

e-SCOR

Quick Reference

Version 5.1 Rev. 0



e-SCOR Quick Reference Version 5.1 Rev. 0

May 2007

The information in this publication is subject to change without notice and does not represent a commitment by Gensym Corporation.

Although this software has been extensively tested, Gensym cannot guarantee error-free performance in all applications. Accordingly, use of the software is at the customer's sole risk.

Copyright © 2007 Gensym Corporation

All rights reserved. No part of this document may be reproduced, stored in a retrieval system, translated, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Gensym Corporation.

SCOR is a registered trademark of PRTM.

All other products or services mentioned in this document are identified by the trademarks or service marks of their respective companies or organizations, and Gensym Corporation disclaims any responsibility for specifying which marks are owned by which companies or organizations.

Gensym Corporation
52 Second Ave.
Burlington, Massachusetts 01803
(781) 265-7100
FAX: (781) 265-7101

Part Number: DOC097-510

Table of Contents

About this Quick Reference	iv	Manufacturing Tab	21
SCOR Acknowledgment	iv	Transfer Tab	21
Level 1 and Level 2	1	Cost Tab	22
Configuring Level 1 Roles	1	Enable Deliver	23
Configuring Level 2 SCOR	1	Enable Deliver Tab	23
Role	2	Deliver	24
Role Tab	2	Delivery Tab	24
Financial Tab	4	Order Tab	25
Assets Tab	6	Order Selection Tabs	25
Cost Tab	8	Fulfillment Tab	27
Product Tab	8	Transportation Tab	27
Logging Tab	9	Financial Tab	28
Plan	10	Cost Tab	29
Planning Tab	10	Product Composite	31
Enable Source	12	General Tab	31
Enable Source Tab	12	Demand Tab	33
Source	13	Inventory Tab	34
Source Tab	13	Sourcing Tab	35
Receiving Tab	14	Supplier Tab	36
Verification Tab	14	Supplier Selection Tab	38
Transfer Tab	14	Manufacturing Tab	40
Financial Tab	15	Delivery Tab	41
Cost Tab	16	Multipliers Tab	42
Make	18	Metrics Tab	45
Manufacturer Tab	18	Distributions	48
Engineering Tab	19	Keyboard Shortcuts	53
Build Orders Tab	19	Index	55
Build Selection Tabs	20		
Production Material Tab	21		

About this Quick Reference

This quick reference provides:

- A summary of the steps for configuring Level 1 roles and Level 2 SCOR.
- Summary tables of all e-SCOR parameters and metrics for roles, categories, and product composites, organized by tab page. The relevant tab page appears in bold at the top of the table.
- Diagrams for each process that e-SCOR runs when you run a model and corresponding tables with the parameters and metrics associated with each step in the process.
- A description and picture of each mathematical distribution available when configuring the Mode Type parameter.
- A summary of all available keyboard shortcuts.
- An index of all parameters and metrics for easy access through the summary tables.

Each summary table of parameters and metrics includes these columns:

- Group/Name — The name of the parameter or metric and its associated group.
- P/M — Whether the table entry is a parameter (P) or metric (M).
- Description — A brief description of the parameter or metric.
- Process — The process in which e-SCOR uses the parameter or computes the metric.
- See Also — A reference to related information.

To avoid duplication, the following parameters and metrics appear only once for the Plan category, although they are common to all categories:

- Label
- Role Label
- Process Number
- Upgrade

SCOR Acknowledgment

SCOR is freely available to all who wish to use the standard reference model. Council membership is open to all companies and organizations interested in applying and advancing state-of-the-art supply-chain management systems and practices. All who use the SCOR model are asked to acknowledge the SCC in all documents describing or depicting the SCOR model and its use. All who use SCOR are encouraged to join the SCC, both to further model development and to obtain the full benefits of membership. See www.supply-chain.org for details.

Level 1 and Level 2

Configuring Level 1 Roles

The basic steps in creating an e-SCOR supply-chain model are:

- 1 Determine the level of detail to model. The level of detail you model depends on the performance data you wish to analyze.
- 2 Configure the product hierarchy. The product hierarchy or bill of materials (BOM) describes the products that your supply chain sources, makes, and delivers.
- 3 Configure the Level 1 roles. Roles are the high-level entities that describe your supply chain. To configure Level 1 roles, you perform these tasks:
 - a Create the supply-chain model. Select roles from the e-SCOR toolbox to represent the sites in your supply chain and place them on your model workspace.
 - b Configure the products each role sources and delivers. Assign product specifications to roles to create source and delivery products.
 - c Configure role parameters. Configure role parameters to determine such things as when the role computes its financial metrics.
- 4 Configure resources. Resources determine the capacity of each role to manufacture finished products and are automatically assigned to each manufacturing role in your supply chain. You can modify parameters, as needed.
- 5 Model a distribution process and model a manufacturing process, as needed.

Configuring Level 2 SCOR

The basic steps in configuring Level 2 SCOR are:

- 1 Show the details of each role in the model, then configure process category parameters on the detail of each role.
Note: You must configure at least one potential supplier for all source products in the model.
- 2 Configure product composite parameters for each source and delivery product on the detail of the Products pool for each role.
- 3 Configure Level 2 parameters for stock planning strategies (replenishment, forecast, r-q, and q) and alternative planning strategies (make-to-order and engineer-to-order).
- 4 Configure Level 2 details and parameters for multiple suppliers and multiple products.
- 5 Configure Level 2 parameters for pull and push planning modes.

Role

Role Tab				
Group/Name	P/M	Description	Process	See Also
General Role Label	P	The label to display with the role, which must be unique within the model.	N/A	"Configuring General Parameters for Roles" on page 132
General Highlight Color	P	Sets a region of color on the role icon, which you can use to organize roles in the model. The default value is no color.		
General Site Longitude Site Latitude	P	The longitude and latitude of the site for locating on a map.		
General Process Number	M	The label that appears on the role icon.		
General Upgrade	P	When installing a new version of e-SCOR, whether to upgrade the role, using the default role template ("on") or whether to leave the role as it is ("off"). The default value is "on".		"Upgrading Models" on page 141

Role

Role Tab				
Group/Name	P/M	Description	Process	See Also
Resources Maximum Capacity Used	M	The maximum number of resources that the role allocates during the simulation, based on the Resource Capacity of the resource. Note: This metric is only relevant for Base Manufacturer and Manufacturer roles.		
Metrics Statistical Metrics Period	P	The time period over which to compute time-weighted statistics, such as averages and moving averages.		“Configuring the Time Period for Computing Time-Weighted Statistics” on page 135
Metrics Number of End Products	M	The number of unique delivery products assigned to the role. You must run the model to update the value.		

Role

Financial Tab				
Group/Name	P/M	Description	Process	See Also
General Financial Period	P	The time period for computing financial, asset, and cost metrics. The default value is 4 weeks and 2 days (30 days).	Financial	
General Financial Payment Terms	P	The time period for making payments from invoices. The Financial Payment Terms of the supplier role determines when the buyer role makes payments from invoices. The default value is 4 weeks and 2 days (30 days). Note: Financial Payment Terms is not relevant for Consumer roles because it is not a supplier.		
General Number of Financial Periods	M	The number of financial periods that have passed since the start of the simulation.		

Role

Financial Tab				
Group/Name	P/M	Description	Process	See Also
Incoming Financial Bookings	M	Supplier bookings for orders that buyers have placed with this supplier role but that the supplier has not yet invoiced. This metric includes bookings since the start of the simulation. Note: This metric is not relevant for a Consumer role.	Financial	
Incoming Financial Outstanding	M	The amount of money outstanding for orders that buyers have placed with this supplier role but for which the supplier has not yet been paid. This metric includes outstanding money for orders since the start of the simulation. Note: This metric is not relevant for a Consumer role.		
Incoming Financial Collections within Financial Period	M	The total amount of money that this supplier role has received from buyers during the <i>previous</i> collection period. Note: This metric is not relevant for a Consumer role.		
Incoming Financial Collections Total	M	The total amount of money that this supplier role has received from buyers since the start of the simulation. Note: This metric is not relevant for a Consumer role.		
Outgoing Financial Obligations	M	Buyer obligations for orders that this buyer role has placed with suppliers but has not yet paid. This metric includes obligations since the start of the simulation.		
Outgoing Financial Payments within Financial Period	M	The total amount of money that this buyer role has sent to its suppliers for product shipments received during the <i>previous</i> collection period.		
Outgoing Financial Payments Total	M	The total amount of money that this buyer role has sent to its suppliers for product shipments received since the start of the simulation.		

