



QAD Enterprise Applications
Standard & Enterprise Edition

Training Guide Configured Products

70-3058D
QAD 2011 Standard & Enterprise Edition
Lab: Enterprise Edition 2011 - Addons r02 - Training
Workspace: 10USA > 10USACO
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About This Course

Course Description

This course covers the setup and sales order process of the core QAD Configured Products functionality

Course Objectives

By the end of this class, students should be able to:

- Identify key business considerations before setting up configured products in QAD Enterprise Applications
- Set up configured products in QAD Enterprise Applications
- Process configured products in QAD Enterprise Applications

Audience

This course is intended for people responsible for setting up and maintaining configured items in QAD Enterprise Applications and for sales order entry personnel responsible for taking sales order for these items.

Prerequisites

A good working skill with the user interface and QAD screen handling characteristics is necessary for this course. A basic knowledge of sales order processing is required for this course

Course Credit & Scheduling

This course is designed to be taught in 1 day. It is valid for 6 credit hours.

Virtual Environment Information

The hands-on exercises in this book should be used with the Enterprise Edition 2011 - Addons r02 - Training environment, in the 10USA > 10USACO workspace.

QAD Web Resources

From QAD's main site, you can access QAD's Learning, Support, or Print Solution sites.

<http://www.qad.com/>

Chapter 1

Introduction

Overview

Course Overview

➤ Introduction to Configured Products

- Business Considerations
- Set up Configured Products
- Process Configured Products

Terminology

Best Pricing Terminology

- Configured Item
- Configured Item Type
- ATO - Assemble to Order
- Final Assembly Order
- KIT
- Feature
- Option
- Mandatory Option
- Default Option



CP-1N-050

Configured Item

An Item defined in Item Master Maintenance that can be configured with options at time of sales order entry.

Configured Item Type

A Configured Item may be either ATO or KIT.

ATO - Assemble to Order

A Configured Item that includes options that are assembled into a finished item per a specific sales order.

KIT

A Configured Item that is simple a collection of items, as in a repair kit

Final Assembly Order

A work order linked to a specific sales order to assemble the options into the final item.

Option

An item, or items, defined in Item Master Maintenance, that can be selected for inclusion in a configured item.

Feature

A user defined term, not defined in Item Master Maintenance, that is used to group options into logical categories.

