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UPDATE 20C

REVISION HISTORY

This document will continue to evolve as existing sections change and new information is added. All updates appear in the following table:

Date	Product	Feature	Notes
21 AUG 2020	Sales and Operations Planning	View Dependent Demand for Production	Updated document. Added steps to enable.
10 JUL 2020		IMPORTANT Actions and Considerations	Updated document. Revised section.
19 JUN 2020			Created initial document.

OVERVIEW

This guide outlines the information you need to know about new or improved functionality in this update, and describes any tasks you might need to perform for the update. Each section includes a brief description of the feature, the steps you need to take to enable or begin using the feature, any tips or considerations that you should keep in mind, and the resources available to help you.

SECURITY AND NEW FEATURES

The Role section of each feature identifies the security privilege and job role required to use the feature. If feature setup is required, then the Application Implementation Consultant job role is required to perform the setup, unless otherwise indicated. (If a feature doesn't include a Role section, then no security changes are required to use the feature.)

If you have created job roles, then you can use this information to add new privileges to those roles as needed. For details about how to compare your configured job roles to predefined job roles and add security artifacts to your configured job roles, see the Security Console and Roles and Role Assignments chapters in the *Oracle SCM Cloud: Securing SCM* guide on the Oracle Help Center.

GIVE US FEEDBACK

We welcome your comments and suggestions to improve the content. Please send us your feedback at oracle_fusion_applications_help_ww_grp@oracle.com

OPTIONAL UPTAKE OF NEW FEATURES (OPT IN)

Oracle Cloud Applications delivers new updates every quarter. This means every three months you'll receive new functionality to help you efficiently and effectively manage your business. Some features are delivered Enabled meaning they are immediately available to end users. Other features are delivered Disabled meaning you have to take action to make available. Features delivered Disabled can be activated for end users by stepping through the following instructions using the following privileges:

- Review Applications Offering (ASM_REVIEW_APPLICATIONS_OFFERINGS_PRIV)
- Configure Oracle Fusion Applications Offering (ASM_CONFIGURE_OFFERING_PRIV)

Here's how you opt in to new features:

1. Click Navigator > My Enterprise > **New Features**.
2. On the Features Overview page, select your offering to review new features specific to it. Or, you can leave the default selection **All Enabled Offerings** to review new features for all offerings.
3. On the New Features tab, review the new features and check the opt-in status of the feature in the **Enabled** column. If a feature has already been enabled, you will see a check mark. Otherwise, you will see an icon to enable the feature.
4. Click the icon in the **Enabled** column and complete the steps to enable the feature.

In some cases, you might want to opt in to a feature that's not listed in the New Features work area. Here's how to opt in:

1. Click Navigator > My Enterprise > **Offerings**.
2. On the Offerings page, select your offering, and then click **Opt In Features**.
3. On the Opt In page, click the **Edit Features** (pencil) icon for the offering, or for the functional area that includes your feature.
4. On the Edit Features page, complete the steps to enable the feature.

For more information and detailed instructions on opting in to new features for your offering, see Offering Configuration.

Opt In Expiration

Occasionally, features delivered Disabled via Opt In may be enabled automatically in a future update. This is known as an Opt In Expiration. If your cloud service has any Opt In Expirations you will see a related tab in this document. Click on that tab to see when the feature was originally delivered Disabled, and when the Opt In will expire, potentially automatically enabling the feature. You can also click here to see features with Opt In Expirations across all Oracle Cloud Applications.

FEATURE SUMMARY

Column Definitions:

Features Delivered Enabled

Report = New or modified, Oracle-delivered, ready to run reports.
UI or Process-Based: Small Scale = These UI or process-based features are typically comprised of minor field, validation, or program changes. Therefore, the potential impact to users is minimal.
UI or Process-Based: Larger Scale* = These UI or process-based features have more complex designs. Therefore, the potential impact to users is higher.

Features Delivered Disabled = Action is needed BEFORE these features can be used by END USERS. These features are delivered disabled and you choose if and when to enable them. For example, a) new or expanded BI subject areas need to first be incorporated into reports, b) Integration is required to utilize new web services, or c) features must be assigned to user roles before they can be accessed.

Feature	Ready for Use by End Users (Features Delivered Enabled) Reports plus Small Scale UI or Process-Based new features will have minimal user impact after an update. Therefore, customer acceptance testing should focus on the Larger Scale UI or Process-Based* new features.			Action is Needed BEFORE Use by End Users (Features Delivered Disabled) Not disruptive as action is required to make these features ready to use. As you selectively choose to leverage, you set your test and roll out timing.
	Report	UI or Process-Based: Small Scale	UI or Process-Based: Larger Scale*	
Demand Management				
Focus Data Analysis Using Multidimensional Measure Filters		✔		
Planning Advisor				
Optimize New Product Introduction Using Recommendations from Planning Advisor				✔
Replenishment Planning				
Replan Replenishments for a Planner-Selected Subset of Item-Locations				✔
Focus Data Analysis Using Multidimensional Measure Filters				✔

Feature	Ready for Use by End Users (Features Delivered Enabled) Reports plus Small Scale UI or Process-Based new features will have minimal user impact after an update. Therefore, customer acceptance testing should focus on the Larger Scale UI or Process-Based* new features.			Action is Needed BEFORE Use by End Users (Features Delivered Disabled) Not disruptive as action is required to make these features ready to use. As you selectively choose to leverage, you set your test and roll out timing.
	Report	UI or Process-Based: Small Scale	UI or Process-Based: Larger Scale*	
Query Supplies and Demands by Entering a List of Items or Organizations				✓
Sales and Operations Planning				
View Dependent Demand for Production				✓
Focus Data Analysis Using Multidimensional Measure Filters		✓		
Supply Planning				
Synchronize Availability Data for Contract Manufacturers with Oracle Supply Planning Cloud				✓
Respect Reservation of Component Supply to a Work Order		✓		
Query Supplies and Demands by Entering a List of Items or Organizations		✓		
Control Order Policy Enforcement in Aggregate Time Buckets		✓		
Release Planned Manufacturing Orders with a User-Defined Work Order Number		✓		
Project-Driven Supply Chain				
Plan Project-Specific Supply				✓
Planning Advisor				
Plan Considering Events in Oracle IoT Production Monitoring Cloud				✓
Order Backlog Management				
Automatically Reschedule Order Lines Using Manufacturing Alternatives				✓

Feature	Ready for Use by End Users (Features Delivered Enabled) Reports plus Small Scale UI or Process-Based new features will have minimal user impact after an update. Therefore, customer acceptance testing should focus on the Larger Scale UI or Process-Based* new features.			Action is Needed BEFORE Use by End Users (Features Delivered Disabled) Not disruptive as action is required to make these features ready to use. As you selectively choose to leverage, you set your test and roll out timing.
	Report	UI or Process-Based: Small Scale	UI or Process-Based: Larger Scale*	
Efficiently Configure Columns to be Displayed				✔
Query Order Backlog by Entering a List of Items, Organizations, Set Names, or Order Numbers				✔
>>Click for IMPORTANT Actions and Considerations				

DEMAND MANAGEMENT

FOCUS DATA ANALYSIS USING MULTIDIMENSIONAL MEASURE FILTERS

Supply chain planning applications usually display and report the set of measure values, or the aggregate of those values, for a selected combination of planning dimensions. However, sometimes you need to filter measure values within a specific set of dimensions that meet certain query criteria. For example, you may want to see the forecasts for fitness equipment category items in a specific region that have low forecast accuracy to determine the areas to focus your analysis on. With this update, measure data filters will return only multidimensional combinations that meet the measure criteria for selected dimensions of the measure, except the time dimension.