Role

Assets Tab				
Group/Name	P/M	Description	Process	See Also
Days of Supply Raw Materials	M	The cost-weighted value of source product inventory at the end of the <i>previous</i> financial period, given current inventory and the consumption of source products during the financial period. Note: This metric is not relevant for a Consumer role.	Financial	Appendix A, "Asset Metrics Formulas" on page 539
Days of Supply Work in Progress	M	The cost-weighted value of work in progress at the end of the <i>previous</i> financial period, given current work in progress and the consumption of source products during the financial period. Note: This metric is not relevant for a Consumer role.		
Days of Supply Finished Goods	M	The cost-weighted value of delivery product inventory at the end of the <i>previous</i> financial period, given current inventory and the amount of delivery product picked for delivery during the financial period. Note: This metric is not relevant for a Consumer role.		
Days of Supply Inventory	M	The sum of Raw Materials, Work in Progress, and Finished Goods days of supply. Note: This metric is not relevant for a Consumer role.		

Role

Assets Tab

Name	P/M	Description	Process	See Also
Metrics Asset Turns	M	The number of days the role takes to turn over its inventory for delivery products, measured as a cost-weighted value in days. Note: This metric is not relevant for a Consumer role.	Financial	Appendix A, "Asset Metrics Formulas" on page 539
Metrics Cash-to-Cash Cycle Time	M	The time it takes for money to flow from buyers to suppliers. A positive value indicates the role spends more money than it takes in. A negative value indicates the role takes in more money than it spends. This metric is weighted, based on the Financial Payment Terms of each buyer role and is measured in days. Note: This metric is not relevant for a Consumer role.		
Metrics Days Sales Outstanding	M	The value of delivery product sales, which includes Financial Collections within Financial Period, Financial Bookings, and Financial Outstanding metrics for the <i>previous</i> financial period, measured in days. Note: This metric is not relevant for a Consumer role.		
Metrics Cash Flow Period	M	The amount of money available during the <i>previous</i> financial period, which is equal to the Financial Collections within Financial Period minus the Financial Payments within Financial Period, which could be positive or negative. Note: This metric is not relevant for a Consumer role.		

Role

Cost Tab				
Name	P/M	Description	Process	See Also
General Order Management Costs	M	The total cost of doing business since the start of the simulation, which includes these Cost Incurred metrics for these categories: <ul style="list-style-type: none">• Source category: Create Customer Order Metric• Deliver category: Order Entry Metric Order Fulfillment Metric Pick Metric Packing Metric Transportation Metric Customer Invoicing Metric Customer Collections Metric	Financial	

Product Tab				
Name	P/M	Description	Process	See Also
Delivery Products Source Products	P	The product composites that the role delivers to downstream buyers and sources from upstream suppliers, respectively.		"Configuring the Products a Role Sources and Delivers" on page 126

Role

Logging Tab				
Group/Name	P/M	Description	Process	See Also
Settings Transaction Logging Enabled	P	Enables and disables transaction logging.	N/A	“Logging Transactions that Occur Between Roles” on page 365
Settings Transaction Logging Report	P	The name of the Role Transaction Report to which to log data.		
Transaction Filtering Log Orders	P	Logs orders that buyers send to suppliers.		
Transaction Filtering Log Purchases	P	Logs purchase requests that buyers send to suppliers, purchase responses that suppliers send to buyers, and purchase awards that buyers send to suppliers.		
Transaction Filtering Log Products	P	Logs product shipments that suppliers send to buyers.		
Transaction Filtering Log Financials	P	Logs invoices that suppliers send to buyers and payments that buyers send to suppliers.		

Plan

Planning Tab

Group/Name	P/M	Description	Process	See Also
General Label	P	The label to display with the category. The default value is the SCOR category name.	N/A	
General Role Label	M	The label associated with the role.		
General Process Number	M	The SCOR process number.		
General Upgrade	P	When installing a new version of e-SCOR, whether to upgrade the category, using the default role template (“on”) or whether to leave the category as it is (“off”). The default value is “off”.		“Upgrading Models” on page 141
Planning Planning Period	P	The time interval between executing plans. For the P3: Plan Make category, each time a plan executes, the Plan category sends build orders to the Make category, which manufactures delivery products to satisfy current build orders. For the P2: Plan Source category, each time a plan executes, the Plan category sends replenishment orders to the Source category, which places orders for source products with upstream suppliers. The default value is 1 week.	Source Planning Make Planning	“Coordinating Source and Make Planning” on page 441
Planning Initial Plan Delay	P	The initial delay from the start time of the simulation to the time at which the first plan goes into effect. By default, planning occurs every Planning Period, thereafter. The default value is 2 days. You configure this parameter to coordinate source and make planning when the model contains Manufacturer roles.		
Planning Number of Planning Periods	M	The number of planning periods that have passed since the start of the simulation, which is based on the Planning Period.		

Plan

Planning Tab				
Group/Name	P/M	Description	Process	See Also
Planning Continuous Planning	P	<p>Whether the role uses cyclical planning, in addition to demand-based planning. By default, Continuous Planning is disabled, which means the role uses cyclical planning only, based on the Planning Period.</p> <p>When Continuous Planning is enabled, in addition to its normal cyclical planning, the role initiates a plan whenever the downstream category creates an order. The type of planning depends on the role and the Plan category, as follows:</p> <ul style="list-style-type: none"> • For the P2 category of a Distributor role, source planning initiates whenever a downstream buyer role creates a replenishment order for the role's delivery products. • For the P2 category of a Manufacturer role, source planning initiates whenever the downstream Make category creates a build order for the role's delivery products. • For the P3 category of a Manufacturer role, make planning initiates whenever a downstream buyer role creates a replenishment order for the role's delivery products. <p>To use demand-based planning only, configure the Planning Period to be a very large number so it never gets invoked.</p>	Source Planning Make Planning	Chapter 15, "Using Stock Planning Strategies" on page 447
Planning Compensate for Yield	P	<p>Whether the role takes into account the Build Yield parameter of the delivery product during the make planning process. When Compensate for Yield is enabled, the default, the P3 category increases the number of products it plans to make, due to expected loss. Disable Compensate to Yield to disregard the build yield during make planning.</p>		

Enable Source

Enable Source Tab

Group/Name	P/M	Description	Process	See Also
Metrics Orders Sent	M	The total number of customer orders that the ES category has sent to suppliers since the start of the simulation. Note: The metrics on the Enable Source tab include orders for all source products associated with the role.	Order/ Product	
Metrics Change Orders Sent	M	The total number of change orders that the ES category has sent to suppliers since the start of the simulation. This metric includes orders for all source products associated with the role.		
Metrics Product Shipments Received	M	The total number of product shipments that the ES category has received from suppliers since the start of the simulation. This metric includes shipments for all source products associated with the role.		
Metrics Contracts Established	M	The total number of contracts for source products that the ES category has established with suppliers since the start of the simulation. This metric includes contracts for all source products associated with the role. By default, Contracts Established is 1, which means the buyer sources products from a single buyer.	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479
Metrics Supplier On-Time Performance (%)	M	The percentage of product shipments that the ES category has received on or before the customer request date. The ES category computes this date from the Desired Turnaround parameter of all source products associated with the role. This metric includes product shipments for all source products associated with the role.	Order/ Product	

Source

Source Tab				
Group/Name	P/M	Description	Process	See Also
Product Selection All Products	P	Whether the Source category parameters apply to all source products assigned to the role or to a specific source product. By default, All Products is enabled.		"Adding Multiple Categories to Role Details" on page 497
Product Selection Specific Product Name	P	When All Products is disabled, the specific source product to which the Source category parameters apply.		
Metrics Orders Sent	M	The total number of customer orders that the Source category has sent to suppliers since the start of the simulation.	Order/ Product	
Metrics Change Orders Sent	M	The total number of change orders that the Source category has sent to suppliers since the start of the simulation.		
Metrics Product Shipments Received	M	The total number of product shipments that the Source category has received from suppliers since the start of the simulation. This metric includes shipments for all source products associated with the role.		
Metrics Product Shipment Lead Time	M	The average change in time from the Desired Turnaround parameter of source products to the actual time at which the Source category receives product shipments. A positive number indicates product shipments are early, and a negative number indicates product shipments are late.		

Source

Receiving Tab				
Group/Name	P/M	Description	Process	See Also
Receiving Duration Distribution Mode	P	The time it takes from when the Source category receives source products to when it places them in inventory. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Order/ Product	“Configuring the Mathematical Distribution” on page 154

Verification Tab				
Group/Name	P/M	Description	Process	See Also
Verification Duration Distribution Mode	P	The time it takes to verify shipments of source products before placing them in inventory. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Order/ Product	“Configuring the Mathematical Distribution” on page 154

Transfer Tab				
Group/Name	P/M	Description	Process	See Also
Transfer Duration Distribution Mode	P	The time it takes to transfer shipments of source products to inventory. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Order/ Product	“Configuring the Mathematical Distribution” on page 154

Source

Financial Tab				
Group/Name	P/M	Description	Process	See Also
Outgoing Financial Obligations	M	Buyer obligations for customer orders that the Source category has placed with suppliers but has not yet received since the start of the simulation.	Financial	
Outgoing Financial Payments within Financial Period	M	The total amount of money that the Source category has sent to suppliers for product shipments received during the previous collection period.		
Outgoing Financial Payments Total	M	The total amount of money that the Source category has sent to suppliers for product shipments received since the start of the simulation.		

