure** field.

Forecasting Profile Options for Demand Plans

Demand plan options determine the forecasting profiles to include as a part of a demand, demand and supply, or sales and operations plan run.

Define forecasting profile options for a plan in an Oracle Fusion Cloud Supply Chain Planning work area on the Plan Options page, Demand tab. The Demand tab isn't available for supply plans.

In the Forecast Profiles region, select which forecasting profiles are available for the plan run. You can also indicate the amount of historical data used for forecast generation. When you run the plan, the forecasting profiles run in the specified order.

Statistical demand forecasts are generated at different time levels, such as day, week, or month. For a demand plan, specify the time level in the **Forecasting Time Level** field on the Demand tab.

For a demand plan that uses a hybrid time hierarchy, the available forecasting time levels are parent levels of the Hybrid time level for the hierarchy that you selected as the planning calendar on the Scope tab.

> **Note:** For sales and operations plans, the demand planning engine can generate statistical demand forecasts at weekly, monthly, or quarterly time levels. You specify the time level in the **Planning Time Level** field on the Plan Options page, Scope tab.

Aggregate Non-Key Customer Data to an All Other Level Member Checkbox

Select this checkbox to aggregate data for non-key customers to placeholder sites named <zone name>:All Other or a placeholder site named Default:All Other. The data for key customers is stored at the Customer Site level.

For information about the functionality for aggregating data for non-key customers, see *Overview of Aggregating Data for Non-Key Customers*.

This checkbox is available for only demand, demand and supply, and sales and operations plans. The checkbox is disabled for a demand plan if you've selected a planning level profile on the Scope tab on the Plan Options page.

> **CAUTION:** Select this checkbox only while creating your plan and before running it for the first time. If you change your selection later, you might run into data integrity issues.

Forecasting Profiles with Input Measures and Output Measures

In the Forecast Profiles region, specify which forecasting profiles to include as part of a plan. You can't edit the input measure or output measure for a forecasting profile.

The following table lists the predefined forecasting profiles.

Forecasting Profile Name	Input Measure	Output Measure
Forecast Shipments	Final Shipments History	Shipments Forecast
Forecast Shipments Including Event Activity (Not available in the Planning Central or Sales and Operations Planning work area)	Final Shipments History	Shipments Forecast
Forecast Shipments Including Product Lifecycle (Not available in the Planning Central work area)	Final Shipments History	Shipments Forecast
Forecast Bookings	Final Bookings History	Bookings Forecast
Forecast Bookings Including Event Activity (Not available in the Planning Central or Sales and Operations Planning work area)	Final Bookings History	Bookings Forecast
Forecast Bookings Including Product Lifecycle (Not available in the Planning Central work area)	Final Bookings History	Booking Forecast

Analysis Set

An analysis set is an optional criterion used to apply a forecasting profile to a subset of a plan.

- If you don't select an analysis set, then the forecasting profile applies to the full scope of the plan.
- If you select an analysis set, then the forecasting profile is applied to only the subset of the plan scope defined by the analysis set.

For example, you've an analysis set containing a specific set of products, and you select that analysis set for a forecasting profile. The forecast is generated for the specific products included in both the analysis set and plan, instead of for all the products in the plan.

Historical Buckets

Define the amount of historical data to use during the forecasting process. The statistical demand forecasting process uses the number of buckets in this field to define the amount of historical data used.

The historical buckets substantially affect the demand forecast generated when you run the plan. Use at least 12 months of history, but 18 to 36 months of history is the best practice. When setting the historical buckets, keep the following in mind:

- Very long history affects plan runtimes and makes the forecast less relevant to current demand patterns.
- Less than 1 year of history affects seasonal analysis. This includes both yearly seasonality and holiday impacts.

The historical buckets setting is the maximum amount of history used when generating a forecast. The actual amount depends on the data available for a given item and organization. For each item and organization, the forecasting process identifies all available historical data, removes any leading zero demand before the first positive demand point, and generates a forecast.

History Start and End Dates

The plan definitions drive the history end date. The history start date is calculated on the basis of the end date and historical buckets.

Forecast Buckets

Indicates how far into the future a demand forecast is generated and is driven by the planning horizon set for the plan.

Locked Forecast Buckets

Indicates the number of buckets from the end of historical data that don't receive a new forecast when you run the demand plan.

Forecast End Date

Indicates the end date for a forecast that's generated when you run the plan. The end date is based on the planning horizon and the current plan start date.

Define Supply Plan Options

For sales and operations plans, use the Plan Options page, Supply tab to set general and organization-specific supply planning options. Use the General subtab to specify the supply plan attributes, aggregate plan attributes, and supply constraints.

The Organizations and Schedules subtab lists the organizations specified on the Scope tab and the demand schedules used to plan supply.

General

Supply Plan Attributes: Specify the supply plan attributes for the sales and operations plan.

- Select an assignment set.
- You can select the options to include purchase orders, transfer orders, work orders, or sales orders in the plan.

Aggregate Plan Attributes: Specify the aggregate plan attributes for the sales and operations plan.

- **Planning Product Level**: Specify the product level at which demands and the bill of resources are modeled in a plan. You can set the product level as either **item** or **Category**. Item is the default setting. Category is the parent level of item.

- **Category Level Members**: Specify which items are planned at the category level. To select members, you must select **Category** as the planning product level.
- **Use Global Demand**: Select to make the aggregate supply planning engine model demands globally. If selected, then also specify the planning customer level.

  Or, deselect to create a network with demand modeled at fulfillment warehouse organizations without customer detail.
- **Planning Customer Level**: If you selected the **Use global demand** check box, then you can specify the customer dimension level to use for aggregate planning. Specify the level at which to model customer demand in your plan: **Customer Site** or **Zone**.

  If you didn't select the **Use global demand** check box, then the planning customer level is set to **None**.

Constraints: Specify the constraints for the sales and operations plans.

- **Allow purchasing and transfer lead time compression**: When the check box is selected, the lead time compression exceptions are generated in a plan run. If the check box isn't selected, lead time constraints are enforced. By default, the Allow purchasing and transfer lead time compression check box is selected.
- **Consider supplier capacity constraints**: Select to enforce supplier item capacity constraints at a component category level by supplier location. You will still have visibility to the requirements for items within the category. You can also continue to generate supplier requirements for unconstrained component categories if you choose not to load available supplier capacity for those items.
- **Consider processing lead time for assembly items**: Select to include the processing lead time of an assembly item during the aggregate supply planning step in the sales and operations planning process. By default, processing lead times for assembly items aren't considered.

  Aggregate supply planning uses bills of resources. The Aggregate Bill of Resources table provides a representation of the critical component items and bottleneck resources required to make an assembly item. By considering the processing lead time for assembly items, the Processing Lead Time attribute values in the Items table are included for assembly items. The processing lead time is used to offset the manufacturing start and consumption of components and resources.

  If the processing lead time of an assembly item is longer than a planning time period, then the consumption of component items and resources occurs in the time period when manufacturing starts. Usage quantities aren't spread across time periods. Also, aggregate supply planning doesn't accumulate lead times across manufacturing stages to offset subassemblies.
- **Consider work center capacity constraints**: Select to enforce resource capacity constraints at the work center level. You will still have visibility to resource loading within the work center. If you select this check box, you can then select which work centers to constrain in manufacturing locations. You can also continue to generate resource requirements for resources in unconstrained work centers.
- **Constrained Work Center Level Members**: If you selected **Consider work center capacity constraints**, then you can also select the work center level members to constrain. The list of work centers is based on the selections made in the Plan Organizations section on the Plan Options page, Scope tab. If you don't select any work centers, then no resource capacity constraints are enforced.

Organizations and Schedules

Organizations: View organizations and their descriptions. The organizations are based on the organization level members specified on the Plan Options page, Scope tab.

For each listed organization in the Subinventory Netting dialog box, select or deselect the check boxes under Enable Netting to include or exclude subinventories from the sales and operations plan. During the collection process, data

is collected from the subinventories based on the organization configuration in the source system. If you enable subinventory netting for a new subinventory in the source system, the sales and operations plan includes the new subinventory when running the plan after the next collection process.

Demand Schedules: View the demand schedules used to plan supply, which references the same plan name in a sales and operations plan.

- Supply Plan Input: Click the Select button to open the Supply Plan Input dialog box. In the Supply Plan Input dialog box, select an end item demand measure by which to drive supply planning. The following are the preconfigured measures that you can select, but you can also select a user-configured measure:
    - Approved Consensus Forecast: The final demand forecast determined by collaborative review that has received final approval for use in supply planning activities, expressed as a quantity.
    - Approved Final Bookings Forecast: The statistical demand forecast, based on bookings forecast demand stream that has been reviewed and received final approval for use in supply planning activities.
    - Approved Final Shipments Forecast: The statistical demand forecast, based on shipments forecast demand stream that has been reviewed and received final approval for use in supply planning activities.
    - Consensus Forecast: The weighted demand forecast that combines multiple stakeholder forecasts from sales, marketing, and operations, expressed as a quantity and including any planner adjustments. The unconstrained consensus forecast coming from the demand review process becomes the basis for developing a constrained operating plan.
    - Final Bookings Forecast: The bookings forecast, expressed as a quantity and including any planner adjustments.
    - Final Marketing Forecast: The marketing forecast based on user adjustments to the baseline marketing forecast, expressed as a quantity.
    - Final Sales Forecast: The final sales forecast including any user adjustments, expressed as a quantity.
    - Final Shipments Forecast: The final forecast based on shipment history, expressed as a quantity and including planner adjustments.
- Measure Levels: View the level at which the demand schedule is being consumed in Sales and Operations Planning.

Configure Revenue Currency Parameters

You can prioritize constrained supply for product demands that generate the most revenue in currency in a sales and operations plan.

When available supply is less than demand, the planning process prioritizes supply allocation to the product categories with higher global revenues to maximize overall enterprise revenue. To configure the revenue currency parameters, navigate to the Supply: Advanced Options dialog box, General tab in plan options.

When you configure revenue currency parameters, the planning process converts the item selling prices by organization from local currency to base currency for planning revenue in currency. Revenues of product categories priced in the local organization currencies of their respective countries can be considered uniformly by converting the local currencies into one base currency using these currency conversion rates. Planning collects currency conversion rates that don't vary by time. Therefore, the planning process uses a single consistent conversion rate to convert from a local currency to a base currency across the plan horizon.

Note: To convert from a local currency to a base currency, you must first define the currency for an organization. Use the Maintain Supply Network Model task to verify that the Currency column is specified for the organizations used in your sales and operations plan. Monitor the Review Plan Messages page to check for setup issues related to currencies and conversion rates.

For external source systems, load currencies and conversion rates by using the file-based data import process. Use the Currency, Currency Conversion Type, and Currency Conversion tabs in the Supply Chain Planning Currencies file (ScpCurrencyImportTemplate.xlsm).

You can create what-if scenarios to simulate future changes in price to determine the global impact and risk on your supply chain. Simulate changes in price by editing the Adjusted Price measure and then rerun the aggregate plan with the data refresh option **Do not refresh with current data** selected. The price adjustments are made in the local currency, but converted to base currency when running the plan to plan revenue in one currency. At the end of the plan run, revenue is output in the local currency, even though the base currency was considered for the fulfillment of end item demands. This process ensures that there is consistent reporting of revenue and costs by organization in local currencies.

Perform the following steps to configure the planning process for currency conversion in your sales and operations plan.

1. In an open sales and operations plan, navigate to the Plan Options page, Supply tab, and click the Advanced Options button.
2. In the Supply: Advanced Options dialog box, General tab, expand the Revenue Currency Parameters section.
3. Select the **Consider currency conversion rates to plan revenue** check box.
   Selecting this check box instructs the planning process to use a single base currency to prioritize demand revenue in a constrained plan rather than planning revenue for each organization in the local currency.
4. Select the conversion type, which contains currencies and conversion rates between currencies.
5. Select the base currency code. This code is for the base currency used to plan revenue for constrained demand in a single currency, which can be different than the local currency defined for an organization.
   Click **Done**.

Related Topics

- Run a Sales and Operations Plan
- Overview of Simulations in Sales and Operations Planning

Calculate Financial Metrics Using Price Lists

You can determine the selling price of an item using a single price list or by averaging multiple price lists associated with a plan.

You can use this selling price to calculate end demand values and financial metrics, such as revenue and margin. The measures can be displayed in tables and graphs. The updated end demand values are displayed in the Supplies and Demands, Exceptions, and Demand Fulfillment views in the supply plan output.

This functionality is available for constrained and unconstrained supply, demand and supply, and sales and operations plans.

Here's how you can calculate financial metrics using a price list in a plan.

1. Navigate to the **Plan Inputs** work area from the navigator.
2. From the Tasks menu, click **Collect Planning Data**.

3. Select **Items** in the Reference Data tab and **Include Price List** check box in the Demand Planning Data tab.
4. Click **Submit** to initiate the collections process.
5. On the Manage Plans page, create a new plan by selecting the price lists in the plan option to derive the selling price for the item.

   You also can edit the existing plan options to allow the price lists to derive the selling price.
6. Click **Edit** for the price list in the plan option.
7. Click **Add** in the Manage Price Lists window.
8. Select the **Primary** check box to indicate a primary price list.

   You can select a user-defined price list or the Item list Price.
9. Enable the **Include When Deriving Selling Price** plan option for the price lists that must be used to calculate the selling price. Select multiple price lists to compute the average selling price of the item.

   The planning process performs all the necessary units of measure and base currency conversions and represents them in the primary unit of measure. This value takes precedence over the Item List Price.
10. Click **OK** to save the options and run the plan.
11. Click **Open** in the plan output work area and search for the Items view.

    You can see that the plan has computed the Selling Price and Net Selling Price from the price list associated with the plan.

    In the Supplies and Demands view, the Selling Price is used to compute and display the **End Demand Value** for the forecast.

    > **Note:** This view is available in supply and demand, and supply plans.

Things to Consider When Calculating Financial Metrics Using Price Lists

Here's some additional information about this functionality.