You can include any non-time-varying numeric, percent, and currency type measures in your queries. However, date and text type measures are not supported.

You can also apply the following conditions:

- is equal to (=)
- is not equal to (<>)
- is greater than (>)
- is greater than or equal to (>=)
- is less than (<)
- is less than or equal to (<=)
- is null
- is between

However, these conditions aren't supported:

- is in top N
- is in bottom N
- is not null

Additionally, you can combine multiple measure conditions AND or OR; however, a mix of AND and OR in a single expression is not supported.

Watch a Demo

STEPS TO ENABLE

You don't need to do anything to enable this feature.

TIPS AND CONSIDERATIONS

To use this feature, create or edit a table or graph and navigate to the new **Measures Filters** tab.

1. Enter one or more measure conditions to be evaluated. The following are supported:
    - Multiple AND conditions
    - Multiple OR conditions

2. Select dimension, hierarchy, and level combinations.
    - The dimensions, hierarchies, and levels selected on the **Hierarchies** tab are the default selections
3. The measure filters in a table or graph can be applied to a linked table or graph in **Manage Links**.
    - In **Manage Links**, select the option to include measure filters
    - The **Include measure filters** option is available when the **Pass user-specified parameters** option is selected

Time varying measures aren't supported in this update.

Configure-to-order measures aren't supported.

KEY RESOURCES

- Watch Focus Data Analysis Using Multidimensional Measure Filters Readiness Training

ROLE INFORMATION

Users assigned to any of the following job roles will automatically be able to use this feature and no special privileges are required:

- Demand Planner (ORA_MSC_DEMAND_PLANNER_JOB)
- Sales and Operations Planner (ORA_MSC_SALES_OPERATIONS_PLANNER_JOB)
- Replenishment Planner (ORA_MSC_REPLENISHMENT_PLANNER_JOB)

PLANNING ADVISOR

Recent advances in technology increase the volume of data available to your enterprise and provide new avenues to automatically analyze, and seek deep insights into, this data that were previously hard to achieve. Oracle IoT (Internet of Things) applications provide rich, real-time data to improve efficiency and derive more value from Oracle Supply Chain Planning Cloud using machine learning technologies. Oracle Supply Chain Planning Cloud now offers built-in integrations to Oracle IoT applications to leverage these insights and get contextual recommendations.

OPTIMIZE NEW PRODUCT INTRODUCTION USING RECOMMENDATIONS FROM PLANNING ADVISOR

To manage the risk at all stages of new product introduction it's essential that you consider all available information to get the best forecast. The advent of machine learning technologies can help in these activities by utilizing data from past experiences of launching products with similar features and applying that data to the new product being introduced. For example, upon analysis a higher resolution screen in a mobile phone may be more important for the success of your product than a bigger screen.

With this update, you can use the popular Extreme Gradient Boost machine learning library available in Oracle Internet of Things (IoT) Cloud applications. After you enable this technology and provide the input data that includes the features of products (the learning data set), you can generate a forecast for the new product with the target features starting from the launch date you provide. After the forecast is generated, you can use the new planning advisor UI. This new UI advises you of the expected forecast accuracy and the features that are of significance. You can then drill down for further analysis using a context-sensitive link to detailed analytics and make adjustments that are incorporated into your final forecast.

In this update, new measures related to the feature-based forecast are introduced to represent the forecast generated using these new algorithms. You can compare this new forecast with the forecast generated using previously existing algorithms.

This feature further enhances the multiple data science techniques already available in Oracle Demand Management Cloud, such as Bayesian forecasting, to improve the quality of the system-generated forecasts for new product introductions.

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

After opting in to this feature, perform these actions to enable it:

- Create new applications in the Manage Integration of Additional Applications UI in the Setup and Maintenance work area:
    - Create a new application named SCP_DM_CROSS_PRODUCT_ENGINE_REST to set up credentials required to invoke REST calls to trigger a machine learning workflow in Oracle Internet of Things (IoT) Intelligent Application Cloud. You need a subscription to Oracle IoT Intelligent Application Service to complete this setup.
    - Create a new application named SCP_BICC_REST_CREDENTIALS to set up credentials required to invoke a Business Intelligence Cloud Connector data extraction job to extract required data from Oracle Demand Management Cloud to Oracle Storage Cloud for machine learning.
- Configure Oracle Cloud Infrastructure object storage in Business Intelligence Cloud Connector. A Business Intelligence Cloud Connector data extraction job extracts the file to a specified name space and bucket in the Oracle Storage Cloud objects store. You need a subscription to Oracle Cloud Storage to complete this setup.
- Include available global item flexible attributes required for machine learning analysis using the Configure Planning Analytics Level and Attributes setup task. Add global item level flexible attributes to the plan dimension catalog. A Supply Chain Planning items collection process collects data for flexible attributes from the Product Information Management work area. If you're not using the Oracle Cloud application to manage your item data, you can collect data for these attributes using the Items file-based data import (FBDI) template.
- Configure item-level stored measures required for machine learning analysis using the Manage Planning Measures task and collect data for these measure using the Measures FBDI template. Add item-level stored measures to the plan measure catalog.
- Configure your feature-based machine learning forecast profile using the Manage Forecasting Profiles configuration task available in the Demand Management and Demand and Supply Planning work areas.
- Define a new analysis set to identify new products using the Manage Tables, Graphs, and Analysis Sets configuration task.
- Add the feature-based forecasting profile that you created to the relevant demand and demand and supply plan and select the analysis set containing new products.

For more details, refer to the Optimize New Product Introduction Using Recommendations from Planning Advisor readiness training available on Oracle Cloud Readiness for Supply Chain Planning.