Source

Cost Tab				
Group/Name	P/M	Description	Process	See Also
Costs Per Transaction Receiving	P	The costs associated with receiving source products. The default value is 0.	Order/ Product	
Costs Per Transaction Verification	P	The costs associated with verifying a shipment of source products. The default value is 0.		
Costs Per Transaction Transfer	P	The costs associated with transferring a shipment of source products to inventory. The default value is 0.		
Costs Per Transaction Create Customer Order	P	The costs associated with creating an order for source products. The default value is 0.		
Costs Per Transaction Invoice	P	The costs associated with paying invoices for source products. The default value is 0.	Financial	

Source

Cost Tab				
Group/Name	P/M	Description	Process	See Also
Costs Incurred Receiving Metric	M	The total cost that the Source category has incurred for receiving source products since the start of the simulation.	Order/ Product	
Costs Incurred Verification Metric	M	The total cost that the Source category has incurred for verifying product shipments since the start of the simulation.		
Costs Incurred Transfer Metric	M	The total cost that the Source category has incurred for transferring product shipments to inventory since the start of the simulation.		
Costs Incurred Create Customer Order Metric	M	The total cost that the Source category has incurred for creating customer orders since the start of the simulation.		
Costs Incurred Invoice Metric	M	The total cost that the Source category has incurred for paying invoices for product shipments received since the start of the simulation.	Financial	

Make

Manufacturer Tab

Group/Name	P/M	Description	Process	See Also
Product Selection All Products	P	Whether the Make category parameters apply to all delivery products associated with the role or to a specific delivery product. By default, All Products is enabled. You configure this parameter when the Make category manufactures multiple products.	N/A	"Adding Multiple Categories to Role Details" on page 497
Product Selection Specific Product Name	P	When All Products is disabled, the specific delivery product to which the Make category parameters apply.		
Metrics Build Orders Started	M	The total number of build orders the Make category has started to manufacture since the start of the simulation. The Make category starts manufacturing a build order when it receives a scheduled build order from the P3: Plan Make category and it has components.	Build	
Metrics Build Orders Completed	M	The total number of build orders the Make category has completed manufacturing since the start of the simulation. A build order is complete when the Make category finishes its manufacturing step but before it releases the product.		
Metrics Make Cycle Time	M	The average cycle time from when the Make category starts to manufacture a build order to when it releases finished products for delivery.		
Metrics Order Entry to Manufacturing Time	M	(Mb, M3) The total amount of time from when the downstream Deliver category creates a build order for a particular order to when the Make category starts manufacturing the build order. This metric is only relevant for ETO products.		

Make

Engineering Tab

Group/Name	P/M	Description	Process	See Also
Engineering Duration Distribution Mode	P	(Mb and M3) The time it takes to engineer a single batch of engineer-to-order products, regardless of the number of products in the batch. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour. This parameter is only relevant for ETO products.	Build	“Configuring the Mathematical Distribution” on page 154

Build Orders Tab

Group/Name	P/M	Description	Process	See Also
Order Release to Manufacturing Duration Distribution Mode	P	The time it takes from when the Make category receives a build order to when it receives components. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Build	“Configuring the Mathematical Distribution” on page 154

Make

Build Selection Tabs				
Group/Name	P/M	Description	Process	See Also
First Second Third Fourth Sort Direction	P	Determines whether to sort build orders in ascending or descending order, based on the Sort Criteria. By default, build orders are chosen randomly.	Build	"Configuring Build Selection Parameters" on page 437
First Second Third Fourth Sort Criteria	P	Determines the value the Make category uses to sort build orders. The options include value of a build order that is a number. The default value is none. The options are: unit-price, total-cost, order-size, payment-terms, customer-order-number, internal-order-number, customer-preference, and product-preference.		
First Second Third Fourth Cutoff	P	Determines whether the Make category includes all build orders in its sort (none) or whether it includes only those build orders that meet an acceptable cutoff. If Sort Criteria is a numeric value, the options for Cutoff are: minimum-acceptable, maximum-acceptable, and maximum-delta-acceptable.		
First Second Third Fourth Cutoff Value	P	When Cutoff is a value other than none and when Sort Criteria is a numeric value, specifies the value that determines whether a build order is excluded from the sort. If the specified value of a build order does not meet the cutoff criteria, the Make category does not fill the order.		
First Second Third Fourth Cutoff Duration	P	When Cutoff is a duration, specifies the value that determines whether a build order is excluded from the sort. If the specified value of a build order does not meet the cutoff criteria, the Make category does not fill the order.		

Make

Production Material Tab				
Group/Name	P/M	Description	Process	See Also
Production Material Duration Distribution Mode	P	The time it takes from when the Make category receives components to when it starts manufacturing batches of finished products. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Build	“Configuring the Mathematical Distribution” on page 154

Manufacturing Tab				
Group/Name	P/M	Description	Process	See Also
Manufacturing Duration Distribution Mode	P	The time it takes from when the Make category starts to manufacture a single batch of delivery products to when it finishes manufacturing the batch. The Manufacturing Duration is the same, regardless of the number of products in the batch. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Build	“Configuring the Mathematical Distribution” on page 154

Transfer Tab				
Group/Name	P/M	Description	Process	See Also
Move to Delivery Duration Distribution Mode	P	The time it takes from when the Make category finishes manufacturing a batch of delivery products to when the finished products are transferred to inventory. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Build	“Configuring the Mathematical Distribution” on page 154

Make

Cost Tab				
Group/Name	P/M	Description	Process	See Also
Costs per Transaction ECO	P	(Mb, M3) The costs associated with engineering change orders for engineer-to-order products. The default value is 0. Note: This parameter applies to ETO delivery products only.	Build	
Costs per Transaction Production Material Handling	P	The costs associated with handling the components the Make category uses to manufacture finished products. The default value is 0.		
Costs Incurred ECO Metric	M	(Mb, M3) The total cost that the Make category has incurred for engineering change orders since the start of the simulation. Note: This metric applies to ETO delivery products only.		
Costs Incurred Production Material Handling Metric	M	The total cost associated with handling the components used to manufacture finished products since the start of the simulation.		

Enable Deliver

Enable Deliver Tab

Group/Name	P/M	Description	Process	See Also
Metrics Orders Received	M	The total number of customer orders that the ED category has received from buyers since the start of the simulation. Note: The metrics on the Enable Deliver tab include orders for all delivery products associated with the role.	Order/ Product	
Metrics Change Orders Received	M	The total number of change orders that the ED category has received from buyers since the start of the simulation.		
Metrics Product Shipments Sent	M	The total number of product shipments that the ED category has sent to buyers since the start of the simulation.		
Metrics Contracts Established	M	The total number of contracts for delivery products that the ED category has established with buyers since the start of the simulation. By default, one contract is established for every downstream buyer role.	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479
Metrics Delivery Performance (%)	M	The percentage of product shipments that the ED category has delivered on or before the customer request date. The ED category computes this date from the Desired Turnaround parameter of the source product of the downstream buyer role.	Order/ Product	
Metrics Perfect Order Fulfillment (%)	M	The percentage of product shipments that the ED category has delivered on or before the customer request date and that are for the requested quantities. The ED category computes this date from the Desired Turnaround parameter of the source product of the downstream buyer role.		

Deliver

Delivery Tab				
Group/Name	P/M	Description	Process	See Also
Product Selection All Products	P	Whether the Deliver category parameters apply to all delivery products assigned to the role or to a specific delivery product. By default, All Products is enabled.	N/A	“Adding Multiple Categories to Role Details” on page 497
Product Selection Specific Product Name	P	When All Products is disabled, the specific delivery product to which the Deliver category parameters apply.		
Metrics Orders Received	M	The total number of valid customer orders the Deliver category has received from buyers since the start of the simulation.	Order/ Product	
Metrics Change Orders Received	M	The total number of change orders the Deliver category has received from buyers since the start of the simulation.		
Metrics Product Shipments Sent	M	The total number of product shipments the Deliver category has delivered to buyers since the start of the simulation.		
Metrics Fill Rates (%)	M	(D1) The percentage of product shipments the Deliver category has delivered within 24 hours of receiving an order.		
Metrics Ready to Ship Time	M	The sum of the Pick Material Time and Pack Material Time parameters of the Deliver category, in days.		
Metrics Order Entry to Ship Time	M	The average time from when the Deliver category enters a customer order to when the product shipment is ready to deliver.		

Deliver

Order Tab

Group/Name	P/M	Description	Process	See Also
Order Entry Duration Distribution	P	(D1, D2) The time it takes from when the Deliver category receives an order to when it enters the order. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Order/ Product	

Order Selection Tabs

Group/Name	P/M	Description	Process	See Also
First Second Third Fourth Sort Direction	P	Determines whether to sort build orders in ascending or descending order, based on the Sort Criteria. By default, orders are chosen randomly.	Order/ Product	"Configuring Order Selection Parameters" on page 418
First Second Third Fourth Sort Criteria	P	Determines the value the Deliver category uses to sort orders. The options include numeric, time-based, and non-numeric properties of an order. The default value is none. The numeric options are: unit-price, total-cost, order-size, payment-terms, customer-order-number, internal-order-number, customer-preference, and product-preference. The time-based options are: order-placed-time, order-selected-time, and order-lead-time.		