- The Include When Deriving Selling Price check box is disabled for Item List Price since it is the default price list for all calculations. The check box is enabled for user-defined price lists collected from Product Information Management (Fusion source) or using file-based data integration (external source).
- The Selling Price is the same as the Item List Price if you don't assign any user-defined price lists to the plan. You can uncheck Include When Deriving Selling Price to consider the Item List price as the Selling Price.
- The Price measure is calculated for the price list you set as Primary. The planning process does not compute the time-varying Price measure values for a price list that is not set as Primary and for which Include When Deriving Selling Price is enabled.
- The Price measure calculated with a Primary price list is used to compute shipment or booking forecast value measures. You also can use it to compute the value in a user-defined measure with an expression in a supply plan.

Examples Showing How to Calculate Financial Metrics Using Price Lists

Example 1 shows how the selling price of an item is derived from the price lists for price list details specified in Oracle SCM. The price list and item price details are created in the Pricing work area.

The item KB-SS-PUMP106's price is defined in two price lists in Pricing. In the price list SN PRICE: LIST1, the price is 98 USD, and in the price list SN PRICE LIST2, the price is 99 USD.

1. Select the item's price list and price details, and run the Collect Planning Data scheduled process. The details are collected in Oracle SCP.

2. Create a plan, and add price lists SN PRICE LIST1 and SN PRICE LIST2 in the Manage Price Lists in the plan option.
3. Select the **Include When Deriving Selling Price** check box for both the lists.
4. Run the plan to see the item's Selling Price and Net Selling Price values in the Items view. These values are calculated from the price lists associated with the plan.

Example 2 shows how the time-varying price is used to calculate the revenue in a sales and operations plan.

The planning process uses the time-varying price for revenue calculation when you mark a single price list as **Primary**, and select **Include When Deriving Selling Price** in plan options.

For example, the Revenue of 32,000 in March 2030 is calculated by multiplying the Constrained Forecast (200) and Price (160).

The Selling Price value in the Items table is computed as the average of the time-varying prices for an item in the plan output.

If you mark more than one price list as **Include When Deriving Selling Price** in plan options, then the computed average Selling Price is used in revenue calculations instead of the time-varying price.

Example 3 shows how the average selling price is derived for an item from price lists in a supply plan.

The item AS7311 in an organization M1 is collected with the following price list details from the source system:

- Price List 1 with the price of 10 USD, effective from January 1st, 2022.
- Price List 2 with the price of 11 USD, effective from February 2nd, 2022.
- Price List 3 with the price of 9.5 Euros, effective from March 3rd, 2022.
- Price List 4 with the price of 14 USD, effective from January 1st, 2022 to June 30th, 2022.

A supply plan is created with the plan horizon start date of July 29th, 2022. The supply planning process derives the selling price for item AS7311 from price lists. **Include When Deriving Selling Price** is marked for all four price lists. The default price list “Item List Price” is marked as **Primary**.

The items AS7311 and CM1234 have a collected list price as a selling price of 10 USD.

The currency of Organization M1 is USD. The latest collected conversion rate from Euros to USD is 1.2, with the conversion date effective from Jan 1st,2022. The price of 9.5 Euros from Price List 3 is converted to USD using the latest conversion rate. The price of 14 USD from Price List 4 is ignored, as the **To Date** ends before the plan horizon start date. So, the average selling price for the item AS7311 is derived from Price List 1, Price List 2, and Price List 3 as 10.8 USD.

Since item CM1234 does not have any price list detail, the list price of the item is applied as a selling price of 10 USD in the plan.

The financial metrics in the plan for item AS7311 are calculated based on the selling price derived from price lists associated to the supply plan.

Report Resource Requirements by Assembly

To report resource requirements by assembly item in a sales and operations plan, select the **Report resource requirements by assembly** check box in the plan options. The check box is located in the Supply: Advanced Options dialog box, General tab.

You can associate resource and work center requirements with assembly items or product category mix. Use these associations to better understand and adjust resource loading. You can gain insight for strategic requirements by analyzing the product mix for assembly items produced in shared, constrained work centers for better rough-cut capacity planning. You can leverage measures and reports that combine resource and product dimensions to quickly validate sales opportunities for manufactured items.

When you select the Report resource requirements by assembly check box, the planning process uses measures to analyze plan data. These measures have both resource and product as conforming dimensions to link resource requirements to manufactured assembly items. The measures used to analyze plan data include the following:

- Resource Requirements by Assembly Item
- Resource Quantity by Assembly Item
- Production Plan by Resource

The planning process creates the following views for you to analyze:

- The Resource Plan by Category and Quarter table combines the resource and product dimensions to help you review and adjust resource loading.
- The Resource Plan by Category and Quarter graph compares Resource Requirements by Assembly Item with Resource Availability.

You can simulate changes to resource usage quantities for assembly items in bills of resources and the Resource Quantity by Assembly Item measure reflects the updates in your plans.

> **Note:** Selecting the Report resource requirements by assembly check box can potentially slow down processing times for your sales and operations plan.

Technical Control Parameters

The Enable Multithreading and Parameter Overrides options are available on the Technical tab in the Supply: Advanced Options dialog box.

Enable Multithreading

You can use multithreading to decrease the overall runtime of a supply plan.

In the plan options, navigate to the Supply: Advanced Options dialog box, Technical tab, and select the **Enable multithreading** check box. When selected, the planning process implements multithreading during the plan run.

Parameter Overrides

The **Parameter Overrides** field provides a mechanism to change default planning behavior. It's used, only when instructed by Oracle support, to resolve select issues raised as part of a service request.

In the plan options, navigate to the Supply: Advanced Options dialog box, Technical tab. Enter one or more values in the **Parameter Overrides** field. If more than one value is entered, use commas to separate values.

Configure Optimization Parameters

You can influence the plan results by configuring optimization parameters. By setting these parameters, you can better control the plan output and decision-making process.

The following optimization parameters are available:

- Penalty Cost Multiplier for Demand Backordering: The value by which the penalty cost for demand backordering is multiplied. The default value for this global parameter is 100.
- Penalty Cost Multiplier for Supplier Capacity Overloading: The value by which the penalty cost for supplier capacity overloading is multiplied. The default value for this parameter is 1000. You can overload the supplier category capacity to enforce demand due dates on time for assembly items. Set this parameter to -1 to set a hard constraint on the supplier category capacity.
- Penalty Cost Multiplier for Resource Capacity Overloading: The value by which the penalty cost for resource capacity overloading is multiplied. The default value for this parameter is 1000. You can overload the work center capacity to enforce demand due dates on time for assembly items. Set this parameter to -1 to set a hard constraint on the work center capacity.
- Penalty Cost Multiplier for Sourcing Allocation Violation: The value by which the penalty cost for violating the sourcing allocation percentage is multiplied. The default value for this parameter is 100.

Perform the following steps to configure the optimization parameters in your sales and operations plan:

1. In an open sales and operations plan, navigate to the Edit Plan Options page, Supply tab, and click **Select Advanced Options**.
2. In the Select Advanced Options dialog box, click the Optimization Parameters tab.
3. Select the **Use declining storage costs to avoid building inventory early** check box to use the storage penalty costs rolled up from the component items associated with an assembly item's bill of resources that decline over the plan horizon. Unselect the check box to use the same storage penalty cost over the plan horizon.
4. Optionally, update the values for the optimization parameters:
    - **Penalty Cost Multiplier for Demand Backordering**
    - **Penalty Cost Multiplier for Supplier Capacity Overloading**
    - **Penalty Cost Multiplier for Resource Capacity Overloading**
    - **Penalty Cost Multiplier for Sourcing Allocation Violation**

    > **Note:** Oracle recommends consulting them before altering optimization parameters.
5. Click **Reset to Default** to remove your user-specific values.
6. Click **Done**.

Configure Optimization measure

Penalty Cost Multiplier for Demand Backordering is an editable measure that can influence plan results more precisely than the global optimization parameter. The measure uses the value set for the global optimization parameter by default. Adjust this value to increase the relative priority of fulfilling the end item demands. This measure gives you granular level control to prioritize which demands to fulfill first.

For example, if a new assembly item consumes capacity on a constrained work center, you can increase the measure value from 100 to 100,000 to prioritize fulfilling this new product.

Perform the following steps to use this measure to influence your plan results:

1. Add the Penalty Cost Multiplier for the Demand Backordering measure to the measure catalog of your sales and operations plan.
2. Run your plan with the **Refresh with current data** option selected on the Parameters tab in the Run Plan dialog box.
3. Create a table that uses this editable measure. You can adjust the measure values by organization, item, and time.

Configure Supplier and Capacity Constraints

You can configure to constrain supplier capacity and resource capacity in a plan's options. With aggregate capacity planning, you can constrain resource capacity for specific work centers and constrain supplied component items at the product category level.

You have the flexibility to decide which capacity constraints to enforce in your plans and which ones not to enforce. Configure these constraint parameters on the Plan Options page, Supply tab from the Sales and Operations work area.

You can configure supply constraints to enforce supplier category capacity and work center resource capacity for the critical component items and bottleneck resources used in your aggregate bill of resources. For example, if a supplier allocates a fixed amount of supply due to their own global constraints, or if a manufacturing facility cannot exceed a known level of output, then you can enforce these constraints in your sales and operations plans.

> **Note:** In a constrained plan, capacity utilization can exceed 100 percent for constrained work centers or supplier component categories depending on the Optimization Parameters you configure in Supply Advanced Options. Overloading can also occur in a constrained plan for unconstrained resources and suppliers.

Exception management identifies where there are performance gaps. You can tailor predefined exceptions to your specific requirements and use them in exception sets.

Supplier Capacity

To enforce supplier capacity, select the **Consider supplier capacity constraints** check box in the Constraints section on the Plan Options page, Supply tab. The planning process constrains supplier capacity at the component category level, not for an individual component item. You still have visibility to supplier item loading within the component category.

When constraining component categories, specify available supplier capacity for all items in the category. If you do not want to constrain a component category in a constrained plan, then do not specify available supplier capacity for its items.

In a supplier constrained plan, capacity utilization can exceed 100 percent for component categories depending on the Optimization Parameters you configure in Supply Advanced Options.

For example, the default value for the Penalty Cost Multiplier for Supplier Capacity Overloading parameter is 1000. You can overload the supplier category capacity to enforce demand due dates on time for assembly items.

Set this parameter to -1 to set a hard constraint on the supplier category capacity. With this setting, the capacity utilization cannot exceed 100 percent.

Supplier capacity overloading can still occur for supplied items in a constrained component category. The constraint is enforced at the component category level.

Resource Capacity

To enforce resource capacity, select the **Consider work center capacity constraints** check box in the Constraints section on the Plan Options page, Supply tab. The planning engine constrains resource capacity at the work center level, not for an individual resource. You still have visibility to resource loading within the work center.

You can select which work centers to constrain in manufacturing locations in plan options. You can also continue to generate resource requirements for resources in unconstrained work centers.

A work center containing resources without defined resource availability in either plan inputs or simulation set can't be constrained when running a plan with data refresh. You must load resource availability to constrain the work centers. You can simulate adjustments to the Resource Availability measure when resource availability is defined for a work center.

In a resource constrained plan, resource utilization can exceed 100 percent for constrained work centers depending on the Optimization Parameters you configure in Supply Advanced Options.

For example, the default value for the Penalty Cost Multiplier for Resource Capacity Overloading parameter is 1000. You can overload the work center capacity to enforce demand due dates on time for assembly items.

Set this parameter to -1 to set a hard constraint on the work center capacity. With this setting, the capacity utilization cannot exceed 100 percent.

In a resource constrained plan, resource utilization cannot exceed 100 percent for constrained work centers. However, resource overloading can still occur for unconstrained work centers in the plan. An individual resource in a constrained work center can be overloaded. The constraint is enforced at the work center level.

Exceptions

Sales and Operations Planning provides predefined exceptions to use in constrained plans, such as Supplier Category Capacity Overloaded and Work Center Overloaded. These exceptions detect when capacity utilization for supplier component categories and work centers are fully loaded at 100 percent.

Run a Sales and Operations Plan

When you run a sales and operations plan, you can specify the scope of the plan that you want to run. For example, you can generate the demand forecasts or supply replenishments, or both.

You can decide whether to refresh the plan's input data before running it. Also, you can run the plan immediately or you can run the plan in the background at a set time or on a repetitive schedule, such as daily or weekly.

After you create a plan, you must run the plan to generate the data. In the Run Plan dialog box, Parameters tab, options are sequenced in the order of operations: data refresh, scope, demand, and supply. The data refresh process runs first, then the forecasting process runs, and then the output is used for planning calculations. You can configure the following options for a sales and operations plan:

- Data Refresh Options
- Scope Options
- Demand Plan Run Options
- Supply Plan Run Options

Data Refresh Options

The following data refresh options are available:

- *Do not refresh with current data*: Select this option to run incremental what-if plan simulations. There is no advancement of the plan start date.
- *Refresh with current data*: Select this option to refresh the complete plan with the latest collected data and advance the plan start date. If you are running the plan for the first time, this is the only data refresh option available and it is selected by default.

  If you select this option for a sales and operations plan, the Plan demand and Plan supply check boxes in the Scope Options section are selected by default and cannot be deselected.

Scope Options

Scope options restrict the focus of the replan. The following scope options are available:

- **Plan demand**: Select to forecast demand when running a plan. If you selected **Refresh with current data** in the Data Refresh Options section, then this option is selected by default.
- **Plan supply**: Select for the planning process to calculate the supply when running the plan. The **Plan supply** check box in the Scope Options section is available only when the **Plan supply** check box is selected on the Plan Options page, Supply tab. If not selected, then the aggregate planning engine is not invoked as part of the plan run. If selected, and you also select the **Refresh with current data** check box in the Data Refresh Options section, then the **Plan supply** option is selected by default and cannot be deselected.
- **Archive plan**: Select to archive data after you run the plan. The Archive plan option is available when the **Enable for archiving** check box is selected in the Scope: Advanced Options dialog box, which you navigate to from the Plan Options page, Scope tab. If the plan is enabled for archiving, then the measures in the measure catalog specified in the **Measure Catalog for Archival** field will be archived.