TIPS AND CONSIDERATIONS

Before you begin the actions to enable the Optimize New Product Introduction using Recommendations from Planning Advisor feature, review the implementation considerations that you need to take into account. Consider the needs for a dataset for machine learning. A rich set of product, location, and time varying features will enable the machine learning models to learn better about how each feature influences the demand shape and volume. Without a rich set of data, the feature-based machine learning can't provide meaningful forecast recommendations for the new product.

Consider these recommendations:

- Define measures at the item level to store product feature information and add it as a feature in your feature-based machine learning profile.
- Set the AccuracyThreshold parameter value between 0.4 (40%) and 0.6 (60%). It's recommended that you start with a lower value and adjust accordingly based on the predicted model accuracy and feedback provided by the planners on the quality of the forecast recommendations.
- Test the TrainingPercent parameter with a default value 0.8. It's recommended that you don't change this parameter value to be below 0.75 (75%) or above 0.85 (85%). The lower the value, the lower the amount of data available for learning, and the higher the value, the lower the amount of data available for testing.
- Select the product dimension hierarchy level chosen for parameter AccuracyStratificationLevel also as a feature in your feature-based forecasting profile.

KEY RESOURCES

- Watch Optimize New Product Introduction Using Recommendations from Planning Advisor Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Demand Planner (ORA_MSC_DEMAND PLANNER_JOB)

REPLENISHMENT PLANNING

Maintain optimum inventory levels at each node of your supply chain to meet customer service targets at the lowest inventory cost. Use automated processes to maintain inventory policy parameters and improve customer service levels. These automated processes dynamically update the inventory to keep on hand and reduce costs by calculating the economic order quantity for replenishment when appropriate.

After you opt in to the feature named Replenishment Planning, you can use the feature described in this section.

REPLAN REPLENISHMENTS FOR A PLANNER-SELECTED SUBSET OF ITEM-LOCATIONS

A typical replenishment plan covers a number of facilities. Your enterprise planners may be managing different subsets of your facilities. The planners perform simulations on their respective subset of the

replenishment plan's item-locations to resolve local issues, such as a stock out in a storeroom or a promotional demand increase at a retail store. As they work, planners typically rerun the plan several times to review the impact of their edits.

With this update, planners can choose a subset of item-location combinations that need to be replanned. The replenishment planning process only simulates replenishments for the item-location combinations that you select.

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

TIPS AND CONSIDERATIONS

When you opt in to use this feature, you must opt in to the feature named: Replenishment Planning. Opting in to the Replenishment Planning feature enables all of the Replenishment Planning features described here. If you previously opted in to the Replenishment Planning feature, then this feature is automatically enabled.

KEY RESOURCES

- Watch Replenishment Planning Enhancements Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Replenishment Planner (ORA_MSC_REPLENISHMENT_PLANNER)

FOCUS DATA ANALYSIS USING MULTIDIMENSIONAL MEASURE FILTERS

Supply Chain Planning applications usually display and report the set of measure values, or the aggregate of those values, for a selected combination of planning dimensions. However, sometimes you need to filter measure values within the set of dimensions that meet certain query criteria. For example, you may want to see the forecasts for fitness equipment category items in a specific region that have low forecast accuracy to determine the areas to focus your analysis on. With this update, measure data filters will return only multidimensional combinations that meet the measure criteria for selected dimensions of the measure, except the time dimension.

You can include any non-time-varying numeric, percent, and currency type measures in your queries. However, date and text type measures are not supported.

You can also apply the following conditions:

- is equal to (=)
- is not equal to (<>)
- is greater than (>)
- is greater than or equal to (>=)
- is less than (<)
- is less than or equal to (<=)
- is null
- is between

However, these conditions aren't supported:

- is in top N
- is in bottom N
- is not null

Additionally, you can combine multiple measure conditions AND or OR; however, a mix of AND and OR in a single expression is not supported.

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

TIPS AND CONSIDERATIONS

When you opt in to use this feature, you must opt in to the feature named: Replenishment Planning. Opting in to the Replenishment Planning feature enables all of the Replenishment Planning features described here. If you previously opted in to the Replenishment Planning feature, then this feature is automatically enabled.

To use this feature, create or edit a table or graph and navigate to the new Measures Filters tab.

1. Enter one or more measure conditions to be evaluated. The following are supported:
    - Multiple AND conditions
    - Multiple OR conditions
2. Select dimension, hierarchy, and level combinations.
    - The dimensions, hierarchies, and levels selected on the **Hierarchies** tab are the default selections
3. The measure filters in a table or graph can be applied to a linked table or graph in **Manage Links**.
    - In **Manage Links**, select the option to include measure filters
    - The **Include measure filters** option is available when the **Pass user-specified parameters** option is selected

Time varying measures aren't supported in this update.

Configure-to-order measures aren't supported.

KEY RESOURCES

- Watch Focus Data Analysis Using Multidimensional Measure Filters Readiness Training