Deliver

Order Selection Tabs

Group/Name	P/M	Description	Process	See Also
First Second Third Fourth Cutoff	P	<p>Determines whether the Deliver category includes all orders in its sort (none) or whether it includes only those orders that meet an acceptable cutoff.</p> <p>If Sort Criteria is a numeric value, the options for Cutoff are: minimum-acceptable, maximum-acceptable, and maximum-delta-acceptable. If Sort Criteria is a time-based value, the options are: time-delta-acceptable and current-time-delta-acceptable.</p> <p>If Cutoff is maximum-delta-acceptable or time-delta-acceptable, Sort Direction must be smallest or biggest. If Cutoff is current-time-delta-acceptable, Sort Direction must be random and Sort Criteria must be order-lead-time.</p>	Order/ Product	"Configuring Order Selection Parameters" on page 418
First Second Third Fourth Cutoff Value	P	When Cutoff is a value other than none and when Sort By is a numeric value, specifies the value that determines whether an order is excluded from the sort. If the specified value of an order does not meet the cutoff criteria, the Deliver category does not fill the order.		
First Second Third Fourth Cutoff Duration	P	When Cutoff is a value other than none and Sort Criteria is a time-based value, specifies the value that determines whether an order is excluded from the sort. If the specified time of an order does not meet the cutoff criteria, the Deliver category does not fill the order.		

Deliver

Fulfillment Tab

Group/Name	P/M	Description	Process	See Also
Pick Duration Distribution Mode	P	The time it takes from when the Deliver category enters an order to when it picks delivery products from inventory for packing. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.	Order/ Product	
Packing Duration Distribution Mode	P	The time it takes from when the Deliver category picks delivery products from inventory to when it packs them into containers for shipment. By default, you specify the Min, Max, and Mode of a triangular distribution. The default values are 1 hour.		

Transportation Tab

Group/Name	P/M	Description	Process	See Also
Transportation Duration Distribution Mode	P	The time it takes from when the Deliver category packs containers for shipment to when the buyer receives the shipment. By default, you specify the Min, Max, and Mode of a triangular function. The default values are 1 hour.	Order/ Product	

Deliver

Financial Tab				
Group/Name	P/M	Description	Process	See Also
Incoming Financial Bookings	M	Supplier bookings for customer orders that buyers have placed with the Deliver category but that the Deliver category has not yet invoiced.	Financial	
Incoming Financial Outstanding	M	The amount of money outstanding for customer orders that buyers have placed with the Deliver category but for which the Deliver category has not yet been paid.		
Incoming Financial Collections within Financial Period	M	The total amount of money for product shipments the Deliver category has received from buyers during the previous collection period.		
Incoming Financial Collections Total	M	The total amount of money for product shipments the Deliver category has received from buyers since the start of the simulation.		

Deliver

Cost Tab				
Group/Name	P/M	Description	Process	See Also
Costs per Transaction Order Entry	P	The costs associated with entering an order. The default value is 0.	Order/ Product	
Costs per Transaction Order Fulfillment	P	The costs associated with fulfilling an order. The default value is 0.		
Costs per Transaction Pick	P	The costs associated with picking delivery products from inventory. The default value is 0.		
Costs per Transaction Packing	P	The costs associated with packing shipments for delivery. The default value is 0.		
Costs per Transaction Transportation	P	The average shipping cost per shipment. The default value is 0.		
Costs per Transaction Customer Invoicing	P	The costs associated with invoicing the buyer. The default value is 0.		
Costs per Transaction Customer Collections	P	The costs associated with collecting payments from the buyer. The default value is 0.		

Deliver

Cost Tab

Group/Name	P/M	Description	Process	See Also
Costs Incurred Order Entry Metric	M	The total cost that the Deliver category has incurred for entering customer orders since the start of the simulation.	Order/ Product	
Costs Incurred Order Fulfillment Metric	M	The total cost that the Deliver category has incurred for filling customer orders since the start of the simulation.		
Costs Incurred Pick Metric	M	The total cost that the Deliver category has incurred for taking products out of inventory for distributing to buyers since the start of the simulation.		
Costs Incurred Packing Metric	M	The total cost that the Deliver category has incurred for packing product shipments for buyers since the start of the simulation.		
Costs Incurred Transportation Metric	M	The total cost that the Deliver category has incurred for transporting product shipments since the start of the simulation.		
Costs Incurred Customer Invoicing Metric	M	The total cost that the Deliver category has incurred for invoicing customers since the start of the simulation.		
Costs Incurred Customer Collections Metric	M	The total cost that the Deliver category has incurred for collecting payments from customers since the start of the simulation.		

Product Composite

General Tab				
Group/Name	P/M	Description	Process	See Also
General Role Label	M	The label of the role on whose detail the product composite exists.		
General Product Name	M	The name of the product specification in the product hierarchy. You can think of the Product Name as the SKU number for an item in inventory.		
General Order Type	P	For source products, determines whether to use a stock, make-to-order, or engineer-to-order planning strategy when creating customer orders for its source products. The default is stock. For delivery products, determines whether the role uses a stock, make-to-order, or engineer-to-order planning strategy when making and delivering its delivery products. The default is stock.	Build (Base Mfg.) Make Planning Source Planning	"Configuring the Role to Use Alternative Planning Strategies" on page 466
Order Quantity to Deliver	M	For delivery products, the total number of orders for delivery products that a supplier has received since the start of the simulation.	Order/ Product	
Order Quantity Shipped	M	For delivery products, the total number of delivery products that a supplier has shipped since the start of the simulation.		
Order Quantity Ordered	M	For source products, the total number of source products that a buyer has ordered from its suppliers since the start of the simulation.		
Order Quantity Received	M	For source products, the total number of source products that a buyer has received from its suppliers since the start of the simulation.		

Product Composite

General Tab				
Group/Name	P/M	Description	Process	See Also
Preferences Product Preference	P	<p>A number representing the priority of the delivery product, where the lower number means a higher priority. The default value is 1.</p> <p>You can use this number to choose which delivery product to deliver first when configuring the Order Selection parameters of the Deliver category and which finished product to make first when configuring the Build Selection parameters of the Make category.</p> <p>You also use this number to determine which delivery products to deliver first when using a push planning strategy when a role makes and/or delivers multiple products and when components are shared.</p> <p>This parameter is only relevant for delivery products.</p>	Order/ Product Build	<ul style="list-style-type: none"> • “Configuring Order Selection Parameters” on page 418 • “Configuring Build Selection Parameters” on page 437 • “Using Push Mode Planning” on page 515
Preferences Supplier Preference	P	<p>A number that represents the priority as a supplier of the role associated with this delivery product. The smaller the number, the more likely a downstream buyer will choose this supplier when issuing purchase awards, based on Supplier Preference, using contracts. The default value is 1.</p> <p>This parameter is only relevant for delivery products.</p>	Contracts	“Configuring the Supplier Selection Criteria” on page 484
Preferences Customer Preference	P	<p>A number representing the priority of a downstream buyer’s source product, where the lower number means a higher priority. The default value is 1.</p> <p>You can use this number to choose which delivery product to deliver first when configuring the Order Selection parameters of the Deliver category of the upstream supplier.</p> <p>This parameter is only relevant for source products.</p>	Order/ Product	“Configuring Order Selection Parameters” on page 418

Product Composite

Demand Tab				
Group/Name	P/M	Description	Process	See Also
Demand Details Demand Start Time	P	The time before which a Consumer role creates its first demand order for source products, from the start time of the simulation. The default value is one day. Note: The parameters on the Demand tab are only relevant for the source products of a Consumer role.	Order/ Product	“Configuring Demand and Change Orders through a Demand Report” on page 233
Demand Details Demand Stop Time	P	The time after which the Consumer role stops placing demand orders for source products, from the start time of the simulation. The default value is 521 weeks and 3 days, which is 10 years.		
Demand Details Use Demand Input Report Demand Input Report Name	P	Whether to import order demand parameters from the specified report or use the Demand Order Start Time, Demand Order Stop Time, Demand Order Duration, and Demand Order Size from the dialog. By default, the Use Demand Input Report option is disabled. When the Use Demand Input Report option is enabled, you configure the Demand Input Report Name parameter to be the name of the Demand Report from which to import the demand order parameters.		
Demand Order Duration Distribution Mode Mean	P	The frequency with which the Consumer role creates demand orders for source products. By default, you specify the Mean of a fixed distribution. The default value is 1 hour.		“Configuring the Mathematical Distribution” on page 154
Demand Order Size Distribution Mode Mean	P	The number of units of source products that a Consumer role orders, which determines initial order demand for the overall supply chain. By default, you specify the Mean of a fixed distribution. The default value is 100.		