Demand Plan Run Options

Use Demand Plan Run Options to generate a demand forecast. Select the forecasting profiles that you want to include as part of the plan. If you do not select a forecasting profile, then the demand forecasting process does not run.

Supply Plan Run Options

The following supply plan run options are available for sales and operations plans:

- **Interactive**: Select this option to run incremental what-if plan simulations. If you select Interactive, the Schedule tab is disabled and the plan is set to run as soon as possible. When the plan run completes, the plan is available for review.
- **Batch**: If you select Batch, the Schedule tab becomes available where you can select to run the plan immediately or set up a schedule for when to run the plan, such as weekly or monthly.

Running a Sales and Operations Plan

To run a sales and operations plan:

1. Open the Run Plan dialog box:
   a. In the Navigator, click the Sales and Operations work area.

b. Click the Plans panel tab.
c. In the Tasks panel drawer, click the **Manage Plans** link.
d. Enter the search parameters and click the **Search** button.
e. In the Search Results region, select the plan that you want to run, click **Actions**, and then select **Run**.

2. In the Run Plan dialog box, Parameters tab, expand Details to review the plan options:
    a. In the Data Refresh Options section, review the options and make appropriate selections.

        > **Note:** If you are running the plan for the first time, select **Refresh with current** data. This option refreshes historical data, imports sales orders, and advances the plan start date to align with the current date.

    b. In the Scope Options section, select the options that you want for the plan run.
    c. In the Demand Plan Run Options section, select the forecasting profiles that you want to include as a part of the plan run.
    d. In the Supply Plan Run Options section, select **Interactive** or **Batch**.
3. If you selected **Batch** in the Supply Plan Run Options section, click the Schedule tab to set up the frequency parameters:
    a. To run the plan immediately, select **As soon as possible**.
    b. To run the plan in the background at a set time, select **Using a schedule** and then select a **Frequency**, such as **Daily** or **Weekly**.

Publish Plan Data

You can publish data for a plan in the Demand Management, Demand and Supply Planning, Planning Central, Replenishment Planning, Sales and Operations Planning, or Supply Planning work area to a compressed file.

You can then use the file for data integration between your Supply Chain Planning application and other Oracle or external applications.

By submitting a scheduled process from your Supply Chain Planning work area or the Scheduled Processes work area, you can publish the data in a pivot table within your plan to a file on the content server of Oracle WebCenter Content.

Using APIs of Oracle's ERP integration service for automating the data integration between your Supply Chain Planning Application and an external application, you can submit the scheduled process, check its status, and get the details of the published document.

The file name is in the <plan name>_<pivot table name>.zip format.

Publish Plan Data from a Supply Chain Planning Work Area

Here's how you can publish data for your plan from your Supply Chain Planning work area:

1. Do one of the following to open the Publish Data dialog box:
   - On the Manage Plans page, select the plan and click **Actions** > **Publish Data**.

     The Publish Data dialog box opens.
   - Open your plan and click **Actions** > **Publish Data**.

     The Publish Data dialog box opens.
2. Optionally, enter submission notes for your scheduled process.
3. On the Parameters tab, optionally, select the **Append request number to output file name** check box.

   Selecting this check box results in the request number being appended to the file name, which enables easy identification of the file on the content server. The resulting file name (<plan name>_<pivot table name>_<request number>) is also used as the document title.

   If you don't select this check box, the document title is PUBLISHPLANDATA.
4. In **Table Name**, select the pivot table of your plan for which you want to publish data.

   The available tables are enabled for the work area of the plan, and you have the required access to these tables.
5. In **Source System**, select the source system that's specified on the Scope tab of the Plan Options page for the plan.
6. On the Schedule tab, specify whether you want to run the process as soon as possible or according to a schedule.

   If you publish the file according to a schedule, you can specify the frequency and start and end dates for the process.
7. Click **Submit**.

   The Status dialog box opens and displays the request number. Make a note of this number and then click **OK**.

   You can use this number to search for the result of your request in the Scheduled Processes work area.

   If you appended this number to the compressed file's name, you can use this number to search for the file in the File Import and Export work area. You can then download and check the file.

Publish Plan Data from the Scheduled Processes Work Area

Here's how you can publish data for your plan from the Scheduled Processes work area:

1. On the Overview page, click the **Schedule New Process** button.

   The Schedule New Process dialog box opens.
2. In **Name**, select the Publish Plan job, and click **OK**.

   The Process Details dialog box opens.
3. To be notified when the process ends regardless of the result, select the **Notify me when this process ends** check box.
4. Optionally, enter submission notes for your scheduled process.
5. On the Parameters tab, in **Plan Name**, select your plan.
6. Optionally, select the **Append request number to output file name** check box.

Selecting this check box results in the request number being appended to the file name, which enables easy identification of the file on the content server. The resulting file name (<plan name>_<pivot table name>_<request number>) is also used as the document title.

If you don't select this check box, the document title is PUBLISHPLANDATA.

7. In **Table Name**, select the pivot table of your plan for which you want to publish data.

   The available tables are enabled for the work area of the plan, and you have the required access to these tables.
8. In **Source System**, select the source system that's specified on the Scope tab of the Plan Options page for the plan.
9. To set a schedule for your request and notify other users about the result, click the **Advanced** button.

   The Schedule and Notification tabs are displayed.

   - On the Schedule tab, specify whether you want to run the process as soon as possible or according to a schedule.

     If you publish the file according to a schedule, you can specify the frequency and start and end dates for the process.
   - On the Notification tab, specify the recipients to whom result notifications should be sent and the conditions under which the notifications are sent.
10. Click **Submit**.

    The Confirmation dialog box opens and displays the process number. Make a note of this number, and click **OK**.

    You can use this number to search for the result of your request in the Scheduled Processes work area.

    If you appended this number to the compressed file's name, you can use this number to search for the file in the File Import and Export work area. You can then download and check the file.

Compare Sales and Operations Plans

Compare a sales and operations plan with another sales and operations plan or an archive of the same plan. You can select a metric to show the difference between the plans.

Compare aggregate plan metrics: You can compare two plans and understand what changed at an aggregate level. For example, you can compare metrics, such as Revenue, Production Plan, Resource Requirements, Projected Available Balance, and Exceptions Count. The comparison of plans in a table or a graph displays the data for each plan side-by-side. To see the differences between the plans, you can select the metrics in the Comparison Options tab when creating or editing the table or graph. The Show Difference icon in the table or graph toolbar redraws the table or graph with the selected difference metrics.

> **Note:** If you compare sales and operations plans with different planning levels, you must compare from within the plan that's planned at a higher level of aggregation. For example, if you compare a quarter-level plan with a month-level plan, you must make the comparison from within the quarter-level plan. You can't make the comparison from within the month-level plan.

The comparison metric options are the following:

- Difference
- Percent Difference
- Absolute Percent Difference

To compare a plan:

1. In the Navigator, click the **Sales and Operations Planning** work area.
2. From the Actions menu, select **Compare** and then click **Plans**.
3. In the Search and Select: Plan dialog box, search and select the plan that you want to compare with the current plan, and click **OK**.

   You can view the table or graph with both plans displayed.

   > **Tip:** Click the **Graph** icon on the toolbar of the table to view the results in a graph.

4. Click **Show Difference** to view the difference between the current plan and the comparison plan.

To stop comparing the plans, select the **Cancel Compare** from the **Actions** menu.

Review Plan Messages

In Supply Chain Planning, you can view root causes for technical plan process failures and the recommendations to fix the issues.

After running a plan, open the Review Plan Messages table to review the warning and error messages generated by the planning processes, such as forecast generation and supply plan generation. You can also review the recommendations to address the warning and error conditions. Access the plan messages from either the Manage Plans page or the Edit Plan page.

Plan messages are available for all plan types (for example, Supply Plan or Sales and Operations Plan types) and are accessible from your respective Supply Chain Planning work area. There are three message types:

- Warning: Indicates an issue that can result in a future run plan error if not resolved.
- Error: Indicates a plan failure.
- Recommendation: Indicates a recommendation to resolve a plan failure or how to achieve a better run performance.

If you repeatedly run the plan, the same messages appear on the Review Plan Messages tab for each plan run. The messages will have different process identifiers and submission times.

You can delete plan messages based on the submission date. On the Review Plan Messages tab, click the Purge button. In the Purge Messages dialog box, enter a submission date with one of the operators: Equals, Before, On or before, After, On or after, Between, or Not between.

Use the following steps to open the Review Plan Messages table from the Manage Plans page:

1. From a Supply Chain Planning work area, click the **Task** drawer and select **Manage Plans**.
2. On the Manage Plans page, search for a plan.
3. In the Search Results region, select a plan.
4. Click the **Actions** list and then select **Review Plan Messages** to access the Review Plan Messages tab.

From the Search Results region, you can export the messages to a Microsoft Excel spreadsheet.

Use the following steps to open the Review Plan Messages table from the Edit Plans page:

1. From a Supply Chain Planning work area, click the **Task** drawer and select **Manage Plans**.
2. On the Manage Plans page, search for a plan.
3. In the Search Results region, select a plan. Next, click the **Actions** list and then select **Open**.
4. On the Edit Plan page, click **Open**.
5. In the Open Table, Graph, or Tile Set dialog box, search for the Review Plan Messages table. Select the table and then click **OK**.
6. On the Review Plan Messages tab, click the **Search** button.
7. In the Search Results region, view the plan messages.

   From the Search Results region, you can export the messages to a Microsoft Excel spreadsheet.

Related Topics

- Actions to Manage Your Plans
- Overview of Supply Chain Planning Plan Types

13 Analyze Sales and Operations Plans

Aggregate Build Plan View

Overview of the Aggregate Build Plan in Sales and Operations Planning

The Aggregate Build Plan table in Sales and Operations Planning Cloud enables you to simultaneously view resource, material, and supplier requirements in the context of demand for an assembly.

This report leverages the bill of resources used in aggregate supply planning that defines which component items and resources are used in an assembly item. Use Aggregate Build Plan to focus on the components, resources, and measures that are important to you. For example, you can analyze a material plan for a critical component and its available supplier capacity.

The Aggregate Build Plan also gives you visibility into the upstream manufacturing of subassemblies and their requirements for components and resources. You can quickly identify and reduce supply and resource bottlenecks as well as understand the imbalance in resource capacity and component supply.

When you open the Aggregate Build Plan table for the first time, you will see an empty plan layout. You can configure the layout of the Aggregate Build Plan table to show only the components, resources, and measures that you want to see. You can also define criteria at a product category level for aggregate analysis across shared components and resources.

After selecting the criteria that you want, the Aggregate Build Plan displays the end items, components, and resources that you identified in the criteria. You can expand the root node to see the measures that you included in the layout as well as the selected time level used for the columns. Whether or not you can edit a value in a cell is based on if the measure is editable or not. If the measure is editable, then you can edit the measure in the Aggregate Build Plan.

Use the Drill to action to see additional information related to a table cell. The context of the cell is passed into the resulting table or graph. You can also drill into the Aggregate Build Plan, which is currently supported only for assembly items.

Related Topics

- Create Aggregate Build Plan Criteria
- Create an Aggregate Build Plan Layout

Create Aggregate Build Plan Criteria

When you open the Aggregate Build Plan table directly from a Sales and Operations Plan, you must select criteria to specify which end items, components, and resources from the bill of resources that you want to view.

You can also drill into the Aggregate Build Plan from another report with end item context. In this case, the Aggregate Build Plan displays criteria for all of the components and resources in the bill of resources for that assembly. You can then select different criteria for your end items.

Follow these steps to create the criteria for an aggregate build plan report:

1. Open a Sales and Operations plan:
    a. In the Navigator, click the Sales and Operations Planning work area.
    b. Click the Tasks panel tab.
    c. In the Tasks panel drawer, click **Manage Plans**.
    d. Search for and open your plan.
2. Open the Aggregate Build Plan table:
    a. Click **Actions**.
    b. In the Open Table, Graph, or Tile Set dialog box, search for Aggregate Build Plan.
    c. Click **OK**.
3. In the Aggregate Build Plan view, click the **Criteria** list and then click **Manage**.
4. In the Manage Criteria dialog box, click **Add** and enter the values for **Name**, **Description**, and **Access** fields.
5. In the Details section, select **Item** or **Category** and then do one of the following:
    - If your end item criteria is Item, then select an item and organization from the list. You can leave the Organization field empty.
    - If your end item criteria is Category, then select a catalog and category from the list.
6. Click **Refresh Lists**.

    The refresh builds the list of components and resources used in the assembly of the selected end item or category from the bill of resources.
7. Select the components and resources that you want to see in your report:
    - Select **All** or a specific component for the item.
    - Select **All** of a specific resource for the item.
8. Click **Save and Close**.

Related Topics

- Overview of the Aggregate Build Plan in Sales and Operations Planning
- Create an Aggregate Build Plan Layout

Create an Aggregate Build Plan Layout

When you work in the Aggregate Build Plan table in a Sales and Operations Planning work area, there is a predefined layout to display certain measures for items and resources.

You can select which end items, components, and resources to display by first setting up criteria. Next, you can create your own layout with preferred measures to display and for which time levels to display for the end items, components, and resources. You create your own layout by using the Manage action from the Layout choice list in the Aggregate Build Plan dialog box. You can set this layout as the default layout for all other sales and operations plans.

Follow these steps to create an Aggregate Build Plan layout.

1. Open a Sales and Operations plan:
    a. In the Navigator, click the Sales and Operations Planning work area.
    b. Click the Tasks panel tab.

c. In the Tasks panel drawer, click **Manage Plans**.
d. Search for and open your plan.

2. Open the Aggregate Build Plan table:
    a. Click **Actions**.
    b. In the **Open Table, Graph, or Tile Set** dialog box, search for Aggregate Build Plan.
    c. Click **OK**.
3. In the Aggregate Build Plan view, click the Layout list and then click **Manage**.
4. In the Manage Layouts dialog box, click the Add button and do the following:
    a. Enter the values for Name, Description, Access, and Time fields.
    b. Optionally, select the Default check box to make this layout the default layout.
5. In the Details section in the Manage Layouts dialog box, select your preferred measures in the Available column and move them to the Selected column for the following subtabs:
    - End Item Measures
    - Component Measures
    - Resource Measures
    - Supplier Measures
6. When done, click **Save and Close**.