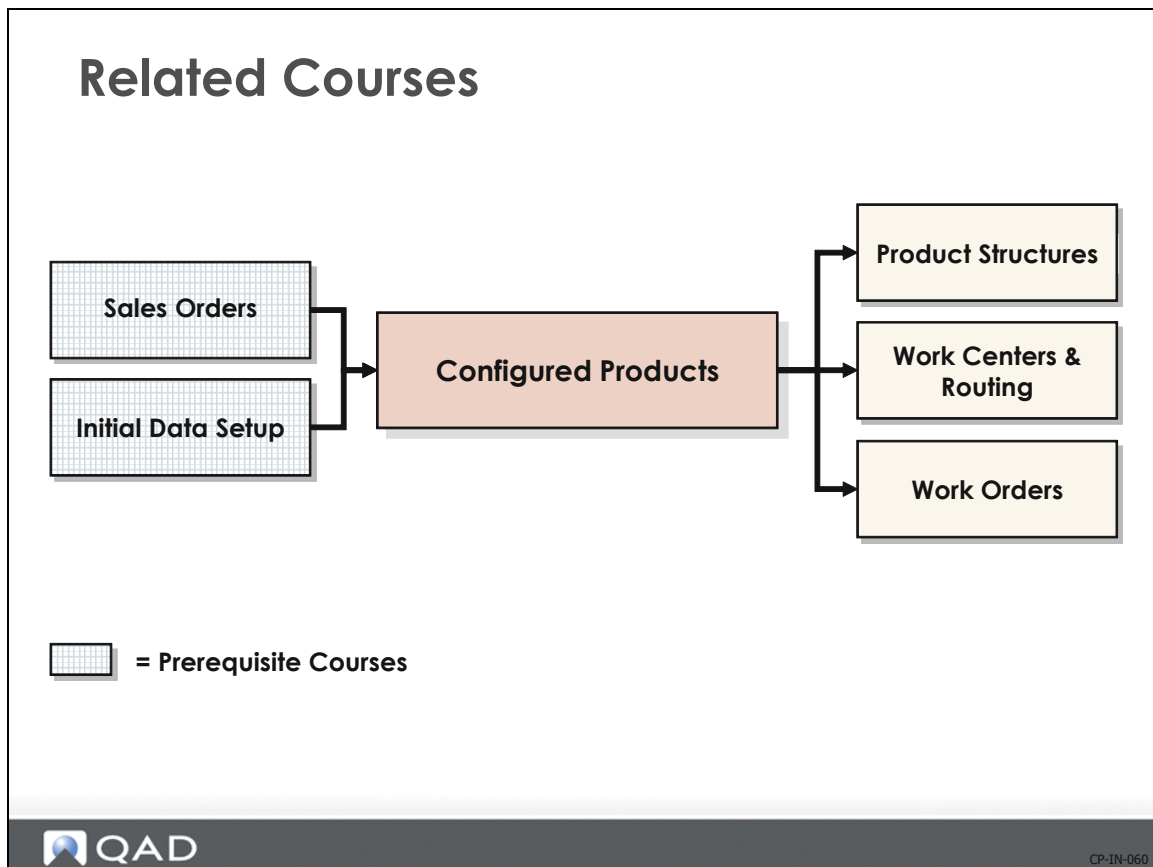
Mandatory Feature

A feature that must be selected, that is the configured item cannot be made without this feature.

Default Option

An option that will be selected by default if none is selected, often used with mandatory features to insure the configuration can be built.

Related Courses



Chapter 2

Business Considerations

Chapter Learning Objectives

Business Considerations

- Assembled Configured Products
- Kitted Products
- Final Assembly Orders
- Ship from Work in Process
- Complex Configurations



CP-BC-020

Business Considerations. Assembled Configured Products. QAD core product Configurator handles simple additive processes such as are used with a notebook PC. You select a basic model then specify the various components, Disk size, memory, DVD writer, etc.

This configuration is built on line during the sales order entry process.

The pricing of configured items is simply the sum of the component prices.



Kitted Products. In a kit, no assembly is required. It is simply a collection of items. Kits are often used for field installation, maintenance, repair or upgrade.

For example, QMI Lubricant can be ordered separately or as part of a medical supply or surgical kit.

Final Assembly Orders. As in the example of the notebook PC, the release of the sales order creates a linked work order to manage the assembly process. It is necessary that the manufacturing route for the end item configured product have sufficient detail to allow assembly of all components as the system does not allow routing changes based on the options selected.

Ship from Work in Process. The final assembly work order can then be shipped directly from work in process, rather than closing to a stores location first.

Complex Configurations. If your configured products require complex configuration control such as " if you select this option, you cannot select some other option. Or selection of a given option requires the deletion of a base module or component. Then you will require the optional Configurator.

Chapter 3

Setup

Configured Products Setup

Configured Products Setup

- Configured Products Control

Configured Products Control

Go To Actions Copy Print Preview

Receive F/A in SO: ☒

Receive F/A in WO: ☒

Unit F/A Orders: ☐

Automatic Backflush: ☐



CP-SU-020

Control File

Receive F/A in SO. Enter Yes to have sales order shipments automatically record a receipt on final assembly work orders. This does not happen for unit final assembly orders, because the system cannot know which of several orders to complete.

Receive F/A in WO. If Yes, you can receive items from FAS orders using Work Order Receipt (16.11) or Work Order Receipt Backflush (16.12), maintaining complete component traceability for serial-numbered items.

Unit F/A Orders. Set to Yes only when separate (unit) final assembly work orders, each with an order quantity of one, should be created for multiple quantity orders of a serial-controlled configured product. This option may be necessary if full lot/serial traceability is required for serialized products. These items have Lot/Serial set to S in Item Master Maintenance.

Automatic Backflush. Determines whether the component issue transactions for configured items that are shipped without a final assembly order are created without having to enter shipment information for each sales order line. These items must be defined as kits.