ROLE INFORMATION

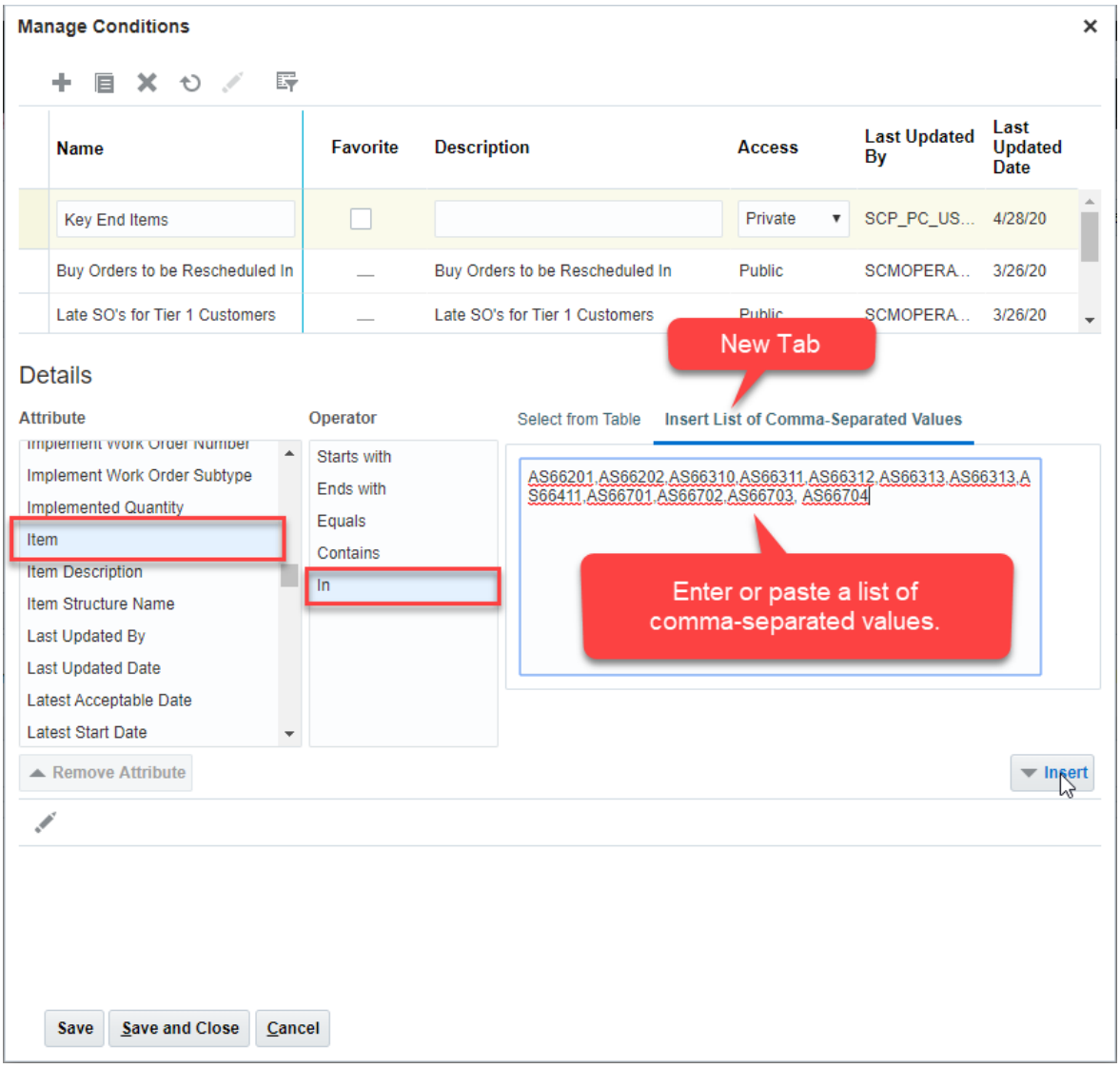
Users assigned to any of the following job roles will automatically be able to use this feature and no special privileges are required:

- Demand Planner (ORA_MSC_DEMAND_PLANNER_JOB)
- Replenishment Planner (ORA_MSC_REPLENISHMENT_PLANNER_JOB)

QUERY SUPPLIES AND DEMANDS BY ENTERING A LIST OF ITEMS OR ORGANIZATIONS

Individually selecting items or organizations when defining a condition in the Manage Conditions UI associated with the supplies and demands UI may be too tedious, especially if the list is large. With this update, you can enter the items or organizations you want to query as set of comma-separated values instead of selecting from a list of values. This option enables you to improve your productivity in retrieving the supplies and demands associated with your items.

When creating a condition from the Supplies and Demands UI, if you select the item or organization attribute and the In operator, then a new tab is displayed that enables you to insert a list of comma-separated values. You can either manually enter a list of values or paste a list of comma-separated values. When you click the Insert button, the individual entries in the list are validated. If all values are valid then the list of items or organizations is inserted into the condition.



Manage Conditions in Supplies and Demands

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

TIPS AND CONSIDERATIONS

When you opt in to use this feature, you must opt in to the feature named: Replenishment Planning. Opting in to the Replenishment Planning feature enables all of the Replenishment Planning features described here. If you previously opted in to the Replenishment Planning feature, then this feature is automatically enabled.

KEY RESOURCES

- Watch Query Supplies and Demands by Entering a List of Items or Organization Readiness Training

ROLE INFORMATION

Users assigned to any of the following job roles will automatically be able to use this feature and no special privileges are required:

- Materials Planner (ORA_MSC_MATERIALS_PLANNER_JOB)
- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)
- Replenishment Planner (ORA_MSC_REPLENISHMENT_PLANNER_JOB)

SALES AND OPERATIONS PLANNING

VIEW DEPENDENT DEMAND FOR PRODUCTION

In an aggregate sales and operations planning review, reviewers analyze demand at a product-category level globally across all organizations. In this case, dependent demand at an organization comprises both the component consumption from upstream subassemblies as well as the shipping of the items to a further downstream organization.

The new sales and operations planning measure, the Production Demand measure, provides information on the component consumption requirements of organizations. This measure is particularly useful for an upstream subassembly organization that wants to know how its production is consumed by the organizations it's supplying to as well as the external independent demand. When aggregate demand analysis is done, the component item demand information is provided by this measure.

Watch a Demo

STEPS TO ENABLE

You must assign the predefined Production Demand measure to your plan's measure catalog before running the plan again. This is a required step.

1. On the Configure Planning Analytics page, Measure Catalogs tab, add the Production Demand measure to your measure catalog.
2. Click the **Save and Close** button.

TIPS AND CONSIDERATIONS

To use this feature, create or edit a table or graph and select the Production Demand measure after running a plan.

KEY RESOURCES

- Watch View Dependent Demand for Production Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Sales and Operations Planner (ORA_MSC_SALES_AND_OPERATIONS_PLANNER_JOB)

FOCUS DATA ANALYSIS USING MULTIDIMENSIONAL MEASURE FILTERS

Supply Chain Planning applications usually display and report the set of measure values, or the aggregate of those values, for a selected combination of planning dimensions. However, sometimes you need to filter measure values within the set of dimensions that meet certain query criteria. For example, you may want to see the forecasts for fitness equipment category items in a specific region that have low forecast accuracy to determine the areas to focus your analysis on. With this update, measure data filters will return only multidimensional combinations that meet the measure criteria for selected dimensions of the measure, except the time dimension.

You can include any non-time-varying numeric, percent, and currency type measures in your queries. However, date and text type measures are not supported.

You can also apply the following conditions:

- is equal to (=)
- is not equal to (<>)
- is greater than (>)
- is greater than or equal to (>=)
- is less than (<)
- is less than or equal to (<=)
- is null
- is between

However, these conditions aren't supported:

- is in top N
- is in bottom N
- is not null

Additionally, you can combine multiple measure conditions AND or OR; however, a mix of AND and OR in a single expression is not supported.

Watch a Demo

STEPS TO ENABLE

You don't need to do anything to enable this feature.

TIPS AND CONSIDERATIONS

To use this feature, create or edit a table or graph and navigate to the new Measures Filters tab.

1. Enter one or more measure conditions to be evaluated. The following are supported:
    - Multiple AND conditions
    - Multiple OR conditions

2. Select dimension, hierarchy, and level combinations.
    - The dimensions, hierarchies, and levels selected on the **Hierarchies** tab are the default selections
3. The measure filters in a table or graph can be applied to a linked table or graph in **Manage Links**.
    - In **Manage Links**, select the option to include measure filters
    - The **Include measure filters** option is available when the **Pass user-specified parameters** option is selected

Time varying measures aren't supported in this update.