Related Topics

- Overview of the Aggregate Build Plan in Sales and Operations Planning
- Create Aggregate Build Plan Criteria

Resource Plan by Category and Quarter Views

The Resource Plan by Category and Quarter views provide you with capacity insight to simplify data analysis. The table and graph also enable you to make quicker decisions to improve efficiency in your sales and operations planning process.

Use the Resource Plan by Category and Quarter views to focus on assembly items linked to critical resources to ensure that supply can meet strategic needs. The views simplify data analysis by highlighting product category mix for shared work center resources and enables better rough-cut decisions for sales opportunities in constrained plans.

The Resource Plan by Category and Quarter table combines the resource and product dimensions to help you review and adjust resource loading.

The Resource Plan by Category and Quarter graph compares Resource Requirements by Assembly Item with Resource Availability. Resource Requirements by Assembly Item appears as a bar chart stacked by product category. The Resource Availability measure has resource as a conforming dimension, not product, so it isn't associated with assembly items.

By using the graph to analyze resource loading, you can use both the Net Resource Availability (also a resource measure not conforming to the product dimension) and Resource Quantity by Assembly Item measures in the table to determine how many more assembly items you can produce.

For example, a provider of tablet computers wants to increase Quarter 2 sales revenue. They must ensure that there is enough capacity during the Supply Review phase of their sales and operations planning cycle. By analyzing the Resource Plan by Category and Quarter graph, the planner can see there is available capacity in their constrained work

center and the current requirements by product category. The planner then uses the Resource Plan by Category and Quarter table to determine how much more product they can produce by category to consume the available capacity. After a brief analysis, the planner adjusts Quarter 2 forecasts and runs a plan simulation to validate the changes before approving the plan.

To report resource requirements by assembly item in a sales and operations plan, select the **Report resource requirements by assembly** check box in the plan options. The check box is located in the Supply: Advanced Options dialog box, General tab.

Use the Product Lifecycle Management Page Layout

Overview of the Product Lifecycle Management Page Layout

The Product Lifecycle Management page layout helps you to manage product introductions and retirements. On this page layout, you can modify launch dates and discontinuation dates for products, while increasing or reducing baseline forecasts.

The introduction or retirement of a product often affects the demand for a related product. When the product introduction reduces the demand for the related product, the effect is termed as the cannibalization effect. When the product introduction increases the demand for the related product, the effect is termed as the halo effect.

Using this page layout along with predefined forecasting profiles in demand, demand and supply, replenishment, and sales and operations plans, you can do the following:

- Generate forecasts while allowing for the cannibalization or halo effect.
- Plan for cannibalization of existing products, and avoid revenue loss.
- Plan for the increased demand for related products on account of the halo effect.

Note: The page layout isn't available in the Planning Central work area.

Description of the Page Layout

The Product Lifecycle Management page layout consists of two panes:

- The top pane displays the predefined Manage Product Life Cycle by Item and Date table, using which you can modify the launch and discontinuation dates for products.
- The bottom pane displays the predefined Manage Forecast During Product Life Cycle table, using which you can modify the shipments or bookings forecast for products.

By default, both tables display products under the Category level 1 level of the Product hierarchy in the Product dimension.

The top table is dynamically linked to the bottom table; the former passes the highlighted selection in the Category level 1 level to the latter.

Note: If your products are in a different Product dimension level, you need to make a copy of the page layout and its tables, modify the Product dimension level for the table copies, and ensure that the top table dynamically passes the highlighted selection in the required Product dimension level to the bottom table. You can't make changes to predefined page layouts or the hierarchy levels and links of predefined tables.

Measures for Managing Dates for Product Lifecycle Management

The measures you use for managing dates in this page layout are as follows:

- Launch Date: Use this measure to store the date when the product is available for sale in the market. The value for this measure is collected or imported through the file-based data import (FBDI) template for Supply Chain Planning measures.
- Adjusted Launch Date: Use this measure to modify the date when the product is available for sale in the market. You can modify this measure on the page layout.
- Final Launch Date: This measure displays the final value for the date when the product is available for sale in the market. If the Adjusted Launch Date measure contains a value, that value is displayed by the Final Launch Date measure. Otherwise, the value of the Launch Date measure is displayed by the Final Launch Date measure.

  The Final Launch Date measure is the default value for the LaunchDateMeasure forecasting parameter of the Forecast Bookings Including Product Life Cycle and Forecast Shipments Including Product Life Cycle forecasting profiles.
- Discontinuation Date: Use this measure to store the date when the product is no longer available for sale in the market. The value for this measure is collected or imported through the FBDI template for Supply Chain Planning measures.
- Adjusted Discontinuation Date: Use this measure to modify the date when the product is no longer available for sale in the market. You can modify this measure on the page layout.
- Final Discontinuation Date: This measure displays the final value for the date when the product is no longer available for sale in the market. If the Adjusted Discontinuation Date measure contains a value, that value is displayed by the Final Discontinuation Date measure. Otherwise, the value of the Discontinuation Date measure is displayed by the Final Discontinuation Date measure.

  The Final Discontinuation Date measure is the default value for the DiscontinueDateMeasure forecasting parameter of the Forecast Bookings Including Product Life Cycle and Forecast Shipments Including Product Life Cycle forecasting profiles.

Measures for Managing Forecasts for Product Lifecycle Management

Note: By default, the predefined Manage Forecast During Product Life Cycle table displays shipments forecast measures. If you want to generate a forecast that's based on historical bookings, you need to click **View** > **Measures** > **Manage Measures**, select the hidden and visible measures according to your requirement, and save the table layout.

The measures you use for managing the shipments forecast in this page layout are as follows:

- Shipments Forecast: This measure is the output measure for the predefined Forecast Shipments Including Product Life Cycle forecasting profile. The measure stores the shipments forecast that's based on shipments history.
- Adjusted Shipments Forecast: Use this measure to modify the shipments forecast for the product by using a number. You can modify this measure on the page layout.

- Change to Shipments Forecast Percentage: Use this measure to modify the shipments forecast for the product by using a percentage. You can modify this measure on the page layout.

  For example, to increase the shipments forecast by 75%, enter 0.75 for the Change to Shipments Forecast Percentage measure. To decrease the shipments forecast by 25%, enter -0.25 for the Change to Shipments Forecast Percentage measure.
- Final Shipments Forecast: This measure displays the final value for the shipments forecast and is dynamically updated in the Manage Forecast During Product Life Cycle table. If the Adjusted Shipments Forecast measure contains a value, it's displayed by the Final Shipments Forecast measure. If the Change to Shipments Forecast Percentage measure contains a value, the calculated value is displayed by the Final Shipments Forecast measure. Otherwise, the value of the Shipments Forecast measure is displayed by the Final Shipments Forecast measure.

  If both the Adjusted Shipments Forecast and Change to Shipments Forecast Percentage measures contain values, the percentage of the value in the Adjusted Shipments Forecast measure is calculated and displayed by the Final Shipments Forecast measure.

The measures you use for managing the bookings forecast in this page layout are as follows:

- Bookings Forecast: This measure is the output measure for the predefined Forecast Bookings Including Product Life Cycle forecasting profile. The measure stores the bookings forecast that's based on bookings history.
- Adjusted Bookings Forecast: Use this measure to modify the bookings forecast for the product by using a number. You can modify this measure on the page layout.
- Change to Bookings Forecast Percentage: Use this measure to modify the bookings forecast for the product by using a percentage. You can modify this measure on the page layout.

  For example, to increase the bookings forecast by 75%, enter 0.75 for the Change to Bookings Forecast Percentage measure. To decrease the bookings forecast by 25%, enter -0.25 for the Change to Bookings Forecast Percentage measure.
- Final Bookings Forecast: This measure displays the final value for the bookings forecast and is dynamically updated in the Manage Forecast During Product Life Cycle table. If the Adjusted Bookings Forecast measure contains a value, it's displayed by the Final Bookings Forecast measure. If the Change to Bookings Forecast Percentage measure contains a value, the calculated value is displayed by the Final Bookings Forecast measure. Otherwise, the value of the Bookings Forecast measure is displayed by the Final Bookings Forecast measure.

  If both the Adjusted Bookings Forecast and Change to Bookings Forecast Percentage measures contain values, the percentage of the value in the Adjusted Bookings Forecast measure is calculated and displayed by the Final Bookings Forecast measure.

Forecasting Profiles for Product Lifecycle Management

You use these predefined forecasting profiles for managing product life cycles:

- Forecast Shipments Including Product Life Cycle: This forecasting profile generates a forecast on the basis of historical shipments and the Final Launch Date and Final Discontinuation Date measures.

  The forecasting profile is available for demand, demand and supply, replenishment, and sales and operations plans.
- Forecast Bookings Including Product Life Cycle: This forecasting profile generates a forecast on the basis of historical bookings and the Final Launch Date and Final Discontinuation Date measures.

  The forecasting profile is available for demand, demand and supply, and sales and operations plans.

Other Points to Note

Note these other points about the functionality for managing the product life cycle:

- If the Final Launch Date measure doesn't contain a value or isn't present in the plan's measure catalog, the forecast is generated from the forecast start date of the plan.

  The plan's forecast start date is used if it's later than the value of the Final Launch Date measure.
- If the Final Discontinuation Date measure doesn't contain a value or isn't present in the plan's measure catalog, the forecast is generated till the forecast end date of the plan.

  The plan's forecast end date is used if it's earlier than the value of the Final Discontinuation Date measure.
- If the date in the Final Launch Date measure is later than the date in the Final Discontinuation Date measure, both measures are ignored, and the forecast is generated from the plan's forecast start date to the plan's forecast end date.
- Optionally, you can use an override label for the Change to Shipments Forecast Percentage or Change to Bookings Forecast Percentage measure in the Manage Forecast During Product Life Cycle table so that the functionality of the page layout is better reflected. For example, you can use Launch and Cannibalization Factor as the override label in the Format Measures dialog box.

Related Topics

- Manage Page Layouts in Sales and Operations Planning
- How You Generate Forecasts While Managing Product Life Cycles
- Work with Page Layouts in Demand Management
- Work with Page Layouts in Replenishment Planning
- Create a Forecasting Profile

How You Generate Forecasts While Managing Product Life Cycles

To generate forecasts for your products while managing their life cycles, you can use the Product Lifecycle Management page layout in your demand, demand and supply, replenishment, or sales and operations plan.

The following is the high-level procedure for forecasting for your products while using this page layout:

1. Set up your plan.

   Include the predefined Forecast Bookings Including Product Life Cycle or Forecast Shipments Including Product Life Cycle forecasting profile in your plan.
2. Perform the collections process or use the file-based data import (FBDI) templates for importing data.

   Collect or import values for the Launch Date and Discontinuation Date measures for your products.

3. Do the following:
    - If you want to generate the forecast on the basis of historical bookings, in the table, make the bookings forecast measures visible, and hide the shipments forecast measures.
    - If your products in your plan are in a different Product dimension level than what's used in the tables, do the following:
        - Make a copy of the page layout.
        - Make copies of the page layout's tables, and select or hide the shipments forecast or bookings forecast measures as you require.
        - Change the Product dimension level for the copied tables.
        - Ensure that the copy of the Manage Product Life Cycle by Item and Date table is dynamically linked to the copy of the Manage Forecast During Product Life Cycle table, and that the top table passes the highlighted selections in the required Product dimension level to the bottom table.
4. Run the plan.
5. Open the plan, and view the information in the copy of the page layout.
6. If you're generating a forecast using shipments history, enter a value in the Adjusted Shipments Forecast or Change to Shipments Forecast Percentage measure to view the result in the Final Shipments Forecast measure. Save your changes in the table layout.

   If you're generating a forecast using bookings history, enter a value in the Adjusted Bookings Forecast or Change to Bookings Forecast Percentage measure to view the result in the Final Bookings Forecast measure. Save your changes in the table layout.
7. If you must modify the launch date for a product, enter a value in the Adjusted Launch Date measure to view the final date in the Final Launch Date measure. Save your changes in the table layout.

   If you must modify the discontinuation date for a product, enter a value in the Adjusted Discontinuation Date measure to view the final date in the Final Discontinuation Date measure. Save your changes in the table layout.

   Run the plan again to view the forecasts for the required periods for your products.

   If required, modify the value in the Adjusted Bookings Forecast, Change to Bookings Forecast Percentage, Adjusted Shipments Forecast, or Change to Shipments Forecast Percentage measure. Save your changes in the table layout.

Related Topics

- Overview of the Product Lifecycle Management Page Layout
- Manage Page Layouts in Sales and Operations Planning
- Work with Page Layouts in Demand Management
- Work with Page Layouts in Replenishment Planning
- Create a Forecasting Profile

14 Archive Plans

Overview of Plan Archival

Supply Chain Planning provides two archival types, one that a planner can run for a plan and another archive type that only an administrator with proper security privileges can set up for MAPE statistics.

For a planner, plan archival enables you to archive measures in a plan with plan context and save multiple versions of a plan's archived measures over time. When you archive a plan, you archive a set of measures contained in the measure catalog that you chose as the archive measure catalog for the plan.

> **Note:** You can create archives for demand, supply, integrated demand and supply, and sales and operations plans. Archival isn't available for Oracle Planning Central.

Plan Archives

Plan archival enables you to save multiple versions of the plan where you archive the key measures at a point in time. The Waterfall Analysis and Trend Analysis tables and graphs use the plan archive to compare the current plan's data to past versions of the plan. When viewing past versions of the plan, you can see the impact of strategic and tactical changes made to the plan. You can also compare the individual archives to the plan by selecting **Compare** > **Archive** from the **Actions** menu in a plan.