Product Composite

Inventory Tab				
Group/Name	P/M	Description	Process	See Also
Policy Starting Product Inventory Level	P	The number of source or delivery products in inventory at the start of the simulation. Configure this parameter to avoid skewed order fulfillment lead times at startup while the model accumulates inventory. The default value is 0.	Order/ Product Build	Chapter 15, "Using Stock Planning Strategies" on page 447
Policy Maximum Inventory Level	P	The maximum number of source or delivery products the role can accommodate in its inventory. If the Inventory Level exceeds this maximum, the role discards the excess. The default value is 100,000,000. The only time the inventory could potentially exceed this maximum is if a supplier pushes products onto a buyer, causing the buyer to exceed its Maximum Inventory Level.		
Policy Inventory Control Strategy	P	When using a stock planning strategy in pull mode, the planning strategy to use for computing replenishment or build order size for stock source or delivery products, respectively. The options are: replenishment, forecast-customer, r-q, and q. The default is replenishment.		
Policy Safety Stock	P	When using a stock/replenishment planning strategy in pull mode, the minimum number of source or delivery products the role needs to maintain in inventory before creating a new replenishment or build order, respectively. The default value is 500. You configure this parameter when the Inventory Control Strategy is replenishment.		
Policy Minimum Reorder Quantity	P	When using a stock/replenishment planning strategy in pull mode, the minimum number of source or delivery products for which the role creates replenishment or build orders, respectively. The default value is 100. You configure this parameter when the Inventory Control Strategy is replenishment.		

Product Composite

Sourcing Tab

Group/Name	P/M	Description	Process	See Also
Policy Purchase Cost	P/M	<p>Parameter: For a Base Manufacturer role only, the cost of raw materials to make one delivery product. The default value is 0. The model uses this cost parameter to compute outgoing financial metrics for the Base Manufacturer role.</p> <p>Metric: The weighted average of the price a buyer pays for its source products, which is based on the Net Selling Price parameter of the upstream supplier's delivery product and the number of units purchased.</p>	Financial Build (Base Mfg.)	

Product Composite

Supplier Tab					
Group/Name	P/M	Description	Process	See Also	
Policy Desired Turnaround	P	The desired amount of time from when a buyer role places customer orders for its source products to when the buyer receives the shipment. The role uses this parameter to compute the Product Shipment Lead Time of the Source category. The default value is 1 week.	Order/ Product		
Policy Fulfillment Preference	P	Whether the role must receive complete shipments of the source products it orders (whole) or whether it can receive partial shipments (partial). The default value is whole. If the buyer requires whole shipments, the supplier waits to deliver shipments until it has enough delivery products for a complete order. If the buyer accepts partial shipments, the supplier delivers what it can when it can and creates back orders for the unfulfilled portion of the order.			
Policy Fulfillment Using Alternate Products	P	Whether to fulfill orders for source products with alternate products when generic products are not available. The default value is false, which always uses the generic product. To use alternate products, set this property to true.			“Creating a Product Hierarchy with Alternate Products” on page 115
Policy Push Stock Product	P	Whether to use a push planning mode when placing orders for source products. The default is false, which means the role uses a pull planning mode, whereby the buyer sources products from suppliers by placing orders, and a supplier delivers products to buyers, based on orders. Set this parameter to true to cause the supplier to push products onto buyers, based on contracts, and the buyer simply receives those products from suppliers when the supplier pushes them.			“Using Pull and Push Planning Modes” on page 503

Product Composite

Supplier Tab				
Group/Name	P/M	Description	Process	See Also
Contract Contract Start Time	P	The time from the start of the simulation until the role sends its first purchase request to upstream suppliers for source products. The default value is the start time of the simulation. Note: The parameters in the Contract group are also used when using a stock/forecast planning strategy and when using a push planning mode.	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479
Contract Contract Length	P	The length of time during which the contract is valid. The default value is 521 weeks and 3 days (10 years).		
Contract Contract Response Cycle Time	P	The number of days the supplier has to respond to a purchase request with a purchase response. The default value is 1 day.		
Contract Forecast Estimated Amount	P	An estimate of the number of source products the buyer expects to order over the life of the contract. The default value is 1000. Note: This parameter is only used when using a stock/forecast planning strategy and when using a push planning mode. However, when using contracts to choose suppliers, the Forecast Estimated Amount must be greater than zero.		
Contract Contract Repetition Count	P	The number of times to repeat the contract during the lifetime of the simulation. The default is 100,000.		

Product Composite

Supplier Selection Tab				
Group/Name	P/M	Description	Process	See Also
Supplier Selection Maximum Number of Suppliers	P	Specifies the number of qualified suppliers to which the buyer issues awards for its source products. The default value is 1. Note: You only need to configure the parameters in the Supplier Selection group when sourcing identical products from multiple suppliers.	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479
Supplier Selection Split Orders Between Suppliers	P	Determines whether to send the order to a single supplier (false) or whether to split the order among the specified number of suppliers (true). The default value is false.		
Supplier Selection Supplier Selection Criteria 1, 2, 3, 4	P	Determines how the buyer chooses qualified suppliers. The buyer chooses suppliers, based on the smallest value of the Supplier Selection Criteria 1. If two suppliers have the same value for the sort attribute, the buyer looks at Supplier Selection Criteria 2 to determine which supplier should receive an award, and so on.	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479

Product Composite

Supplier Selection Tab				
Group/Name	P/M	Description	Process	See Also
Supplier Selection Selected Supplier Proportions	P	<p>When Split Orders Between Suppliers is false and the Maximum Number of Suppliers is greater than 1, determines the percentage of the time, on average, that the order will go to each qualified supplier.</p> <p>When Split Orders Between Suppliers is true, determines the proportion of the order that goes to each qualified supplier.</p> <p>The percentage or proportions correspond to each chosen supplier, based on the Supplier Selection Criteria. The value is a comma-separated list of values, for example: .75, .25</p> <p>Note: You only need to configure this parameter when sourcing identical products from multiple suppliers.</p>	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479
Potential Suppliers Potential Suppliers	P	<p>The list of potential suppliers for the source product.</p> <p>Note: You must configure at least one potential supplier for all source products; otherwise, the role will not generate orders for source products.</p> <p>When sourcing identical products from multiple suppliers, you can choose multiple potential suppliers, and the buyer chooses the supplier based on the various supplier information configured for the source product.</p>		

Product Composite

Manufacturing Tab				
Group/Name	P/M	Description	Process	See Also
Policy Build Time Dependent on Order Size	P	Whether the Manufacturing Duration parameter of the Make category depends on the actual size of a batch. If Build Time Dependent on Order Size is false, the default, the time it takes to manufacture a batch of products is the entire Manufacturing Duration, regardless of whether the batch is the maximum size. If Build Time Dependent on Order Size is true and the size of the build order is for less than the Maximum Batch Size, the actual time it takes to manufacture the batch is adjusted proportionally.	Build	
Policy Minimum Batch Size Maximum Batch Size	P	The minimum and maximum number of delivery products to manufacture in each batch. The role can only manufacture finished products if the build order size is greater than or equal to the Minimum Batch Size and less than or equal to the Maximum Batch Size. The value of the Manufacturing Duration parameter of the Make category can be proportional to the batch size, based on the Build Time Dependent on Order Size option. The default values are 0 and 1000, respectively.		
Policy Total Products Accepted	M	The total number of delivery products that the role makes and accepts, then places in inventory for delivery.		
Policy Total Products Rejected	M	The total number of delivery products that the role rejects when the Build Yield parameter is a value less than 1.0.		
Policy Build Yield	P	A percentage of the batch size, which determines the number of delivery products the role can actually use to fulfill build orders. The rest is discarded. The default value is 1.0. If you configure this number to be less than 1.0, the Make category creates additional build orders for delivery products to make up for the loss.		

Product Composite

Delivery Tab				
Group/Name	P/M	Description	Process	See Also
Policy Published Delivery Lead Time	P	The typical standard lead time that the role quotes to its customers for a delivery product. The default value is 3 days. You can use this parameter to choose suppliers when using contracts.	Contracts	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479
Policy Net Selling Price	P	<p>The net price suppliers charge customers for each delivery product. The default value is 1.</p> <p>The model uses this price to compute the Purchase Cost metric of the downstream buyer's source product. It also uses it to compute financial metrics, including Financial Payments Total and Financial Collections Total for the role.</p> <p>You can use this parameter as the award criteria for choosing suppliers when using contracts.</p>	Financial	Chapter 17, "Modeling a Process with Multiple Suppliers" on page 479

Product Composite

Multipliers Tab				
Group/Name	P/M	Description	Process	See Also
Source Multiplier Receiving Duration	P	A number that the role multiplies by the Receiving Duration parameter of the Source category to determine the actual time it takes to place source products in inventory. The default value is 1.0, which means it takes exactly the Receiving Duration.	Order/ Product	"Configuring Multipliers for Timing Parameters" on page 199
Source Multiplier Verification Duration	P	A number that the role multiplies by the Verification Duration parameter of the Source category to determine the actual time it takes to place source products in inventory. The default value is 1.0, which means it takes exactly the Verification Duration.		
Source Multiplier Transfer Duration	P	A number that the role multiplies by the Transfer Duration parameter of the Source category to determine the actual time it takes to place source products in inventory. The default value is 1.0, which means it takes exactly the Transfer Duration.		