Configure-to-order measures aren't supported.

KEY RESOURCES

- Watch Focus Data Analysis Using Multidimensional Measure Filters Readiness Training

ROLE INFORMATION

Users assigned to any of the following job roles will automatically be able to use this feature and no special privileges are required:

- Demand Planner (ORA_MSC_DEMAND_PLANNER_JOB)
- Sales and Operations Planner (ORA_MSC_SALES_OPERATIONS_PLANNER_JOB)

SUPPLY PLANNING

SYNCHRONIZE AVAILABILITY DATA FOR CONTRACT MANUFACTURERS WITH ORACLE SUPPLY PLANNING CLOUD

As is the case with many enterprises, you may be enhancing your strategic relationships with your contract manufacturers to get access to upstream inventory, production, and movement data. Better external supply visibility reduces the need to carry just-in-case inventory and helps reduce risk and cost across the supply chain. With this update, your contract manufacturers can digitally synchronize their end item and component on-hand balances, purchase order details, work order demands, work order supplies, and work order resources with your Oracle Supply Planning Cloud to enhance end-to-end supply visibility.

You can collect these transactions from Oracle Supply Chain Collaboration Cloud or upload them using the standard file-based data import (FBDI) file format. In either case, these updates appear at the organization level in your supply plans.

This new feature supplements the drop ship and contract manufacturing visibility features delivered in earlier updates to provide holistic visibility across multiple tiers of the supply chain. With this update, you and your trading partners can now react quickly to any upstream supply chain disruptions.

STEPS TO ENABLE

Two controls are applicable to this feature, and both controls must be enabled for the feature to be applicable to a supply plan:

- The **Plan external manufacturer supplies** plan option: You must select this option to enable this new feature for a specific supply plan. Navigation to this option: Create Plan or Edit Plan Options> Supply tab> General tab> Select Advanced Options.
- The **Plan External Manufacturer Supplies** option for organizations on the Maintain Supplier Network Model page.

This new feature becomes applicable in a supply plan when both controls are enabled.

If the **Plan external manufacturer supplies** plan option is enabled for a supply plan, but for some external manufacturing organizations which are planned, the Plan External Manufacturer Supplies check box at an organization level is not selected, then external manufacturer's supplies at these organizations won't be planned.

TIPS AND CONSIDERATIONS

A few things to keep in mind:

- Currently, this feature is supported for only unconstrained supply planning.
- Enable the Plan External Manufacturer Supplies option for only those organizations for which you need the global visibility. This check box can be selected only if an external manufacturer is modeled as an organization.
- External manufacturer's data can be uploaded into Supply Planning by either of two methods:
    - External manufacturers can upload data via REST and the Supplier Portal UI through Oracle Supply Chain Collaboration Cloud.
    - Supply data can also be uploaded through standard file-based data import (FBDI) files by an enterprise user on behalf of the external manufacturers.

KEY RESOURCES

- Watch Synchronize Availability Data for Contract Manufacturers with Oracle Supply Planning Cloud Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)

RESPECT RESERVATION OF COMPONENT SUPPLY TO A WORK ORDER

In a variety of manufacturing situations, it's desirable to hard allocate component inventory to a particular work order to ensure supply for the work order manufacturing operations. With this update, you can reserve component inventory or inbound supply to a work order using the standard file-based data import (FBDI) file format. Oracle Supply Planning Cloud will honor this reservation and ensure that this supply is not pegged to another demand. This feature applies only to plans against external source systems, for which planning input data are provided through file-based data import. This feature does not apply to plans where the input data have been collected from Oracle Supply Chain Management Cloud.

STEPS TO ENABLE

You don't need to do anything to enable this feature.

TIPS AND CONSIDERATIONS

A few things to keep in mind:

- Currently, this feature applies only to plans against external source systems, for which planning input data are provided through file-based data import.
- Both unconstrained and constrained supply plans respect reservation of component supply to a work order.
- Supply plans respect the reservations done in an execution system, and you can't edit reservations or reserved supply quantities in a supply plan.

KEY RESOURCES

- Watch Respect Reservation of Component Supply to a Work Order Readiness Training

ROLE INFORMATION

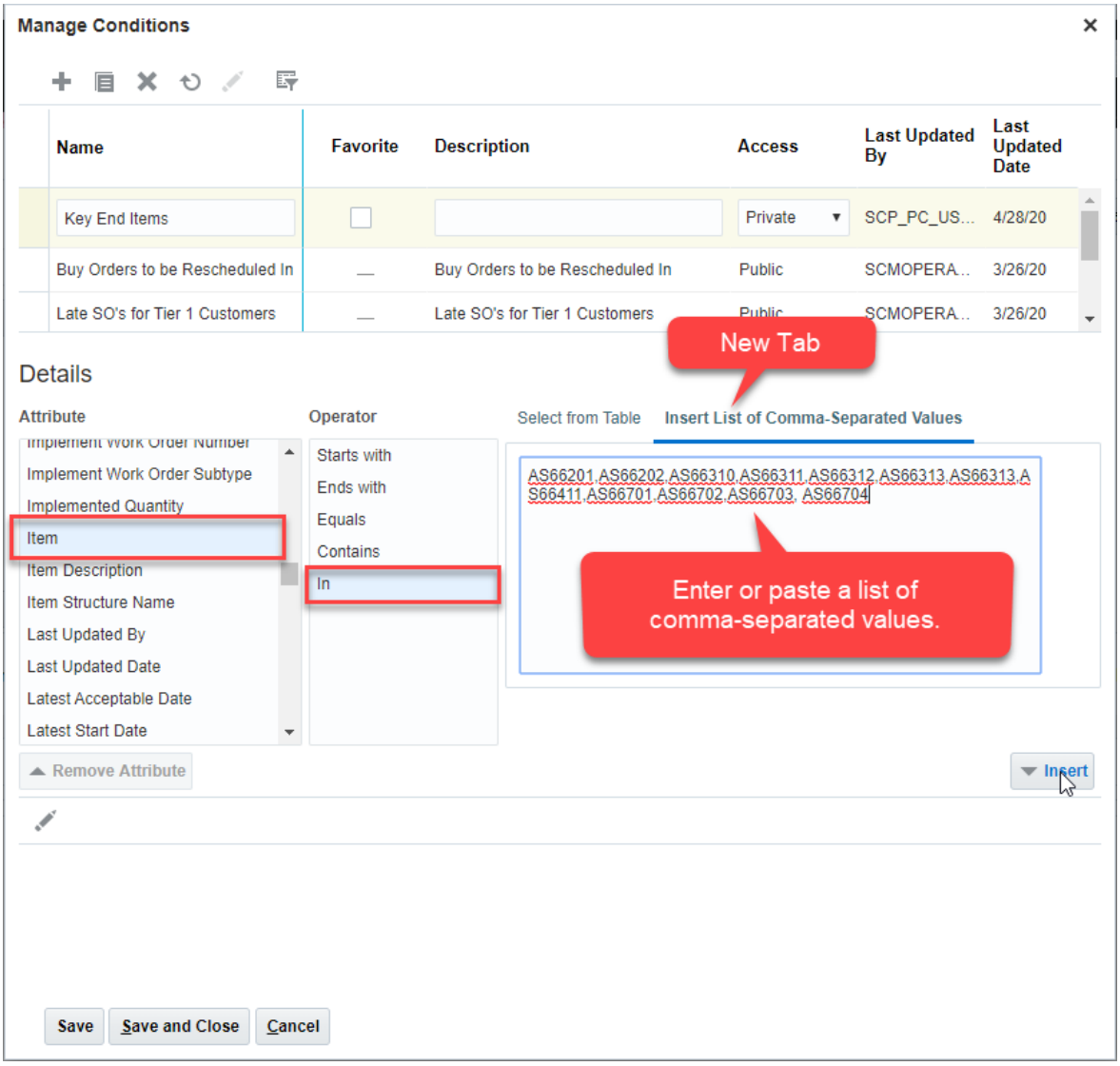
Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)