For example, you archive a plan in May and then market conditions in September cause adjustments to be made to the plan. You can analyze the impact of the adjustments on the plan by viewing the changes in the key performance indicators between the plan version archived in May and the current plan.

A supply chain planner can run the archiving process from an open plan by selecting the Archive option from the Actions menu. A planner can also run the archiving process by selecting the **Archive plan** check box on the Run Plan page. Alternatively, you can run the archive process independently of running the plan by selecting the **Archive** option from the **Actions** menu on the Manage Plans page.

Before you can archive a plan, you must enable the plan for archiving and set up the archiving parameters. The parameters that you configure determine the time hierarchy, time level, and the measure catalog to use for the archives. Set up the archiving parameters in the Scope: Advanced Options dialog box, which you navigate to from the Plan Options page, Scope tab.

It's good practice to back up your archive data by making a full copy of your plan that includes archives. You can access the backup plan data in the event of any temporary issue with the plan of record. On the other hand, if you want to create a standalone plan to simulate a business scenario, you probably don't need to include archived measures.

MAPE Archives

An administrator with the correct security privileges can create an archive for MAPE statistics by running the **Build Plan Archive** scheduled process from the Tools work area. Generally, a supply chain planner doesn't have the privileges to create a MAPE archive. However, an administrator with the required privileges can see the **Enable for MAPE calculations** check box in the Build Archive dialog box. The administrator can create archives at weekly, monthly, or quarterly time levels. The archive level pertains to the planning time level, so the administrator would archive a quarter-level plan at the quarter level.

Note: To calculate predefined measures for demand plans and sales and operations plans that use archived data, you must use a MAPE archive. The statistics calculated for the MAPE archive are used to generate the Waterfall Analysis and Trend Analysis tables and graphs.

Related Topics

- Configure Archiving Parameters
- Copy a Plan

Configure Archiving Parameters

Before you can archive plans, you must enable the archiving options.

Note: You can create archives for demand, supply, demand and supply, and sales and operations plans. Archival isn't available in Oracle Planning Central.

To configure the archiving plan options:

1. In a work area for Oracle Fusion Cloud Supply Chain Planning, open a plan and then select **Edit Plan Options** from the **Actions** menu.
2. On the Plan Options page, Scope tab, click the **Select Advanced Options** button.
3. In the Scope: Advanced Options dialog box, Archive Options section, review and make changes to the archive parameters for the plan.

Parameter	Description
Enable for archiving	Select to set parameters used to archive measure data for your plan. When selected, the archiving options are enabled.
Archive Time Hierarchy	Select the time hierarchy to use to archive the measure data for the plan, such as Gregorian calendar. For a demand plan that uses a hybrid time hierarchy, the field value is defaulted to the hybrid time hierarchy that you selected as the planning calendar and can't be changed.
Archive Time Level	Select the time level to archive measure data for the plan, such as day or week. The time level is based on the selection made for the archive time hierarchy. For a demand plan that uses a hybrid time hierarchy, the field value is defaulted to the Hybrid time level corresponding to the hybrid time hierarchy that you selected as the planning calendar and can't be changed.
Measure Catalog for Archival	Select the measure catalog to use for archiving.

Parameter	Description
	Note: Oracle recommends that you create a measure catalog containing only measures that provide insight to the plan's changes instead of archiving every measure in the plan.
Do not delete archives	Select if you don't want to delete any archives for the plan.
Delete archives automatically	Select to automatically delete archives when the archives are older than the **Most Recent Days to Keep** parameter.
Most Recent Days to Keep	Enter the number of days for which to retain archives. Archives older than this number of days are automatically deleted.

4. Click **Done**.

Related Topics

- Overview of Plan Archival in Supply Chain Planning

Overview of Archival for Calculating MAPE Statistics

A Supply Chain Planning administrator with the Manage Rolling Archives security privilege can create archives for the calculation of the MAPE statistics at a week or month level.

These archives are used to calculate predefined measures for demand plans and sales and operations plans that use archived data. The administrator runs the Build Plan Archive scheduled process from the Tools work area.

Shipments or bookings measures are required in the archive for MAPE statistics calculations, based on the measure used to create the forecast. If your plan forecasts shipments data, then only the shipments forecast measures are needed. If your plan forecasts bookings data, then only the bookings measures are needed. The following shipments or bookings measures are required:

- Final Shipments Forecast
- Final Shipments Forecast 3 Months Ago
- Final Shipments Forecast 3 Months Ago Latest Archive
- Final Bookings Forecast
- Final Bookings Forecast 3 Months Ago
- Final Bookings Forecast 3 Months Ago Latest Archive

To use the archives in a waterfall or trend analysis, select the **Use MAPE calculations** check box in the Selector Tool Comparison Options tab.

MAPE archives created on a rolling basis can be referenced in a user-defined measure expression that uses the Archive function. The archive type is a parameter of this function. The valid values for archive type are "Rolling" and "Adhoc."

Related Topics

- Archival for Calculating MAPE Statistics

Archival for Calculating MAPE Statistics

A Supply Chain Planning administrator with the Manage Rolling Archives security privilege can create archives for the calculation of the MAPE statistics at a week or month level.

Perform the following steps to run the Build Plan Archive schedule process:

1. In the Navigator, under the Tools section, click the **Scheduled Processes** link to access the Scheduled Processes page.
2. Access the Process Details page for the Build Plan Archive process:
    a. On the Schedule Processes page, click the **Schedule New Process** button.
    b. In the Schedule New Process dialog box, click the **Name** list, and then click the **Search** link.
    c. In the Search and Select: Name dialog box, enter Build Plan Archive and click **Search**.
    d. Select Build Plan Archive and click **OK** to return to the Schedule New Process dialog box.
    e. In the Schedule New Process dialog box, click **OK**.
3. In the Process Details dialog box, select the plan to archive and then click the **Advanced** button.
4. On the Parameters tab, select Do not delete archives or Delete archives automatically.

    If you select to delete archives automatically, enter a number in the Most Recent Days to Keep field. The archive process automatically deletes older archives based on this parameter.
5. Select the **Enable for MAPE calculations** check box and enter or select the following parameters:
    a. **Archive Time Hierarchy**: Select the calendar to use for the archive.
    b. **Archive Time Level**: Select the time level to use for the archive.
    c. **Measure Catalog for Archival**: Select the measure catalog to use when archiving.

    > **Note:** Oracle recommends that you create a measure catalog for archived measures instead of archiving every measure in the plan.

    d. **Use default archive name**: Select to use the default archive name.
    e. **Use user-defined archive name**: Select to overwrite the default name with a user-defined name.
6. Click the Schedule tab to set up the frequency parameters.
    - To run the plan immediately, select **As soon as possible**.
    - To run the plan in the background at a set time, select **Using a schedule**. Next, select a **Frequency**, such as **Monthly** or **Weekly**, to create MAPE rolling archives for use in waterfall and trend analyses.
7. Click **Submit**.

Related Topics

- Overview of Archival for Calculating MAPE Statistics

Delete Archives

A planner can automatically delete plan archives by setting parameters in the Scope: Advanced Options dialog box, accessed from the Plan Options page, Scope tab.

Only a Supply Chain Planning administrator with the Manage Rolling Archives security privilege can delete MAPE archives. In the Tools work area, the administrator can use the Delete Plan Archive schedule process to clean up unwanted archived data versions. You can delete the archives of a plan based on an archive version, a time range, or all archives for a plan.

> **Note:** When you use the Delete Plan action, the process not only deletes the plan, but it also deletes all of the archive versions associated with that plan.

Perform the following steps to run the Delete Plan Archive schedule process:

1. In the Navigator, under the Tools section, click the **Scheduled Processes** link to access the Scheduled Processes page.
2. Access the Process Details page for the Delete Plan Archive process:
    a. On the Schedule Processes page, click the **Schedule New Process** button.
    b. In the Schedule New Process dialog box, click the **Name** list, and then click the **Search** link.
    c. In the Search and Select: Name dialog box, enter **Delete Plan Archive** and click **Search**.
    d. Select Delete Plan Archive and click **OK** to return to the Schedule New Process dialog box.
    e. In the Schedule New Process dialog box, click **OK**.
3. In the Process Details dialog box, select the plan that you want to delete the archives for and then click the **Advanced** button.
4. On the Parameters tab, in the Plan section, select one of the following options, which are only available to administrators with the Manage Rolling Archives security privilege:
    a. Include MAPE archives
    b. Delete MAPE archives only
5. On the Parameters tab, in the Archive Parameters section, configure the following parameters:
    a. Archives to delete
    b. Delete archives with time range

    The Delete Plan Archive process filters the selected archive parameters by which MAPE archiving option you selected in the Plan section.
6. Click the Schedule tab to set up the frequency parameters.
    a. To run the plan immediately, select **As soon as possible**.
    b. To run the plan in the background at a set time, select **Using a schedule** and then select a frequency, such as **Monthly** or **Weekly**.
7. Click **Submit**.

15 Extract Plan Data

Overview of Planning Measure Data Extractions from Plan Output

Planning information is an important component of supply chain analytics. It's important to extract planning measure data from any plan to build offline reports or integrate with any external system.

Planners can use the Export Plan Data action from the Manage Plans page to run the Prepare Supply Chain Planning Data for Export scheduled process. You can also run the process or schedule as a job from the Scheduled Processes page under the Tools menu in the Navigator.

When analyzing a plan, you can extract detail supply chain planning multidimensional plan output data, including measures and hierarchies. The extract is based on the measure catalog and dimension catalog assigned to the plan. The Prepare Supply Chain Planning Data for Export scheduled process extracts plan output data into a set of files for external reporting and analysis.

The extract process exports plan data to WebCenter Content in the comma-separated value (CSV) data format. This extract includes measure data, including any measures that you configured that are either stored or calculated. For calculated measures, the planning process extracts the data after evaluating the measure expressions. The extract is based on the measure catalog and dimension catalog assigned to the plan and includes user-defined hierarchies and levels. Supporting information such as hierarchies for multidimensional analysis is also exported.

Before you can run the **Prepare Supply Chain Planning Data for Export** scheduled process for a plan, you must:

1. As a one-time setup, create an application integration with login credentials.
    a. Navigate to the Setup and Maintenance work area and select the Manage Setup Content task.
    b. On the Manage Integration of Additional Applications page, set up the following:
        - Application Name: SCP_BICC_REST_CREDENTIALS
        - Full URL: Enter the host name of the application. For example: **https://example.fa.app.oraclecloud.com**
        - Partner Name: SCP_BICC_REST_CREDENTIALS
        - Security Policy: oracle/wss_username_token_over_ssl_client_policy
2. Ensure that the user running the extract has access to the Upload and Download Data from On-Premise System to Cloud System role (OBIA_EXTRACTTRANSFORMLOAD_RWD).
3. Configure the extract options for your plan. Navigate to the Plan Options page, Scope tab and click the Advanced Options button. In the Scope: Advanced options dialog box, in the Extract Options section, configure the extract parameters.
4. Navigate to the Manage Plans page and select a plan. Select Export Plan Data to run the Prepare Supply Chain Planning Data for Export scheduled process.

You can extract data at the lowest level from any of these plan types:

- Demand plan
- Demand and Supply plan
- Replenishment plan

- Sales and Operations plan
- Supply plan

Configure Plan Extract Parameters

Before you can select the Export Plan Data action from the Manage Plans page, you must configure the extract options for your plan.

1. Navigate to the Plan Options page, Scope tab and click the **Select Advanced Options** button.
2. In the Scope: Advanced options dialog box, in the Extract Options section, select the **Enable for extract** check box to enable plan data to be extracted.
3. Configure the extract parameters for the plan.

Dimension Catalog for Extract

Select a dimension catalog to use for the extract process. The list of values includes all dimension catalogs valid for the plan type. The list of hierarchies included in this list must be a subset of the hierarchies available in the dimension catalog associated with the plan. The list of hierarchies includes preconfigured and user-defined hierarchies. Note the following:

- The maximum number of levels per hierarchy is limited to 10 levels.
- The maximum number of hierarchies in the segment dimension is limited to two hierarchies.

Measure Catalog for Extract

Select a measure catalog to use for the extract process. The list of values includes all measure catalogs valid for this plan type. The measure catalog must contain only the measures that are part of the measure catalog for the plan. The planning process evaluates measures with expressions and includes the results in the extract.

Extract Time Hierarchy

Select a time hierarchy to use for the extract process. Data extraction is done only at the lowest level for all dimensions except for the time dimension. You can have only one time hierarchy per plan and it must be part of the dimension catalog used for the extract process. If it contains other time hierarchies, the extract process ignores them for extract.

The extract time hierarchy depends on the plan type, the planning calendar associated with the plan, and the planning time level. Validation rules apply for the **Extract Time Hierarchy** field, based on the type of plan.

When the planning calendar options are			Extract Time options must be	
Plan Type	Planning Calendar Type	Planning Time Level	Extract Time Hierarchy	Extract Time Level
Supply Plan	Greogorian Calendar	Month	Gregorian Calendar	Month, Quarter or Year
		Day	Any valid time hierarchy in plan	Any supported time levels
	Manufacturing Calendar	Week or Period	Same Manufacturing Calendar of the plan	Planning Time Level or above
		Day	Any valid time hierarchy in plan	Any supported time levels
Demand Plan	Greogorian Calendar	Month	Gregorian Calendar	Month, Quarter or Year
	Manufacturing Calendar	Week or Period	Same Manufacturing Calendar of the plan	Planning Time Level or above
	Fiscal Calendar	Month	Same Fiscal Calendar of the plan	Month or Quarter
		Day	Any valid time hierarchy in plan	Any supported time levels
Sales and Operations Plan	Greogorian Calendar	Month	Gregorian Calendar	Month, Quarter or Year
		Quarter	Gregorian Calendar	Quarter or Year
	Manufacturing Calendar	Week or Period	Same Manufacturing Calendar of the plan	Planning Time Level or above
	Fiscal Calendar	Month	Same Fiscal Calendar of the plan	Month or Quarter
		Quarter	Same Fiscal Calendar of the plan	Quarter
Replenishment Plan	Greogorian Calendar	Month	Gregorian Calendar	Month, Quarter or Year
	Manufacturing Calendar	Week or Period	Same Manufacturing Calendar of the plan	Planning Time Level or above
		Day	Any valid time hierarchy in plan	Any supported time levels

For a demand plan that uses a hybrid time hierarchy, the value in the **Extract Time Hierarchy** field is automatically set to the hybrid time hierarchy that you selected as the planning calendar and can't be changed.