Product Composite

Multipliers Tab

Group/Name	P/M	Description	Process	See Also
Make Multiplier Engineering Duration	P	<p>A number that the role multiplies by the Engineering Duration of the Mb: Make Product and M3: Engineer-to-Order category to determine the actual time it takes to engineer a single batch of engineer-to-order delivery products. The default value is 1, which means it takes exactly the Engineering Duration.</p> <p>Note: This parameter is only relevant for the source products of a Manufacturer role and the delivery products of a Base Manufacturer role whose Order Type is ETO.</p>	Build	
Make Multiplier Order Release to Manufacturing Duration	P	<p>A number that the role multiplies by the Order Release to Manufacturing Duration parameter of the Make category to determine the actual time it takes from when the Make category receives a build order for delivery products to when it receives components. The default value is 1, which means it takes exactly the Order Release to Manufacturing Duration.</p> <p>Note: This parameter is relevant for the source products of a Manufacturer role and the delivery products of a Base Manufacturer role.</p>		
Make Multiplier Production Material Duration	P	<p>A number that the role multiplies by the Production Material Duration parameter of the Make category to determine the actual time it takes from when the role receives components to when it starts to manufacture delivery products. The default value is 1, which means it takes exactly the Production Material Duration.</p> <p>Note: This parameter is relevant for the source products of a Manufacturer role and the delivery products of a Base Manufacturer role.</p>	Build	"Configuring Multipliers for Timing Parameters" on page 199
Make Multiplier Manufacturing Duration	P	<p>A number that the role multiplies by the Manufacturing Duration parameter of the Make category to determine the actual time it takes to make one batch of delivery products. The default value is 1, which means it takes exactly the Manufacturing Duration.</p> <p>Note: This parameter is relevant for the delivery products of a Base Manufacturer role and Manufacturer role.</p>		

Product Composite

Multipliers Tab				
Group/Name	P/M	Description	Process	See Also
Deliver Multiplier Order Entry Duration	P	A number that the role multiplies by the Order Entry Duration parameter of the Deliver category to determine the actual time it takes to enter an order for a delivery product. The default value is 1, which means it takes exactly the Order Entry Duration.	Order/ Product	“Configuring Multipliers for Timing Parameters” on page 199
Deliver Multiplier Pick Duration	P	A number that the role multiplies by the Pick Duration parameter of the Deliver category to determine the actual time it takes to pick components from inventory for making a delivery product. The default value is 1, which means it takes exactly the Pick Duration.		
Deliver Multiplier Packing Duration	P	A number that the role multiplies by the Packing Duration parameter of the Deliver category to determine the actual time it takes to pack containers for shipment with a delivery product. The default value is 1, which means it takes exactly the Packing Duration.		
Deliver Multiplier Transportation Duration	P	A number that the role multiplies by the Transportation Duration parameter of the Deliver category to determine the actual time it takes to ship a container of delivery products. The default value is 1, which means it takes exactly the Transportation Duration.		

Product Composite

Metrics Tab				
Group/Name	P/M	Description	Process	See Also
Metrics Awaiting Orders	M	<p>For the source products of a Manufacturer role, the number of source products for which the role has created build orders but which the upstream supplier has not yet delivered.</p> <p>For the delivery products of a Base Manufacturer, Manufacturer, or Distributor role, the number of delivery products that downstream buyers have ordered and the supplier role has entered but which the supplier has not yet delivered.</p>	Source Planning Make Planning	
Metrics Products On Order	M	<p>For the source products of a Consumer, Manufacturer, or Distributor role, the number of source products for which the source planning process has created replenishment orders but which the upstream supplier has not yet delivered.</p> <p>For the delivery products of a Manufacturer role, the number of delivery products for which the make planning process has created build orders but which the upstream supplier has not yet received. For the delivery product of a Base Manufacturer role, the number of delivery products for which the make planning process has created build orders but which it has not yet manufactured.</p> <p>For the delivery products of a Distributor role that assembles components into kits, the number of delivery products for which the source planning process has created replenishment orders but which the upstream supplier has not yet received.</p>		
Metrics Received Inventory Level	M	<p>For the source products of a Consumer, Manufacturer, or Distributor role, the number of source products that the buyer role has received and placed in inventory since the start of the simulation.</p> <p>For the delivery products of a Base Manufacturer or Manufacturer role, or a Distributor role that assembles components into kits, the number of delivery products that the supplier role has manufactured or assembled into kits and has placed in inventory since the start of the simulation.</p>		

Product Composite

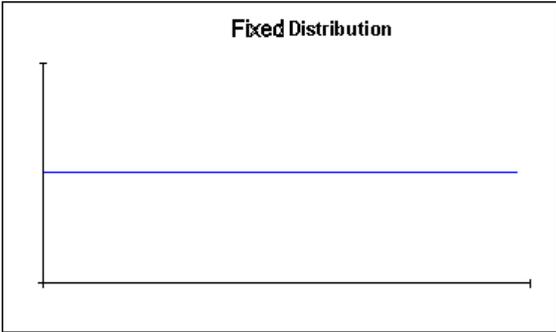
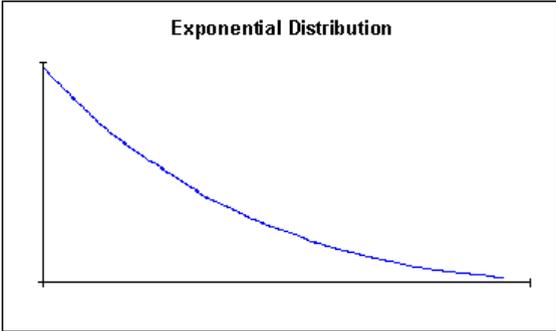
Metrics Tab				
Group/Name	P/M	Description	Process	See Also
Metrics Incoming Inventory Level	M	For the source products of a Consumer, Manufacturer, or Distributor role, the number of source products that the buyer role has received but not yet placed in inventory. For the delivery products of a Distributor role that assembles components into kits, the number of delivery products, or kits, that the role has assembled into kits but not yet placed in inventory.	Source Planning Make Planning	
Metrics Work in Progress	M	For the source products of a Manufacturer role, the number of source products that the role has taken from inventory and is waiting to manufacture into finished products.		
Metrics Inventory Level	M	For the source products of a Consumer, Manufacturer, or Distributor role, the number of source products currently in inventory. For the delivery products of a Base Manufacturer or Manufacturer, or a Distributor role that delivers its source products, the number of delivery products currently in inventory. Note: A Distributor role that assembles components into kits does not calculate the Inventory Level of its finished products.		
Metrics In Transit Inventory Level	M	For the delivery products of a Base Manufacturer or Manufacturer role, the number of delivery products that the role has taken from inventory and is waiting to deliver. For the delivery products of a Distributor role that assembles is components into kits, the total number of delivery products that the role has assembled into kits and is waiting to deliver.		

Product Composite

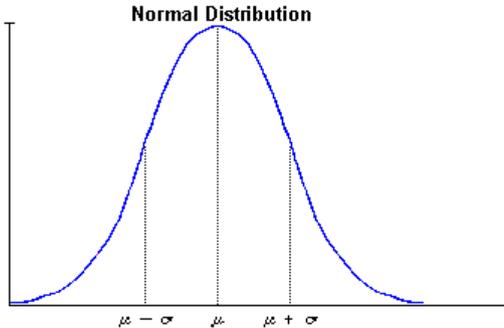
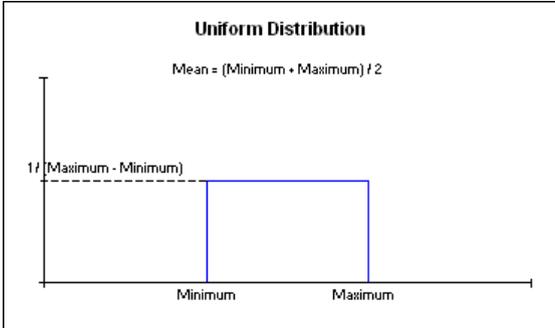
Metrics Tab				
Group/Name	P/M	Description	Process	See Also
Metrics Shipped Inventory Level	M	For the delivery products of a Base Manufacturer or Manufacturer role, the number of delivery products that the role has manufactured and shipped since the start of the simulation. For the delivery products of a Distributor role that assembles is components into kits, the total number of delivery products that the role has assembled into kits and shipped since the start of the simulation.	Source Planning Make Planning	
Metrics Pushed Inventory Level	M	For the delivery products of a Base Manufacturer or Manufacturer role, or a Distributor role that assembles components into kits, the number of delivery products that the role has actually delivered to downstream buyers, using a push planning strategy, since the start of the simulation.		
Metrics Manufacturing Batch Size	M	For the delivery products of a Base Manufacturer or Manufacturer role, or a Distributor that assembles components into kits, the size of the current batch of finished products or kits.		
Metrics Received Fulfillment Time	M	For the source products of a Consumer, Manufacturer, or Distributor role, the average amount of time from when downstream buyers order source products to when the buyer receives product shipments, in days.	Order/ Product	
Metrics Order Fulfillment Lead Time	M	For the delivery products of a Base Manufacturer, Manufacturer, or Distributor role, the average amount of time from when the role receives an order for delivery products from downstream buyers to when the buyer receives the product shipment.		