QUERY SUPPLIES AND DEMANDS BY ENTERING A LIST OF ITEMS OR ORGANIZATIONS

Individually selecting items or organizations when defining a condition in the Manage Conditions UI associated with the supplies and demands UI may be too tedious, especially if the list is large. With this update, you can enter the items or organizations you want to query as set of comma-separated values instead of selecting from a list of values. This option enables you to improve your productivity in retrieving the supplies and demands associated with your items.

When creating a condition from the Supplies and Demands UI, if you select the item or organization attribute and the In operator, then a new tab is displayed that enables you to insert a list of comma-separated values. You can either manually enter a list of values or paste a list of comma-separated values. When you click the Insert button, the individual entries in the list are validated. If all values are valid then the list of items or organizations is inserted into the condition.



Manage Conditions in Supplies and Demands

Watch a Demo

STEPS TO ENABLE

You don't need to do anything to enable this feature.

KEY RESOURCES

- Watch Query Supplies and Demands by Entering a List of Items or Organization Readiness Training

ROLE INFORMATION

Users assigned to any of the following job roles will automatically be able to use this feature and no special privileges are required:

- Materials Planner (ORA_MSC_MATERIALS_PLANNER_JOB)
- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)
- Replenishment Planner (ORA_MSC_REPLENISHMENT_PLANNER_JOB)

CONTROL ORDER POLICY ENFORCEMENT IN AGGREGATE TIME BUCKETS

The time taken for a plan to run is dependent on a variety of factors, but the number of conditions or constraints to be checked is one of the most important factors. Order policies that regulate the order quantities for planned orders typically create a high number of conditions. For most companies, these policies are relevant in the short to medium term, but in the longer term these policies are usually not as important. The longer-term decisions are mostly around analysis of material and capacity imbalances in the time bucket, but not the actual enforcement of the order policy.

With this feature, you can apply your judgement regarding whether order policies are to be enforced in weekly or period time buckets. The shorter the time horizon for enforcing order policy, the faster the plan run time.

STEPS TO ENABLE

You don't need to do anything to enable this feature.

TIPS AND CONSIDERATIONS

- You should consider the extent of impact on planning output when you select a value for the Maximum Number of Planned Orders per Item-ORG per Time Bucket attribute.

KEY RESOURCES

- Watch Control Order Policy Enforcement in Aggregate Time Buckets Readiness Training

ROLE INFORMATION

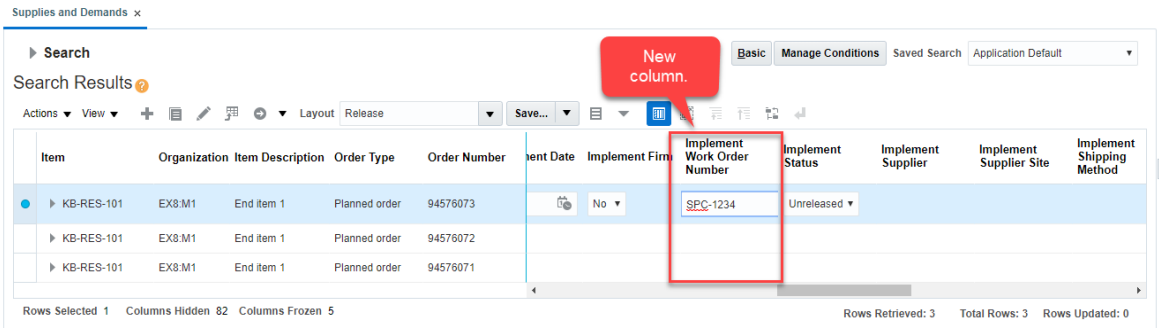
Users assigned to the following job roles will automatically be able to use this feature and no special privileges are required:

- Materials Planner (ORA_MSC_MATERIALS_PLANNER_JOB)
- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)

RELEASE PLANNED MANUFACTURING ORDERS WITH A USER-DEFINED WORK ORDER NUMBER

In some situations, it’s desirable for the planner to key in a manufacturing work order number rather than accept the system-generated numeric value. For example, there could be an alphanumeric scheme that enables the planner to communicate some information to the manufacturing shop floor. You can now enter your own work order number in the supplies and demands UI for planned manufacturing work orders and release them for execution in Oracle Manufacturing Cloud, E-Business Suite, or an external source system.

After marking a planned order for release in the Supplies and Demands UI, a new implement work order number column will be available for you to manually assign a work order number. The manually-entered work order number is released back to manufacturing cloud, E-Business Suite, or an external source system.



Implement Work Order Number in Supplies and Demands

Watch a Demo

STEPS TO ENABLE

You don't need to do anything to enable this feature.

TIPS AND CONSIDERATIONS

- You must ensure the uniqueness of the implement work order number based on the source system's validation rules. The Supplies and Demands UI doesn't validate that the implement work order number is unique.

- If you're using an Oracle cloud source system, then after the order is released Oracle Manufacturing Cloud will check the work order number for uniqueness within the organization. If the work order number is a duplicate, then the supply request in the Supply Chain Orchestration work area will display an error message specifying the work order number is a duplicate.