Extract Time Level

Select a specific time level to extract. The list of values includes all levels based on the plan type and your selection in the **Extract Time Hierarchy** field. The valid values and defaults are as follows:

- Manufacturing calendar: Week, Period (Default is Week)
- Fiscal Calendar: Month, Quarter (Default is Month)
- Gregorian Calendar: Month, Year (Default is Month)

The extract time level depends on the plan type, the planning calendar associated with the plan, and the planning time level. The Extract Time Level selection is subject to validation for each plan type.

Plan Type	Rule
Supply plan	Largest supply planning bucket or above. For example: • If Supply Planning Buckets are 0 days, 52 weeks, then the Extract Time Level can be Week or Period. • If Supply Planning Buckets are 365 days, 13 Periods, then the Extract Time Level can only be Period.
Demand plan	Planning time level of the plan or above.
Demand and Supply plan	Largest supply planning bucket or above. For example: • If Supply Planning Buckets are 0 days, 52 weeks, then the Extract Time Level can be Week or Period. • If Supply Planning Buckets are 365 days, 13 Periods, then the Extract Time Level can only be Period.
Sales and Operations plans	Planning time level of the plan or above.
Replenishment plan	Planning time level of the plan or above.

For a demand plan that uses a hybrid time hierarchy, in the **Extract Time Level** field, you can select a parent of the Hybrid time level for the hybrid time hierarchy that you selected as the planning calendar. For a manufacturing hybrid hierarchy, you can select the Week or Period level. For a Gregorian hybrid hierarchy, you can select the Month, Quarter, or Year level. For a fiscal hybrid hierarchy, you can select the Month, Quarter, or Year level.

Files Created by the Plan Extract Process

The plan extract process generates a set of files. Some files have file names that begin with DATA and have a .csv.gz file extension. These files are compressed, comma-separated value (CSV) files.

The extract process also generates a set of files with file names that begin with META and have a .mdcsv.gz extension for its internal use. You can ignore the META files.

Every plan extract results in the following DATA files:

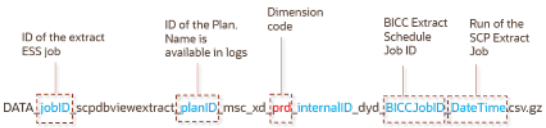
File generated	Description of file
Dimension Data	The plan extract process generates one dimension data file for each dimension selected for the extract process. This file contains all of the level members with their associated relationships for all hierarchies in that dimension.
Dimension Definition	The plan extract process generates one dimension definition file for each extract and contains the names of the hierarchies and levels.
Measure Data	The plan extract process generates one measure data file for each set of measures that share the same dimensionality. This file contains the measure values by the different dimensions.
Measure Definition	The plan extract process generates one measure definition file for each extract and contains the names, data types, expressions, granularity, and aggregation rules of the measure.

The extract process generates the dimension definition and measure definition files to help you understand the content of the data files, but they aren't essential for reporting or analysis. These files contain translatable strings in the language of the planner performing the extract.

Naming Conventions for Extracted DATA Files

In addition to the DATA prefix and .csv.gz file extension, the data file names follow a specific naming pattern. You can search the content server for this name pattern to get the required files for download.

- **Dimension file name patterns**
  - Dimension data file:

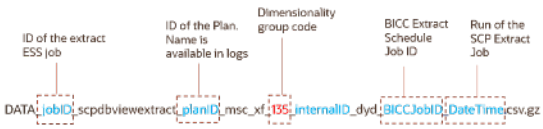


  - Dimension definition file:

DATA_jobID_scpdbviewextract_planID_msc_xtr_hierarchy_map_v-BICCJobID_DateTime.csv

Dimension file name parts	Description
jobID	The job ID of the extract scheduled process.
planID	The ID of the plan. This name is available in log files.
Dimension code	The dimension code that the hierarchies in the file belong to. Used in the dimension data file, but not the dimension definition file.
BICCJobID	The job ID of the extract scheduled job of the BI Cloud Connector (BICC) tool.
DateTime	Date and time the extract scheduled process began.

- **Measure file name patterns**
  - Measure data file:



  - Measure definition file:

DATA_jobID_scpdbviewextract_planID_msc_xtr_measure_map_v-BICCJobID_DateTime.csv

Measure file name parts	Description
jobID	The job ID of the extract scheduled process.
planID	The ID of the plan. This name is available in log files.
Dimensionality group code	Name of the dimensionality group code. Used in the measure data file, but not the measure definition file.
BICCJobID	The job ID of the extract scheduled job of the BI Cloud Connector (BICC) tool.
DateTime	Date and time the extract scheduled process began.

Dimension Data Files Created by the Plan Extract Process

The plan extract process generates one dimension data file for each dimension and contains all of the hierarchies in that dimension. Each dimension file contains information for all of the selected hierarchies.

For example, if the planner selects two product hierarchies, an item appears twice--once for each hierarchy.

Column name	Content
HIERARCHY_ID	Internal hierarchy identifier
[dimension]_LVL_MEMBER_ID	ID of the lowest-level member. Each dimension file contains its own lowest level member. For example: • *PRD*_LVL_MEMBER_ID • *ORG*_LVL_MEMBER_ID
BASE_MBR_NAME	Name of the lowest level member
L2-MBR_ID	Level 2 member ID
L2_MBR_NAME	Level 2 member name
L3-MBR_ID	Level 3 member ID
L3_MBR_NAME	Level 3 member name
L4-MBR_ID	Level 4 member ID
L4_MBR_NAME	Level 4 member name
L5-MBR_ID	Level 5 member ID
L5_MBR_NAME	Level 5 member name
L6-MBR_ID	Level 6 member ID
L6_MBR_NAME	Level 6 member name
L7-MBR_ID	Level 7 member ID
L7_MBR_NAME	Level 7 member name

Column name	Content
L8-MBR_ID	Level 8 member ID
L8_MBR_NAME	Level 8 member name
L9-MBR_ID	Level 9 member ID
L9_MBR_NAME	Level 9 member name
L10-MBR_ID	Level 10 member ID
L10_MBR_NAME	Level 10 member name
SR_BASE_MBR_ID	Internal use only

Dimension Definition Files Created by the Plan Extract Process

The dimension definition file contains information for all of the dimensions and hierarchies specified in the dimension catalog for extract. The plan extract process creates only one file per extract.

Column name	Description
DIMENSION_ID	Unique ID of the dimension
HIERARCHY_ID	Unique ID of the hierarchy
BASE_LEVEL_ID	Lowest level (Level 1) ID
LEVEL_2_ID	Level 2 ID
LEVEL_3_ID	Level 3 ID
LEVEL_4_ID	Level 4 ID
LEVEL_5_ID	Level 5 ID
LEVEL_6_ID	Level 6 ID

Column name	Description
LEVEL_7_ID	Level 7 ID
LEVEL_8_ID	Level 8 ID
LEVEL_9_ID	Level 9 ID
LEVEL_10_ID	Level 10 ID
DIMENSION_CODE	Unique code for the dimension
DIMENSION_NAME	Dimension name
HIERARCHY_NAME	Hierarchy name
BASE_LEVEL_NAME	Base level name
LEVEL_2_NAME	Level 2 name
LEVEL_3_NAME	Level 3 name
LEVEL_4_NAME	Level 4 name
LEVEL_5_NAME	Level 5 name
LEVEL_6_NAME	Level 6 name
LEVEL_7_NAME	Level 7 name
LEVEL_8_NAME	Level 8 name
LEVEL_9_NAME	Level 9 name
LEVEL_10_NAME	Level 10 name

Measure Data Files Created by the Plan Extract Process

The plan extract process generates one measure data file for each set of measures that share the same dimensionality or granularity. Use the measure definition file to obtain more details about the measure, including its full name, description, aggregation methods, and so on.

The following table is an example measure data file for a specific dimensionality with a selected list of measures. The actual format depends on the dimensionality and the measures selected by users for extract.

Column name	Description
PLAN_ID	ID of the plan
PRD_LVL_MEMBER_ID	Product dimension lowest level member ID
ORG_LVL_MEMBER_ID	Organization dimension lowest level member ID
TIM_LVL_MEMBER_ID	Time dimension lowest level member ID
FACT_DATE	Date
AVG_DAILY_DMD	Value of this measure
GROSS_MARGIN_PCT	Value of this measure
IN_TRANSIT	Value of this measure
INV_TURNS	Value of this measure
ITEM_STD_COST	Value of this measure
ONHAND	Value of this measure
PAB	Value of this measure
PAB_VALUE	Value of this measure
PO_QTY	Value of this measure
PR_QTY	Value of this measure
PROJECTED_ONHAND	Value of this measure

Column name	Description
SCHED_RCPT	Value of this measure
SS	Value of this measure
TF_QTY	Value of this measure
TOTAL_DEMAND	Value of this measure
TOTAL_DEMAND_VALUE	Value of this measure
TOTAL_SUPPLY	Value of this measure
TTL_END_ITEM_CST	Value of this measure
GROSS_MARGIN	Value of this measure

The extract process generates one measure data file for each set of measures that share the same dimensionality or granularity. The measure data files contain information for all measures that share that same dimensionality. A list of predefined dimensionality groups is listed in the Dimensionality Group Codes Used by the Plan Extract Process topic. The lowest level of each of these dimensions appears in each file. They will be different for each dimensionality, based on the dimensions that are part of that group. Each measure column name is a measure code from the measure definition file. Use the measure definition file to obtain more details about the measure, including its full name, description, aggregation, and so on.

Measure Definition Files Created by the Plan Extract Process

The measure definition file contains information for all of the measures specified in the measure catalog for extract. The plan extract process creates only one file per extract.

Column name	Description
GRANULARITY_ID	Dimensionality group ID
POSITION	Internal use only
MEASURE_CODE	Used as the column name in measure data files

Column name	Description
MEASURE_ID	ID that uniquely identifies a measure
NAME	Name of the measure
DESCRIPTION	Brief description of the measure
DATA_TYPE	Data type
EXPRESSION	Internal use only
AGGR_ORDER	Aggregation rule: 1 = Calculate, then aggregate 2 = Aggregate, then calculate
AGGR_METHOD_OTHER	Aggregation method on dimensions other than the Time dimension
AGGR_METHOD_TIME	Aggregation method on the Time dimension
WEIGHTED_BY	ID of the measure to be used when aggregation method is WAVG (weighted average)

The MEASURE_CODE column in this file contains all the measure codes for all measures. The actual measure data files use this measure code as data column name. Using this code, you can look up additional information about the measure in the definition file. Note that the expression indicated is only for internal use and is already evaluated before the extract. Aggregation methods (Sum, Latest, Average, Weighted Average, and so on) can be used to configure your analytics to aggregate these measures across various dimensions.

Dimension Codes Used by the Plan Extract Process

The plan extract process uses preconfigured dimension codes related to a list of valid dimension.

Code	Dimension name
tim	Time
res	Resource
cus	Customer
prd	Product

Code	Dimension name
org	Organization
dcs	Demand Class
sup	Supplier
fcm	Forecasting Method
cto	Configure to Order
src	Source
exp	Exception Type
ord	Order Type
cig	Decomposition Method
seg	Segment

Dimensionality Group Codes Used by the Plan Extract Process

The extracted files use codes related to a list of valid dimensionality groups. Dimensionality group codes shown in this topic list all of the valid preconfigured dimension groups.

For example, code 125 is for all measures that are dimensioned only by the Organization, Product, and Time dimensions. The measure data file for that dimensionality contains all measures extracted for that dimensionality.

Dimensionality Group Code	Dimensionality Group
10	org, prd, tim, cus, cto
15	org, prd
20	org, res, tim
25	tim

Dimensionality Group Code	Dimensionality Group
35	org, prd, tim, cus
40	org, prd, res, tim, cus, sup, exp
45	org, prd, tim, sup
50	org, prd, tim, cus, sup, src
55	org, prd, tim, cus, dcs, ord
60	org, prd, tim, ord
65	org, prd, tim, cus, sup, dcs, ord
70	org, prd, tim, sup, ord
75	org, prd, dcs
95	org, prd, cus, dcs, fcm, clg, tim, cto
100	org, prd, tim, cus, dcs, cto
105	org, prd, cus
110	org, prd, cus, dcs
125	org, prd, tim
130	org, prd, tim, cus
135	org, prd, tim, cus, dcs
145	prd, tim, cus
150	prd, tim, cus, dcs
155	org, prd, tim, cus, sup, dcs
160	prd, cus
165	org, prd, tim, exp

Dimensionality Group Code	Dimensionality Group
170	org, tim
175	prd
180	org, prd, tim, cus, dcs, fcm, clg
185	org, prd, cus, dcs, fcm, clg
190	org, prd, cus, fcm, clg

16 Simulations and Simulation Sets

Overview of Simulations

You can perform simulations directly in a sales and operations plan. Make demand and supply changes in a sales and operations plan and run the plan. You can then analyze plan output coming from these changes.

You can make adjustments to editable measures and entity attribute values within the same plan, or make a plan copy that references a base plan. When you make a copy, you can use the plan comparison feature to analyze the differences between plan runs.

If you use the same plan to simulate plan changes rather than making a copy, use the Archive plan action to create an ad hoc archive. Then, use plan comparison to analyze the differences between the plan and the archived version.

Overview of Simulation Sets

Simulation sets provide a way to override key parameters coming from plan inputs. You can make these edits directly in a simulation set.

Some examples of the types of edits are item prices and lead time, and component usage and effective dates in the bill of resources. You can also save plan edits made to attribute values by copying these changes to a simulation set.