Distributions

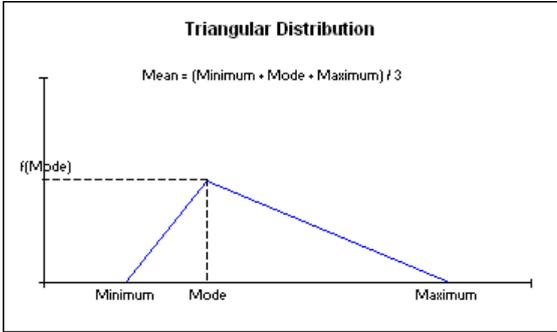
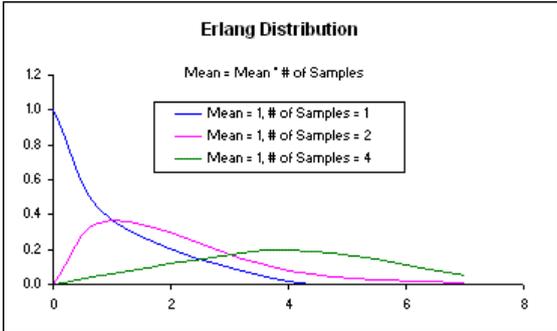
You can choose from a number of mathematical distributions when configuring Distribution Mode for Level 2 SCOR timing parameters and initial order demand. The available mathematical distributions and their associated parameters are:

Distribution	Parameters	Diagram	Description
Fixed Distribution	Mean	 <p>The diagram shows a coordinate system with a vertical y-axis and a horizontal x-axis. A solid blue horizontal line is drawn across the graph, representing a constant value. The text "Fixed Distribution" is centered above the line.</p>	Specifies a fixed distribution given a mean, which results in the same value being used for each sample.
Random Exponential	Mean	 <p>The diagram shows a coordinate system with a vertical y-axis and a horizontal x-axis. A blue curve starts at a high point on the y-axis and decays exponentially towards the x-axis as it moves to the right. The text "Exponential Distribution" is centered above the curve.</p>	Specifies a random sample with a built-in deviation, where the likelihood is greatest that the value will be less than the Mean or somewhat greater than the Mean; however, some small percentage of the time, the value is significantly greater than the Mean. A random exponential function most closely models the frequency with which a process receives inputs in the real world.

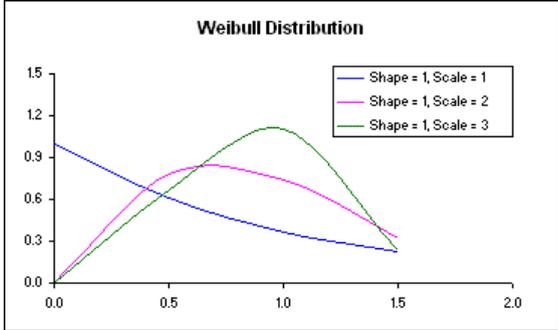
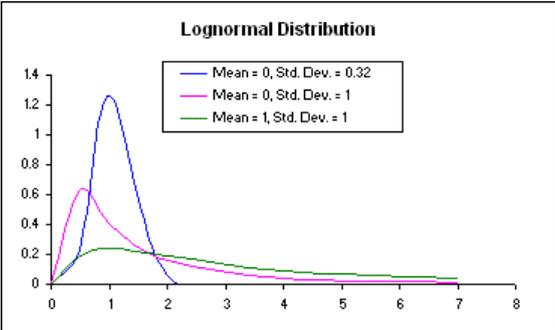
Distributions

Distribution	Parameters	Diagram	Description
Random Normal	Mean Standard Deviation	 <p>The diagram shows a bell-shaped curve representing a normal distribution. The peak of the curve is labeled μ. Two vertical dashed lines are drawn on either side of the peak, labeled $\mu - \sigma$ and $\mu + \sigma$.</p>	<p>Specifies that the value varies around the Mean, based on the Standard Deviation. For example, if the Mean is two hours and the Standard Deviation is one hour, then, on average, the value is two hours. The value varies from some amount less than two hours to some amount greater than two hours, based on a normal distribution, where 95% of the sample points fall within two standard deviations of the Mean.</p> <p>You can configure the Standard Deviation to be zero, in which case the model uses the same value each time.</p>
Random Uniform	Min Max	 <p>The diagram shows a rectangular distribution. The horizontal axis is labeled with 'Minimum' and 'Maximum'. The vertical axis is labeled with $1 / (\text{Maximum} - \text{Minimum})$. The text 'Uniform Distribution' and the formula 'Mean = (Minimum + Maximum) / 2' are also present.</p>	<p>Specifies that every value between the Min and the Max is equally likely. The use of this distribution often implies a complete lack of knowledge about the shape of the data, other than the minimum and maximum values.</p>

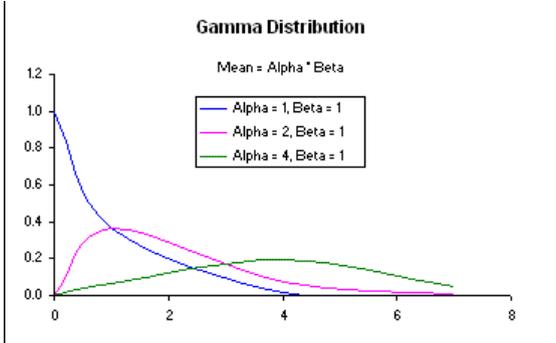
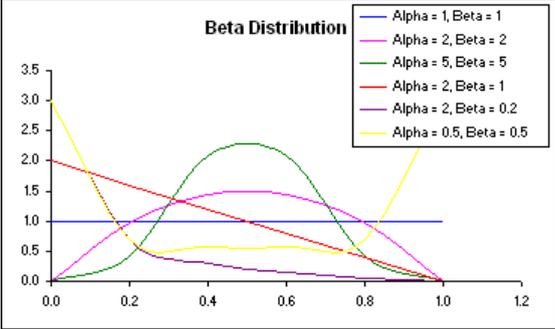
Distributions

Distribution	Parameters	Diagram	Description
Random Triangular	Min Mode Max	 <p style="text-align: center;">Triangular Distribution</p> <p style="text-align: center;">$\text{Mean} = (\text{Minimum} + \text{Mode} + \text{Maximum}) / 3$</p>	Appropriate when a most likely value, called the Mode, is known, and a linear distribution between the Min and the Mode and between the Mode and the Max can be assumed. Triangular is the default Mode Type.
Random Erlang	Mean	 <p style="text-align: center;">Erlang Distribution</p> <p style="text-align: center;">$\text{Mean} = \text{Mean} * \# \text{ of Samples}$</p>	The sum of independent and identically distributed exponential samples with the specified Mean. It is a special case of the Gamma distribution where the Beta parameter is an integer that represents the number of samples.

Distributions

Distribution	Parameters	Diagram	Description
Random Weibull	Shape Scale		Often used for modeling the time to failure, called the reliability, of independent, identical components. When the Shape equals 1, the Weibull distribution reduces to the Exponential distribution.
Random Lognormal	Mean Standard Deviation		The distribution of data whose natural logarithm follows the normal distribution, given a Mean and Standard Deviation. This distribution is appropriate for situations where the value of a data point is a random proportion of the previous data point, for example, the distribution of personal incomes.

Distributions

Distribution	Parameters	Diagram	Description
Random Gamma	Alpha Beta	 <p>Gamma Distribution</p> <p>Mean = Alpha * Beta</p> <ul style="list-style-type: none"> Alpha = 1, Beta = 1 Alpha = 2, Beta = 1 Alpha = 4, Beta = 1 	<p>A generalization of the Erlang distribution where conceptually the number of exponential samples need not be an integer value. With different parameter settings, the Gamma distribution can take on many different shapes and can, therefore, represent a wide variety of different physical processes.</p>
Random Beta	Alpha Beta Min Max	 <p>Beta Distribution</p> <ul style="list-style-type: none"> Alpha = 1, Beta = 1 Alpha = 2, Beta = 2 Alpha = 5, Beta = 5 Alpha = 2, Beta = 1 Alpha = 2, Beta = 0.2 Alpha = 0.5, Beta = 0.5 	<p>Takes on a wide variety of different shapes for different values of the Alpha and Beta parameters, including bell-shaped, U-shaped, symmetric, or asymmetric. The Beta distribution is defined over a finite range (0, 1) that is then scaled, using the Min and Max parameter values.</p>

Keyboard Shortcuts

Menu	Keyboard Shortcuts for Menus	Description
File	Ctrl + N	New
	Ctrl + O	Open
	Ctrl + S	Save
	Ctrl + P	Print
Edit	Ctrl + A	Select All
	F4	Properties
	Delete key	Delete
Layout	Ctrl + T	Order > Bring to Front
View	Ctrl + =	Zoom In
	Ctrl + - (minus)	Zoom Out
	Ctrl + arrow keys	Nudge Up, Down, Right and Left
Go	Alt + left arrow key	Back
	Alt + right arrow key	Forward
	Escape key	Stop Download
	F5	Refresh

Keyboard Shortcuts

Additional Keyboard Shortcuts

Description

Double-click object or press F4

Displays properties dialog for an item.