KEY RESOURCES

- Watch Release Planned Manufacturing Orders with a User-Defined Work Order Number Readiness Training

ROLE INFORMATION

Users assigned to any of the following job roles will automatically be able to use this feature and no special privileges are required:

- Materials Planner (ORA_MSC_MATERIALS_PLANNER_JOB)
- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)

PROJECT-DRIVEN SUPPLY CHAIN

Project-Driven Supply Chain is an end-to-end, integrated solution across the Oracle Supply Chain Management and Project Management Cloud applications. This solution is designed to support various business processes of manufacturing and asset-intensive companies.

You can use the Project-Driven Supply Chain solution to manage your supply chain processes in the context of projects without creating separate organizations for each project. You can also capture supply chain costs as project expenditures.

In this update, the Project-Driven Supply Chain solution includes these features:

- Plan Project-Specific Supply
- Purchase Unplanned Material for Project-Specific Manufacturing Work Order
- Purchase Unplanned Material for Project-Specific Maintenance Work Order
- Purchase Goods and Services for Project-Specific Manufacturing and Maintenance Work Orders
- Cost Account Direct Material Procurement on Project for Manufacturing
- Cost Account Direct Material Procurement on Project for Maintenance

The Project-Driven Supply Chain feature in Oracle Supply Chain Planning Cloud is described in this document.

PLAN PROJECT-SPECIFIC SUPPLY

In a variety of industries, such as telecommunications or industrial manufacturing, planning and execution happen in the context of projects for customers either internal or external. Usually this planning entails material that is hard allocated to these projects by striping the supplies to a particular project or task in addition to having a shareable set of common supplies. With this update, Oracle Supply Chain Planning Cloud enables you to plan for the project-driven supply chain that honors the supply allocations for projects.

Key capabilities include the following:

- Upload a forecast for products identifying the project and task.
- Group projects together when inventory is shared across a group of projects.
- Configure the supply search rules that includes a project group, project, or task that meets your business requirements.
- Net demand and supply ensuring that only supply with appropriate project and task designation is used to satisfy demand in accordance with the rules that you have established for supply search. Supply can be sourced from a common inventory pool when applicable.
- Analyze the plan using identifying project attributes of the supplies and demands, namely the project group, project, and task. This functionality is only available on the supplies and demands UI and for Oracle Transactional Business Intelligence embedded analytics capabilities.
- Release the planned orders for execution with the project and task references.

With this broad set of capabilities, you can plan for a project-driven supply chain.

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

Enable the Plan Project-Specific Supply feature as follows:

- If your enterprise doesn't use Oracle Supply Chain Execution Cloud:
    - In the Offerings work area, select the Supply Chain Planning offering. Click **Opt In Features**.
    - On the Opt In: Supply Chain Planning page, click the **Features** icon for the Supply Chain Planning offering.
    - Enable the Project-Driven Supply Chain feature, and then enable the Plan Project-Specific Supply feature.
- If your enterprise uses Oracle Supply Chain Execution Cloud and has already opted in to the Project-Driven Supply Chain feature:
    - In the Offerings work area, select either the Manufacturing and Supply Chain Materials Management offering or the Supply Chain Planning offering. Click **Opt In Features**.
    - On the Opt In page, click the **Features** icon for the offering.
    - Enable the Plan Project-Specific Supply feature.
- If your enterprise uses Oracle Supply Chain Execution Cloud and hasn't already opted in to the Project-Driven Supply Chain feature:
    - In the Offerings work area, select either the Manufacturing and Supply Chain Materials Management offering or the Supply Chain Planning offering. Click **Opt In Features**.
    - On the Opt In page, click the **Features** icon for the offering.
    - Enable the Project-Driven Supply Chain feature, and then enable the Plan Project-Specific Supply feature.
    - Perform the required setup for the Project-Driven Supply Chain feature. For details, refer to the Project-Driven Supply Chain chapter in the Implementing Manufacturing and Supply Chain Materials Management guide on the Oracle Help Center.

Watch a Setup Demo

TIPS AND CONSIDERATIONS

- The Plan Project-Specific Supply feature is applicable to the unconstrained supply planning mode of supply plans in the Supply Planning work area and in the Demand and Supply Planning work area.
- You must assign a project-based netting rule to plan for project-based netting.
- You can include up to 5 project netting sequences in a project-based netting rule.
- Project-based netting won't be performed if the Hard Pegging Level item attribute is set to none.
- Project and task attribute values for supplies and demands will be collected and released for only project-enabled organizations.

KEY RESOURCES

- Watch Plan Project-Specific Supply Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Materials Planner (ORA_MSC_MATERIALS_PLANNER_JOB)
- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)

PLANNING ADVISOR

Recent advances in technology increase the volume of data available to your enterprise and provide new avenues to automatically analyze, and seek deep insights into, this data that were previously hard to achieve. Oracle IoT (Internet of Things) applications provide rich, real-time data to improve efficiency and derive more value from Oracle Supply Chain Planning Cloud using machine learning technologies. Oracle Supply Chain Planning Cloud now offers built-in integrations to Oracle IoT applications to leverage these insights and get contextual recommendations.

PLAN CONSIDERING EVENTS IN ORACLE IOT PRODUCTION MONITORING CLOUD

Superior manufacturing throughput is dependent on having your shop floor machine resources in tip-top shape through regular maintenance activities. Despite regular maintenance, unplanned down-times can occur that can severely impact your ability to meet demand. Oracle Internet of Things Production Monitoring Cloud enables you to monitor your shop floor assets and use advanced machine learning algorithms to predict downtime events. You can now use these predictions to proactively plan around these events to minimize their impact before it occurs.

A new planning advisor UI is available that advises you of predictions of resource downtimes including the confidence levels and the expected timeframe for each downtime event. If you think an event is important enough, then you can use the context-sensitive drill down to adjust the resource availability. Then you can rerun the plan to see what mitigating actions, such as offloading to an alternative resource, may be available in addition to understanding the impact to your order due date commitments.

With this feature you can proactively improve your on-time-in-full metrics using advanced predictive analytics to guide supply planning decisions.

Your enterprise must also use the Oracle Manufacturing Cloud solution to use this feature.

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

After opting in to this feature, perform these actions to enable it:

- Create a new application named IoT Production Monitoring in the Manage Integration of Additional Applications UI in the Setup and Maintenance work area to set up credentials required to connect the IoT Production Monitoring server and invoke REST API's for Oracle IoT Production Monitoring Cloud Service.
- Select the advanced supply plan option Include Alerts from IoT Production Monitoring for a supply plan to view alerts from IoT Production Monitoring.

For details regarding these steps, refer to the Plan Considering Events in Oracle IoT Production Monitoring Cloud readiness training available on Oracle Cloud Readiness for Supply Chain Planning.