For Sales and Operations Planning, the following tables are relevant for simulation sets:

- Aggregate Bill of Resource
- Items
- Resources
- Suppliers

Additionally, you can access the Resource Availability and Supplier Capacity tables from the Resources and Suppliers tables, respectively.

Create a Simulation Set

Perform the following steps to create a simulation set from the Plan Inputs work area:

1. In the Navigator, click the Plan Inputs work area link.
2. On the Plan Inputs page, click the **Open** button.
3. In the Open Table, Graph, or Tile Set dialog box, do the following:
    a. In the **Search** drop-down list, select: **Name**.
    b. In the **Search** text box, enter the name of a table, such as **Items** or **Resources**.

c. Click the **Search** icon button.
d. Select the **Items** (or **Research**) table and click **OK**.

4. On the Plan Inputs page, Items tab (or Resources tab), click the **Search** button.
5. In the search results, select one or more rows and do the following:

a. Click **Actions** and then select **Add to Simulation Set**.
b. In the Add to Simulation Set dialog box, click the **Search: Simulation Set** down arrow for a list of values, and then click **Create Simulation Set**.
c. In the Create Simulation Set dialog box, in the **Simulation Set** field, enter the name of the simulation set you want to create.
d. Click **Save and Close**.
e. In the Add to Simulation Set dialog box, click **Save and Close**.

Related Topics

- Edit a Simulation Set
- Overview of Simulation Sets
- Simulations in Supply Planning
- Copy Data to Simulation Sets in Supply Planning
- Add Data from Plan Inputs to Simulation Sets

Edit a Simulation Set

Perform the following steps to edit a simulation set from the Plan Inputs work area:

1. In the Navigator, click the Plan Inputs work area link.
2. On the Plan Inputs page, click the Plans panel tab.
3. In the Plans panel drawer, do the following:

a. Expand the list of Simulation Sets.
b. Select a simulation set, right-click on it and select **Open**.

4. On the Simulation Set page, click **Open** and then select **Full Pane**.
5. In the Open Table, Graph, or Tile Set dialog box, select a table, such as **Resources** or **Items**, and then click **OK**.

   On the Simulation Set page, a new tab opens for the table that you selected, such as the Resources tab or the Items tab.
6. In the Search region, click **Search**.
7. In the search results, select one or more rows. Click **Actions** and then select **Edit** from the drop-down list.
8. In the edit dialog box, you can edit some of the attributes and drill down to additional tables, depending on the table that you accessed. For example:

   - For the Resources table, you can change the Bottleneck value. You can also drill down to the Resource Availability table.
   - For the Items table, you can change the Processing Lead Time value. You can also drill down to the Suppliers table.
9. When done, click **OK** to return to the Simulation Set page. Changed rows and fields are marked with small colored dots.

Related Topics

- Create a Simulation Set
- Edit a Simulation Set from a Spreadsheet
- Overview of Simulation Sets
- Simulate Demand and Supply Changes

Edit a Simulation Set from a Spreadsheet

You can download simulation set data into a spreadsheet, make edits, including certain updates, additions, and deletions, and then upload it back to the simulation set.

In the Plan Inputs work area, while working with the Items or Supplies and Demands table in a simulation set, use the Edit in Spreadsheet option in the Actions menu to download the table rows into a Microsoft Excel file.

> **Note:** Before working with spreadsheets, you must download and install the desktop integration installer that is available under **Navigator** > **Tools**. Otherwise, you can't download information into or upload information from spreadsheets.

To edit the data in the Items or Supplies and Demands table of the simulation set in a Microsoft Excel spreadsheet, follow these steps:

1. In the Plan Inputs work area, click the Plans panel tab.

   > **Note:** The simulation set can also be edited from the Planning Central, Sales and Operations Planning, and Supply Planning work areas. However, the Supplies and Demands table is available in the simulation set only when it is edited in the Supply Planning work area.

2. In the Plans panel drawer, do the following:

   a. Expand the list of simulation sets.
   b. Select the simulation set that you want to edit, right-click, and click **Open**. The simulation set opens.
3. In the **Open** menu, select **Full Pane**. The Open Table, Graph, or Tile Set dialog box opens.
4. Select the Items or Supplies and Demands table, and click **OK**. The table opens in a page in the simulation set.
5. Perform a search for the table rows in the simulation set.
6. In the **Actions** menu for the table, click **Edit in Spreadsheet**. A dialog box opens and prompts you to save or open a Microsoft Excel file.
7. Open the spreadsheet. The Connect dialog box opens and prompts you to connect to the URL for the application.
8. Click **Yes**. A dialog box opens and prompts you to type your credentials.
9. Sign in with your credentials for the Oracle Fusion Cloud Applications Suite. The spreadsheet is refreshed with the data in the simulation set.

10. Edit the data.

Task	Steps
To add an item to the Items table of the simulation set	Click the **Add Item** icon in the **Items** menu of the spreadsheet, and provide values in the Add Item dialog box that opens. You can add an existing item or create an item that is based on an existing item.
To create an order in the Supplies and Demands table of the simulation set	Click the **Create Order** icon in the **Supplies and Demands** menu of the spreadsheet, and provide values in the Create Order dialog box that opens. (Not applicable to sales and operations planning.)
To edit a row	Modify the values in the row cells that are not grayed out. A symbol appears in the cell under the Changed column for the row.
To delete a row	Click the corresponding cell in the Mark for Deletion column. A symbol appears in the cell to mark the table row for deletion. To deselect the row, click the cell again.

11. Click the **Upload** icon in the **Items** or **Supplies and Demands** menu. In the Upload Options dialog box that appears, select the check boxes for the options that you want to use, and click **OK**. The data is uploaded to the simulation set.
12. Save the simulation set. The changes are displayed and marked with colored symbols.
13. Save and close the spreadsheet.

Simulate Statistical Demand Forecast

The Statistical Demand Forecast generates demand forecasts coming from overrides made to demand history. This simulation projects future demand at aggregate time levels by using actual and adjusted history.

To simulate statistical demand forecast, do the following:

1. Save data changes in your plan and then select the Run Plan action.
2. In the Run Plan dialog box, do the following:
    a. In the Data Refresh Options section, select **Do not refresh with current data**.
    b. In the Scope Options section, select **Plan demand**.
    c. In the Demand Plan Run Options section, select **Forecast Shipments**.
    d. In the Supply Plan Run Options section, select **Interactive**.
3. Click **OK** to run the plan.
4. Run the plan.

Simulate Changes to Demand and Supply

In Sales and Operations Planning, you can simulate the effects of edits to a plan and analyze the supply changes in the plan output.

You can model supply scenarios to accommodate an increase in demand or see the impact of changes to any of these supply parameters:

- Resource availability for a planning resource in an organization
- Supplier capacity available for a supplier item
- Supplier cost to evaluate changes in purchasing cost
- Item prices to evaluate changes in revenue
- Item lead times
- Safety stock to evaluate changes in projected inventory
- Sourcing percentages to simulate changes in both purchasing and shipping costs and capacities
- Usage quantities and effective dates in bill of resources

Simulating Changes to Demand Forecasts

You can make manual adjustments to demand forecasts as part of a collaborative forecasting process. For example, a difference in value between the Sales Forecast and the Consensus Forecast might necessitate an override to the Adjusted Consensus Forecast measure.

Simulating Changes to Resource and Supplier Availability

You can simulate changes in available resource capacity by editing the Resource Availability measure. For example, you can increase resource availability by adding an extra shift.

You can simulate changes in available supplier capacity by editing the Supplier Capacity Available measure. For example, you can increase component item availability for a supplier.

Simulating Changes to Production Levels

You can adjust the production levels in a sales and operations plan to override the initial production plan driven by net demand, existing supplies, and sourcing. You can simulate changes to production quantities to shift production between assembly items that share constrained work center resources in a highly constrained plan or smooth production levels in an unconstrained plan. You can also set production levels for the assembly items manufactured in multiple organizations.

You can load the Production Plan measure data from Supply Planning to the Adjusted Production Plan measure in Sales and Operations Planning and run a plan simulation. Using the Load Measures from Other Plans process, you can copy the tactical production plan data from a supply plan to a sales and operations plan. You can then run a sales and operations plan simulation to update the supply measures such as Production Plan, Resource Requirements, and Projected Available Balance.

A typical Sales and Operations Planning process has a monthly cycle with product family level reviews and a plan horizon that is between 18 and 24 months. A tactical supply plan is detailed with more focus on transactional planning at item, organization, and day levels. You can load measure data from your tactical supply plans to overlay the

production plan data into your sales and operations plan and project capacity requirements and inventory levels as part of your Supply Review process. After you make strategic decisions in your sales and operations plan, the approved plan results can be fed into your tactical supply plans as a demand schedule for execution.

For example, a provider of fitness equipment can't meet surging pandemic demand. Capacity is fully utilized for the coming months for critical resources. Some new products are being launched and delaying their first shipment dates must be avoided as per directives from senior management. Setting the production levels for these new products, ensures new products are manufactured on time even at the expense of further delays in fulfilling orders for mature product lines.

Add the Adjusted Production Plan and Final Production Plan measures to the measure catalog of your sales and operations plan. Then, run your plan with the Refresh with current data option selected before using these measures in tables and graphs. Here's additional information about the measures:

- Adjusted Production Plan is an editable measure used to override the initial production plan.
- Final Production Plan is a calculated measure used as the Disaggregation Basis field for Adjusted Production Plan and, by default, is equal to NVL(Adjusted Production Plan, Production Plan).
- The Work Orders measure data is treated as firm in your sales and operations plan, whereas production levels can be adjusted below this quantity. The exception Production Less Than Work Orders detects instances where Production Plan is less than Work Orders. Add this exception to the user-defined exception set associated with your plan options.
- The Production Plan measure in Supply Planning is the total quantity of make orders in a time bucket and is the sum of all make planned orders, work orders, non-standard work orders, and by-product supply. It is equivalent to the Production Plan that is calculated in Sales and Operations Planning.
- When loading Production Plan measure data from Supply Planning to the Adjusted Production Plan measure in Sales and Operations Planning, the measure data is aggregated in a supply plan before copying it to a sales and operations plan. Both Production Plan and Adjusted Production Plan measures are dimensioned by item, organization, and time.
- The Production Plan data is aggregated in Supply Planning to the Sales and Operations Planning time level: for example, from daily buckets to monthly time periods before data is copied to the Adjusted Production Plan measure.
- The Production Plan data is also aggregated in Supply Planning to the Sales and Operations Planning aggregate item level if modeled in the target plan. For example, assembly end items within a catalog are aggregated to the parent category per the Plan Items Hierarchy and Planning Product Level Items settings in the plan options of the sales and operations plan before the data is copied to the Adjusted Production Plan measure.

Simulating Changes to Bill of Resources

Within a plan, you can edit usage quantities and effective dates for an Organization, Assembly Item, and component or resource combination in the bill of resources. If you copy to a simulation set after making edits to a bill of resources in the plan, select all of the bill of resources rows to copy for the Organization and Assembly Item combination.

You can edit a bill of resources for an Organization and Assembly Item combination in a simulation set. If you used the file-based data import (FBDI) template, you must first add all of the rows for the bill of resource to the simulation set from the Plan Inputs work area.

Within a simulation set, you can also add records to simulate adding a new component to a bill of resources for engineering or design reasons. You can reference a simulation set for a plan in Plan Options.

You must run a plan with the Refresh with current data option to overlay bill of resources changes made in or copied to a simulation set. Before you run the plan, associate the simulation set to the plan in Plan Options.

You can also run the Create Bills of Resources scheduled process to automatically create bills of resources. You would then use the Aggregate Bill of Resources table to modify the bills of resources in the designated output simulation set. The following example illustrates using the effective date ranges to model different resource quantities to ramp up a new resource:

ORG	Assembly	Resource	Resource Quantity	Effective Start Date	Effective End Date
M1	AS301	R4	0.375	12/02/2021	01/31/2022
M1	AS301	R4	0.25	02/01/2022	12/31/2023

You can add new and modified records in the Aggregate Bill of Resources table to another simulation set for future reuse.

Simulating Changes to Item Price, Item Cost, and Lead Time

You can simulate changes in item price by editing the Adjusted Price measure in a table and rerun the plan. For example, you can evaluate the potential revenue coming from a price increase before changing the actual price. You can also edit the Selling Price in a simulation set in the Items table to overlay in a plan.

You can edit the Standard Cost in the Items table in a plan. You can also edit the Standard Cost in a simulation set in the Items table to overlay in a plan. You can also edit the Adjusted Supplier Cost measure in a table, such as the Supplier Plan by Month table.

You can edit Preprocessing Lead Time, Processing Lead Time, and Postprocessing Lead Time in a simulation set in the Items table to overlay in a plan. Next, run the plan to evaluate lead time changes.

Simulating Changes to Safety Stock

You can override item safety stock levels by editing the Adjusted Safety Stock measure in a table and then rerun the plan to simulate the changes. For example, you can determine the impact on Carrying Cost measure changes that would arise due to changes in inventory levels represented by the Projected Available Balance measure.

You can also use the **Load Measures from Other Plans** task to copy tactical safety stock data from a supply plan or a demand and supply plan to a sales and operations plan. After you run the Load Measures from Other Plans process, you can then run a sales and operations plan simulation to update supply measures such as Production Plan, Purchases, and Projected Available Balance. For example, you can copy safety stock measure data at the item and organization level in the Material Plan to the Adjusted Safety Stock measure for simulation and analysis at the product family level in the Aggregate Build Plan.

On the Load Measures from Other Plans page:

- In the Source Measure field, select the **Safety Stock** measure.
- In the Target Measure field, select the **Adjusted Safety Stock** measure.

> **Note:** Selecting the **Create new combinations** check box doesn't insert new item and organization combinations from the source plan into the target plan. Instead, the planning process inserts new demand combinations from the source plan that don't already exist in the target plan.

Use the **Orchestrate Load Measures** scheduled process to load measures one time or on a repetitive schedule. You can also configure a job set that contains the Orchestrate Load Measures process job followed by the Batch Run Plan job to sequence and automate these two planning processes.