Ctrl + right click on an object with detail

Shows the object detail.

Left click on an indicator arrow

Hides the indicator arrow.

Ctrl + right click on a workspace

Hides the workspace.

Index

A

All Products parameter
 Deliver categories 24
 Make categories 18
 Source categories 13
Asset Turns metric 7
Awaiting Orders metric 45

B

Build Orders Completed metric 18
Build Orders Started metric 18
Build Time Dependent on Order Size
 parameter 40
Build Yield parameter 40

C

Cash Flow Period metric 7
Cash-to-Cash Cycle Time metric 7
categories, configuring 1
Change Orders Received metric
 Enable Deliver category 23
Change Orders Sent metric
 Enable Source category 12
 Source category 13
Compensate for Yield parameter 11
Continuous Planning parameter 11
Contract Length parameter 37
Contract Repetition Count metric 37
Contract Response Cycle Time
 parameter 37
Contract Start Time parameter 37

Contracts Established metric
 Enable Deliver category 23
 Enable Source category 12
Create Customer Order cost
 parameter 16
Create Customer Order Metric 17
Customer Collections cost
 parameter 29
Customer Collections Metric 30
Customer Invoicing cost parameter 29
Customer Invoicing Metric 30
Customer Preference parameter 32
Cutoff Duration parameter
 Deliver category 26
 Make category 20
Cutoff parameter
 Deliver category 26
 Make category 20
Cutoff Value parameter
 Deliver category 26
 Make category 20

D

Days of Supply metrics
 Finished Goods 6
 Inventory 6
 Raw Materials 6
 Work in Progress metric 6
Days Sales Outstanding metric 7
Deliver category 24
Delivery Performance metric 23
Delivery Products parameter 8
delivery products, configuring 1
Demand Input Report Name
 parameter 33

Demand Order Duration parameter 33
Demand Order Size parameter 33
Demand Start Time parameter 33
Demand Stop Time parameter 33
Desired Turnaround parameter 36
details, configuring for roles 1
Distribution Mode parameter 48
 Demand Order Duration 33
 Demand Order Size 33
 Engineering Duration 19
 Manufacturing Duration 21
 Move to Delivery Duration 21
 Order Entry Duration 25
 Order Release to Manufacturing
 Duration 19
 Packing Duration 27
 Pick Duration 27
 Production Material Duration 21
 Receiving Duration 14
 Transfer Duration 14
 Transportation Duration 27
 Verification Duration 14
Distributions 48

E

ECO cost parameter 22
ECO Metric 22
Enable Deliver category 23
Enable Source category 12
Engineering Duration Multiplier
 parameter 43
Engineering Duration parameters 19

Index

F

Fill Rates metric 24
Financial Bookings metric
 Deliver category 28
 role 5
Financial Collections Total metric
 Deliver category 28
 role 5
Financial Collections within Financial
 Period metric
 Deliver category 28
 role 5
Financial Obligations metric
 role 5
 Source category 15
Financial Outstanding metric
 Deliver category 28
 role 5
Financial Payment Terms parameter 4
Financial Payments Total metric
 role 5
 Source category 15
Financial Payments within Financial
 Period metric
 role 5
 Source category 15
Financial Period parameter
 role 4
Finished Goods metric 6
Fixed Distribution 48
Forecast Estimated Amount
 parameter 37
Fulfillment Preference parameter 36
Fulfillment Using Alternate Products
 parameter 36

H

Highlight Color parameter 2

I

In Transit Inventory Level metric 46
Incoming Inventory Level metric 46
Initial Plan Delay parameter 10
Inventory Control Strategy
 parameter 34
Inventory Level metric 46
Inventory metric 6
Invoice cost parameter 16
Invoice Metric 17

K

Keyboard Shortcuts 53

L

Label parameter 10
Level 1 and Level 2 1
Log Financials parameter 9
Log Orders parameter 9
Log Products parameter 9
Log Purchases parameter 9

M

Make category 18
Make Cycle Time metric 18
Manufacturing Batch Size metric 47
Manufacturing Duration Multiplier
 parameter 43
Manufacturing Duration parameter 21
Maximum Batch Size parameter 40

Maximum Capacity Used metric 3
Maximum Inventory Level metric 34
Maximum Number of Suppliers
 parameter 38
Minimum Batch Size parameter 40
Minimum Reorder Quantity
 parameter 34
Move to Delivery Duration parameter 21

N

Net Selling Price parameter 41
Number of End Products metric 3
Number of Financial Periods metric 4
Number of Planning Periods metric 10

O

Order Entry cost parameter 29
Order Entry Duration 25
Order Entry Duration Multiplier
 parameter 44
Order Entry Metric 30
Order Entry to Manufacturing Time
 metric 18
Order Entry to Ship Time metric 24
Order Fulfillment cost parameter 29
Order Fulfillment Lead Time metric 47
Order Fulfillment Metric 30
Order Management Costs metric 8
Order Release to Manufacturing
 Duration Multiplier parameter 43
Order Release to Manufacturing
 Duration parameters 19
Order Type parameter 31

Index

Orders Received metric
 Deliver category 24
 Enable Deliver category 23
Orders Sent metric
 Enable Source category 12
 Source category 13

P

Packing cost parameter 29
Packing Duration Multiplier
 parameter 44
Packing Duration parameter 27
Packing Metric 30
Perfect Order Fulfillment metric 23
Pick cost parameter 29
Pick Duration Multiplier parameter 44
Pick Duration parameter 27
Pick Metric 30
Plan category 10
Planning Period parameter 10
Potential Suppliers parameters 39
Process Number metric 2, 10
Product Composite 31
 product composites, configuring 1
Product Name metric 31
Product Preference parameter 32
Product Shipment Lead Time metric 13
Product Shipments Received metric
 Enable Source category 12
 Source category 13
Product Shipments Sent metric
 Deliver category 24
 Enable Deliver category 23
Production Material Duration Multiplier
 parameter 43

Production Material Duration
 parameters 21
Production Material Handling cost
 parameter 22
Production Material Handling Metric 22
Products On Order metric 45
Published Delivery Lead Time
 parameter 41
Purchase Cost metric 35
Purchase Cost parameter 35
Push Stock Product parameter 36
Pushed Inventory Level metric 47

Q

Quantity Ordered metric 31
Quantity Received metric 31
Quantity Shipped metric 31
Quantity to Order metric 31

R

Random Beta distribution 52
Random Erlang distribution 50
Random Exponential distribution 48
Random Gamma distribution 52
Random Lognormal distribution 51
Random Normal distribution 49
Random Triangular distribution 50
Random Uniform distribution 49
Random Weibull distribution 51
Raw Materials metric 6
Ready to Ship Time metric 24
Received Fulfillment Time metric 47
Received Inventory Level metric 45
Receiving cost parameter 16

Receiving Duration Multiplier
 parameter 42
Receiving Duration parameters 14
Receiving Metric 17
Role 2
Role Label metric
 categories 10
 product composites 31
Role Label parameter 2
roles
 configuring 1
 configuring details for 1

S

Safety Stock parameter 34
Selected Supplier Proportions
 parameters 39
Shipped Inventory Level metric 47
Site Latitude parameter 2
Site Longitude parameter 2
Sort Criteria parameter
 Deliver category 25
 Make category 20
Sort Direction parameter
 Deliver category 25
 Make category 20
Source category 13
Source Products parameter 8
 source products, configuring 1
Specific Product Name parameter
 Deliver categories 24
 Make categories 18
 Source categories 13
Split Orders Between Suppliers
 parameter 38

Index

Starting Product Inventory Level
parameter 34
Statistical Metrics Period parameter 3
Supplier On-Time Performance
metric 12
Supplier Preference parameter 32
Supplier Selection Criteria
parameters 38

T

Total Products Accepted metric 40
Total Products Rejected metric 40
Transaction Logging Enabled
parameter 9
Transaction Logging Report
parameter 9
Transfer cost parameter 16
Transfer Duration Multiplier
parameter 42
Transfer Duration parameters 14
Transfer Metric 17
Transportation cost parameter 29
Transportation Duration Multiplier
parameter 44
Transportation Duration parameter 27
Transportation Metric 30

U

Upgrade parameter
categories 10
role 2
Use Demand Input Report
parameter 33

V

Verification cost parameter 16
Verification Duration Multiplier
parameter 42
Verification Duration parameters 14
Verification Metric 17

W

Work in Progress metric
product composites 46
role 6