TIPS AND CONSIDERATIONS

A few things to keep in mind:

- Your enterprise must also use the Oracle Manufacturing Cloud solution to use this feature.
- Planners can schedule the Retrieve Production Monitoring Alerts scheduled process to retrieve IoT Production Monitoring alerts in real time.
- The alerts provided by IoT Production Monitoring don't predict the length of repair or breakdown time. Planners need to model resource downtimes in consultation with the applicable production personnel.
- The alerts provided by IoT Production Monitoring predict downtime incidences for specific resource instances. Planners need to modify the resource availability based on predictions generated on number of resource instances (which needs action) compared to total resource instances defined for a particular resource.

KEY RESOURCES

- Watch Plan Considering Events in Oracle IoT Production Monitoring Cloud Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Supply Chain Planner (ORA_MSC_SUPPLY_CHAIN_PLANNER_JOB)

ORDER BACKLOG MANAGEMENT

Reschedule your order backlog by prioritizing orders based on flexible demand priority rules. You can simulate the effect of different rules to find the best combination of scheduled dates and sources based upon the latest supply information, and release the updated orders to order management systems for execution.

After you opt in to the feature named Order Backlog Management, you can use the features described in this section.

AUTOMATICALLY RESCHEDULE ORDER LINES USING MANUFACTURING ALTERNATIVES

Some manufacturers may be able to produce the same item using different components or materials or by following an alternate production process. Oracle Supply Chain Execution Cloud associates a manufacturing work definition with each alternative. Beginning in this update, backlog management can evaluate whether a delayed item can be shipped or delivered faster if it's manufactured using an alternate work definition. If so, backlog management will consume the material supply and resource capacity for the alternate, rather than the primary work definition. It's still up to the supply planning or manufacturing solution to plan and initiate the production to meet the scheduled date that backlog management sets.

Watch a Demo

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

TIPS AND CONSIDERATIONS

When you opt in to use this feature, you must opt in to the feature named: Order Backlog Management. Opting in to the Order Backlog Management feature also enables the feature described here. If you previously opted in to the Order Backlog Management feature, then this feature is automatically enabled.

Additional Tips and Considerations:

- Backlog management uses availability across both primary and alternate resources, and across primary and substitute components, if doing so helps in planning an order line earlier.
- End items must be assigned to a Backlog Planning rule with the **Supply chain search option** planning mode enabled and the **Search Components and Resources** attribute selected for their work definitions and related components and resources to be considered in backlog management.
- Resources must have the **Check Capable to Promise** attribute enabled to be considered in backlog management. This attribute is specified on the **Edit Work Center Resource** page in Oracle Fusion Manufacturing Cloud. For external source systems, you can specify this attribute for a resource in the ScpResourcesImportTemplate file-based data import (FBDI) template.

KEY RESOURCES

- Watch Automatically Reschedule Order Lines Using Manufacturing Alternatives and Efficiently Configure Columns to be Displayed Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Backlog Manager (ORA_MSC_BACKLOG_MANAGER_JOB)

EFFICIENTLY CONFIGURE COLUMNS TO BE DISPLAYED

You can efficiently analyze planning data by configuring the display of data, such as the columns that are to be displayed and the order in which they are displayed, in a manner that works for your enterprise. This capability was previously available in Oracle Supply Chain Planning Cloud, but with this update, this capability has been streamlined with a new dialog box in the Backlog Analysis table.

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

TIPS AND CONSIDERATIONS

When you opt in to use this feature, you must opt in to the feature named: Order Backlog Management. Opting in to the Order Backlog Management feature also enables the feature described here. If you previously opted in to the Order Backlog Management feature, then this feature is automatically enabled.

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Backlog Manager (ORA_MSC_BACKLOG_MANAGER_JOB)

QUERY ORDER BACKLOG BY ENTERING A LIST OF ITEMS, ORGANIZATIONS, SET NAMES, OR ORDER NUMBERS

Individually selecting items, organizations, set names, or order numbers when defining a condition in the Manage Conditions UI associated with the Backlog Analysis page may be too tedious, especially if the list is large. With this update, you can enter the items, organizations, set names, or order numbers you want to query as set of comma-separated values instead of selecting from a list of values. This option enables you to improve your productivity in retrieving the order backlog.

STEPS TO ENABLE

Use the Opt In UI to enable this feature. For instructions, refer to the Optional Uptake of New Features section of this document.

Offering: *Supply Chain Planning*

TIPS AND CONSIDERATIONS

When you opt in to use this feature, you must opt in to the feature named: Order Backlog Management. Opting in to the Order Backlog Management feature also enables the feature described here. If you previously opted in to the Order Backlog Management feature, then this feature is automatically enabled.

To use this feature:

- Define a condition using the Manage Conditions button in the Backlog Analysis search area
- Within the Manage Conditions fields, select either Item, Organization, Set Name, or Order Number for the attribute, and then select the In operator
- On the List of Comma-Separated Values tab, insert a list of comma-separated values

KEY RESOURCES

- Watch Query Supplies and Demands by Entering a List of Items or Organization Readiness Training

ROLE INFORMATION

Users assigned to the following job role will automatically be able to use this feature and no special privileges are required:

- Backlog Manager (ORA_MSC_BACKLOG_MANAGER_JOB)

IMPORTANT ACTIONS AND CONSIDERATIONS

CHANGES TO FILE-BASED DATA IMPORT (FBDI) TEMPLATES

Some FBDI templates have changed in this update. For details of the specific changes, refer to the Instructions tab of these FBDI templates:

- Calendars
- Sourcing Rules
- Reservations
- External Forecasts
- Supply On Hand
- Purchase Order Requisitions
- Safety Stock Levels
- Sales Orders
- Transfer Orders
- Work Order Supplies
- Resources
- Resource Availability
- Work Order Operation Resources

FBDI templates for SCM are available in the *File-Based Data Import for Oracle Supply Chain Management Cloud* guide, available on the Oracle Help Center.

OTHER CHANGES IN THIS UPDATE

This section includes details about additional changes in this update that might change the way your products work.

Supply Planning: Change in Calculation for the Purchasing Cost Measure

A change was made to use standard cost instead of list price when calculating the Purchasing Cost measure. This change also impacts the Total End Item Cost and Gross Margin measures, which include purchasing cost in their calculations. This change was made to both unconstrained supply planning and constrained supply planning.

Bug reference: 30979381, 31013911

Sales and Operation Planning: Default Supplier Structure for Purchased End Items

For purchased items with Buy From sourcing and suppliers not defined in the Approved Supplier List, a default supplier structure is inserted into a sales and operations plan to maintain sourcing allocation percentages. Item standard cost is used as the supplier cost per unit, and item processing lead time is used as the supplier lead time. Setup in the Approved Supplier List is still required for supplier-constrained sales and operations plans.

Bug reference 30748528



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