Simulating Changes to Sourcing Allocation Percentage

Use the preconfigured Sourcing Allocation table for simulating changes to sourcing rule allocation percentages modeled by the Sourcing Allocation Percentage measure.

Simulating Supply Scenarios: Procedures

To simulate supply scenarios in a plan, do the following:

1. Save data changes in your plan and then select the Run Plan action.
2. In the Run Plan dialog box, do the following:
    a. In the Data Refresh Options section, select **Do not refresh with current data**.
    b. In the Scope Options section, select **Plan supply**.
    c. In the Supply Plan Run Options section, select **Interactive**.
3. Click **OK** to run the plan.
4. Run the plan.

To simulate supply scenarios in a simulation set, do the following:

1. Save data changes in your simulation set.
2. Associate the simulation set to a plan in Plan Options and then select the **Save and Run** action.
3. In the Run Plan dialog box, do the following:
    a. In the Data Refresh Options section, select **Refresh with current data**.
    b. In the Supply Plan Run Options section, select **Batch**.
4. Click **OK** to run the plan.
5. Run the plan.

17 Troubleshooting

Resolve Error MSC-2806379

This topic guides you on how you can resolve error MSC-2806379 that may be displayed when you view a table or graph.

The error is displayed when you view a table or graph that you don't own for your Oracle Fusion Cloud Supply Chain Planning product, and the table or graph contains too much data.

The error text is as follows: "You can't view this table or graph because the underlying data or analysis produces too much data. (MSC-2806379)

"To resolve this issue, make a copy of the table or graph because you aren't the owner of it, change configurations to reduce the data set, and try again. For example, limit the use of measures with different dimensionalities, reduce the number of measures with complex expressions, such as lead or lag functions, or check measure filter configuration. Refer to Incident ID <number> on <server name> server."

Follow these steps to resolve the error:

1. If the table or graph is open, in the toolbar, click **Actions** > **Save Table As** or **Actions** > **Save Graph As**.
   Otherwise, do the following:
   a. Click **Actions** > **Manage Tables, Graphs, and Analysis Sets**.
   b. In the Manage Tables, Graphs, and Analysis Sets dialog box, search for your table or graph, and select it.
   c. Click **Actions** > **Duplicate**.
2. In the dialog box, provide the name and description for the copied table or graph.
   Provide other details for the copied table or graph.
3. Click **Save and Edit**.
4. In the Configure Table or Configure Graph dialog box, do the following:
   - On the Measures tab, on the Selected Measures pane, select the measures that you can remove from the table or graph, and move them to the Available Measures pane.

     For example, limit the use of measures with complex expressions.
   - On the Members tab, on the Selected Members pane, select the members that you can remove from the table or graph, and move them to the Available Members pane.

     For example, on the Selected Members pane, retain only one organization or a few products according to your business requirements. You can use the Advanced Filter dialog box to reduce the number of members that are displayed by the table or graph.
   - On the Measure Filters tab, add filters to reduce the amount of data returned by your table or graph.
   - On the Layout tab, add filters to your table or graph.

     For example, if your table includes the Organization level, you can use the level as a filter that restricts the returned data to the selected member.
5. Click **Save and Close**.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Use Advanced Options in the Selector Tool
- Configure Filters for Graphs

Resolve Error MSC-2806380

This topic guides you on how you can resolve error MSC-2806380 that may be displayed when you view a table or graph.

The error is displayed when you view a table or graph that you own for your Oracle Fusion Cloud Supply Chain Planning product, and the table or graph contains too much data.

The error text is as follows: "You can't view this table or graph because the underlying data or analysis produces too much data. (MSC-2806380)

"To resolve this issue change configurations to reduce the data set, and try again. For example, limit the use of measures with different dimensionalities, reduce the number of measures with complex expressions, such as lead or lag functions, or check measure filter configuration. Refer to Incident ID <number> on <server name> server."

Follow these steps to resolve the error:

1. If the table or graph is open, in the toolbar, click **Actions** > **Configure Table** or **Actions** > **Configure Graph**. Otherwise, do the following:
    a. Click **Actions** > **Manage Tables, Graphs, and Analysis Sets**.
    b. In the Manage Tables, Graphs, and Analysis Sets dialog box, search for your table or graph, and select it.
    c. Click **Actions** > **Edit**.
2. In the Selector Tool, do the following:
    - On the Measures tab, on the Selected Measures pane, select the measures that you can remove from the table or graph, and move them to the Available Measures pane.

      For example, limit the use of measures with complex expressions.
    - On the Members tab, on the Selected Members pane, select the members that you can remove from the table or graph, and move them to the Available Members pane.

      For example, on the Selected Members pane, retain only one organization or a few products according to your business requirements. You can use the Advanced Filter dialog box to reduce the number of members that are displayed by the table or graph.
    - On the Measure Filters tab, add filters to reduce the amount of data returned by your table or graph.
    - On the Layout tab, add filters to your table or graph.

      For example, if your table includes the Organization level, you can use the level as a filter that restricts the returned data to the selected member.
3. Click **Save and Close**.

Related Topics

- Overview of Tables, Graphs, Analysis Sets, Tiles, and Tile Sets
- Use Advanced Options in the Selector Tool
- Configure Filters for Graphs

Resolve Warnings About Catalogs and Categories That Weren't Processed

This topic helps you resolve warnings about catalogs and categories for the Product dimension that weren't processed during collections for Oracle Fusion Cloud Supply Chain Planning.

The warnings are logged after collections if you haven't set up the catalogs and categories for the Product dimension in the prescribed manner. For information about how you should set up catalogs and categories, see the topic titled *Guidelines for Setting Up Catalogs for Collections*.

The logged warnings might be one or more of the following:

- WARNING: One or more items were skipped while creating trees for Category Sets <names> because the items have multiple parents. Make necessary corrections at the source and relaunch "Create Trees for Dimensions" Scheduled Process to include those items in their respective trees.
- WARNING: The default catalog with category_set_id <name> does not have any category assigned to it. Therefore, it was skipped while processing. Make necessary corrections at the source and relaunch Collections Scheduled Process to include the new default catalog.
- WARNING: The trees <names> have certain categories which do not have an item-category relationship. Therefore they were skipped while processing. Make necessary corrections at the source and relaunch "Create Trees for Dimensions" Scheduled Process to include those categories in their respective trees.
- WARNING: The Trees <names> do not have any category assigned to it. Therefore they were skipped while processing. Make necessary corrections at the source and relaunch "Create Trees for Dimensions" Scheduled Process to include these trees.

Follow these steps to resolve the warnings:

1. Correct the structure of each affected catalog in the Product Information Management work area or using the file-based data import (FBDI) template named Supply Chain Planning Catalogs (ScpCatalogImportTemplate.xlsm).
2. Using the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process, collect your catalogs again.

   You can use the net change collection type.

Related Topics

- Collect Data Using the Net Change Collection Type
- Load Planning Data from Flat Files

Resolve the Warning About the Default Product Catalog

This topic helps you resolve the warning about the missing default Product catalog after collections for Oracle Fusion Cloud Supply Chain Planning.

The logged warning might be as follows: "WARNING: There is no default catalog available. Therefore, there will not be a Default Product Hierarchy. Make necessary corrections at the source and relaunch Collections Scheduled Process to include a new default product hierarchy."

The warning is logged after collections if you haven't set up the default Product catalog in the prescribed manner in Oracle Fusion Cloud Product Lifecycle Management or using the file-based data import (FBDI) template named Supply Chain Planning Catalogs (ScpCatalogImportTemplate.xlsm). The default Product catalog is populated into the default Product hierarchy of the Product dimension in Oracle Supply Chain Planning. If you haven't set up the default Product catalog, the predefined Planning hierarchy that contains only one predefined item is used. Your items won't be available in the Product hierarchy and will be available through the other hierarchies that are created for collected catalogs.

For information about how you must set up the default Product catalog, see the topic titled *Guidelines for Setting Up Catalogs for Collections*.

Follow these steps to resolve the warning:

1. In the Product Information Management work area or using the Supply Chain Planning Catalogs import template, create the default Product catalog.
2. Using the Collect Planning Data page or **Load Planning Data from Flat Files** scheduled process, collect your catalogs again.

   You can use the net change collection type.

Related Topics

- Collect Data Using the Net Change Collection Type
- Load Planning Data from Flat Files

Resolve the Issue About Items Not Being Collected

This topic helps you resolve the issue about items that aren't being collected into Oracle Fusion Cloud Supply Chain Planning.

These items aren't visible in the MSC_SYSTEM_ITEMS table. The items also aren't visible in the Items table in the Plan Inputs work area or the work area for your Oracle Supply Chain Planning module.

The error message that's logged might be as follows: "Inventory Item ID derivation failed because the item is not collected. The combination of values of the attributes ITEM_NAME and ORGANIZATION_CODE is invalid."

The items haven't been collected because you haven't set them up correctly.

For information about how you must set up items, see the topic titled *Guidelines for Setting Up Items for Collections*.

If no error message is logged, you might not have assigned the items to a catalog that's properly configured, or you might not have enabled the source system for collections.

For information about how you must set up catalogs, see the topic titled *Guidelines for Setting Up Catalogs for Collections*.

For information about how you enable source systems for collections, see the topic titled *Manage Planning Source Systems for Data Collections*.

Follow these steps to resolve the issue:

1. In the Product Information Management work area, open an item that hasn't been collected.
   On the Specifications tab on the Edit Item page, ensure that you've selected values for the item attributes.
   If you're using the file-based data import (FBDI) template named Supply Chain Planning Items (ScpItemImportTemplate.xlsm) to import your items, on the Item_ tab, ensure that you've entered values for the item attributes.
2. Repeat the previous step for the remaining items that haven't been collected.
3. Ensure that the items are assigned to a catalog that's properly configured.
4. Ensure that you've enabled the source system for collections.
5. Using the Collect Planning Data page or the **Load Planning Data from Flat Files** scheduled process, collect the items.
   You can use the net change collection type.

Related Topics

- Collect Data Using the Net Change Collection Type
- Load Planning Data from Flat Files

Resolve the Error About No Free Web Service or Application Resources

This topic helps you resolve the errors about no free web service or application resources when you try to run or load your plan for Oracle Fusion Cloud Supply Chain Planning.

Errors might occur when you run the plan from the UI or using the **Batch Run Plan** scheduled process. The errors might also occur when you try to load a demand and supply plan (unconstrained), sales and operations plan, or unconstrained supply plan into the memory.

The displayed or logged errors might be similar to the following:

- Error: No free web service available to serve...
- ```
  BatchRunPlan Job...
  Check for available server 1 time
  Error: No free web service available to serve
  BatchRunPlan: Available server not found 1 time
  ```
- No supply planning engine is available. You can close one or more loaded plans to free up application resources.
  ```

- The requested action cannot be completed for the plan named <name>, because another plan action is processing for this plan.

To solve these errors, try these solutions:

- Check if you're already running another plan.

  In that case, you must wait for the other plan to finish running. Normally, when you've only one planning server, you can run only one plan at a time.

  If the plan that's already running takes a long time to finish or appears to have run into an error, perform these steps:

  a. In the plan, click **Actions** > **View Status Details** to open the Plan Status Details dialog box, from which you can get the process ID for the current run of the plan.
  b. In the Scheduled Processes work area, search for the process ID.
  c. Select scheduled processes in cancelable statuses, and click **Actions** > **Cancel Process**.

     These are the cancelable statuses:

     - Blocked
     - Completed
     - Error Auto-Retry
     - Hold
     - Paused
     - Pending Validation
     - Ready
     - Running
     - Scheduled Ended
     - Wait
  d. If the statuses of the scheduled processes that you've canceled don't change after a while, select them, and click **Actions** > **Hard Cancel** or **Actions** > **Force Cancel**.

     You can select **Hard Cancel** soon after you select **Cancel Process**. You can select **Force Cancel** 30 minutes after you select **Cancel Process**. The menu option that you get depends on the scheduled process that you're canceling.
  e. Run the plan for which the error about no free web service or application resources was displayed or logged.

- If you've previously loaded a demand and supply plan (unconstrained), sales and operations plan, or unconstrained supply plan into the memory, perform these steps:
  a. Search for the plan that's loaded into the memory.

     > **Tip:** On the Manage Plans page, add the Loaded column to identify plans that are loaded into the memory. For an unconstrained demand and supply or supply plan, on the Plans panel tab, in the Plans section, the plan name is prefaced with the **Loaded into Memory** icon.

  b. Open the plan.
  c. Click **Actions** > **Close**.

     A dialog box appears.
  d. Click **Yes**.

     The Plan Status Details dialog box appears.
  e. Click **OK**.
  f. When the plan has been removed from the memory, run or load the plan for which you got the error.

  > **Tip:** If you need to have multiple demand and supply or supply plans that are unconstrained open at the same time, save the plans to the database. You can then open multiple plans at the same time without loading them into the memory.

- Your order for Oracle software might not have included a virtual machine.

  Please contact your Oracle salesperson or implementation partner to ensure that your order was properly processed and includes a virtual machine.

- Verify if a scheduled process previously submitted for the plan is still running.
  a. In the plan, click **Actions** > **View Status Details** to open the Plan Status Details dialog box, from which you can get the process ID for a previously submitted scheduled process.
  b. In the Scheduled Processes work area, search for the process ID.
  c. Ensure that the scheduled process and any child scheduled processes are in these final statuses for which nothing else can be done:
     - Canceled
     - Error
     - Expired
     - Finished
     - Succeeded
     - Validation Failed
     - Warning
  d. Select scheduled processes in cancelable statuses that aren't mentioned in the previous step, and click **Actions** > **Cancel Process**.
  e. If the statuses of the scheduled processes that you've canceled don't change after a while, select them, and click **Actions** > **Hard Cancel** or **Actions** > **Force Cancel**.

     You can select **Hard Cancel** soon after you select **Cancel Process**. You can select **Force Cancel** 30 minutes after you select **Cancel Process**. The menu option that you get depends on the scheduled process that you're canceling.
  f. After all the scheduled processes and child scheduled processes are in final statuses for which nothing else can be done, run the plan again.