Setup Configured Item

Configured Item Setup

Item Master Maintenance

Go To Actions Copy Print Preview Attach

Item: 01040 Item Number: 01040 (2) Description: Industrial Ultrasound

Item Planning Price

Item Item Data Inventory Item Shipping Data

Item

Item Number: 01040 Description: Industrial Ultrasound

Unit of Measure: EA

Item Data

Prod Line: 10	Item Type: FINGOOD	Drawing: F-40000-B62
Added: 6/22/2004	Status: ACTIVE	Revision: CC
Design Group: PRODMGMT	Group: IND	Drawing Loc: B4-3
Promo Group: IND	Price Break Category:	Size: 10

Item Inventory Data

ABC Class: A	Average Interval: 90
Lot/Serial Control: S	Cycle Count Interval: 90
Site: 10-100	Shelf Life:
Location: 010	Allocate Single Lot: <input type="checkbox"/>
Location Type:	Key Item: <input type="checkbox"/>
Auto Lot Numbers: <input type="checkbox"/>	PD Receipt Status: <input type="checkbox"/> Active: <input type="checkbox"/>
Lot Group:	WD Receipt Status: <input type="checkbox"/> Active: <input type="checkbox"/>
Article Number: F40000-0469	Memo Order Type:



CP-SU-030

In Item Master Maintenance (1.4.1), set up the item to be configured.

Configured Item Planning Data

Configured Item Planning Data

Item Master Maintenance

Go To Actions Copy Print Preview Attach

Item: 01040 Item Number: 01040 (2) Description: Industrial Ultrasound

Item Planning Price

Item

Item Number: 01040 Description: Industrial Ultrasound

Unit of Measure: EA

Item Planning Data

Mstr Sched: ☒
Plan Orders: ☒
Time Fence: 0
MRP Required: ☐
Order Policy: LFL
Order Qty: 0
Batch Qty:
Order Period: 0
Safety Stock: 0
Safety Time: 0
Reorder Point: 0
Revision: CC
Issue Policy: ☒

Buyer/Planner: 1-01
Supplier:
PO Site:
Purchase/Manufacture: C
Configuration Type: ATO
Inspect:
1.0 Ins LT: 0 Cum LT: 0
Mfg LT: 4 Pur LT: 0
ATP Enforcement: NONE
Family ATP:
ATP Horizon: 0
Run Seq 1:
2:

Phantom: ☐
Minimum Order: 1
Maximum Order: 1
Order Multiple: 1
Op Based Yield: ☐
Yield Percent: 100.00%
Run Time: 17.000
Setup Time: 7.500
EMT Type: NON-EMT
Auto EMT Processing: ☐
Network Code:
Routing Code: 01040
BOM/Formula:

CP-SU-040

Configured Items have a Purchase/Manufacture Code of C. There are two Configuration Types to choose from ATO. Assemble To Order and KIT. ATO as the name implies is a collection of items that must be assembled into the final configuration for a specific order. You could think of a custom bicycle where you selected a type and size of frame, then wheels, crank sets, handle bars, seat and seat post, gear sets, etc. In each case you are adding an item along with its cost and price to a unique structure for a specific order.

Kits are simply a collection of items with no assembly. For example we might offer a tire and tube replacement KIT that would include two tires, two inner tubes and two valve stem caps. They would simply ship in a box for user installation. The actual KIT configuration would be determined by the type and size of the tires and tubes.

The configured item has no cost or price data. The final price and cost will be calculated from the costs and prices of the individual items.

Configured Item Planning Data

Item Master Maintenance

Go To Actions Copy Print Preview Attach

Item: 60052 Item Number: 60052 Description: High Performance CPU

Item Planning Price

Planning

Item

Item Number: 60052 Description: High Performance CPU

Unit of Measure: EA

Item Planning Data

Mstr Sched: ☐ Buyer/Planner: 1-02 Phantom: ☐

Plan Orders: ☒ Supplier: Minimum Order: 5

Time Fence: 0 PO Site: Maximum Order: 50

MRP Required: ☒ Purchase/Manufacture: P Order Multiple: 5

Order Policy: POQ Configuration Type: Op Based Yield: ☐

Order Qty: 0 Inspect: ☒ Yield Percent: 100.00%

Batch Qty: Ins LT: 1 Cum LT: 0 Run Time: 0.000

Order Period: 7 Mfg LT: 0 Pur LT: 5 Setup Time: 0.000

Safety Stock: 25 ATP Enforcement: NONE EMT Type: NON-EMT

Safety Time: 5 Family ATP: ☐ Auto EMT Processing: ☐

Reorder Point: 50 ATP Horizon: 0 Network Code:

Revision: Run Seq 1: Routing Code:

Issue Policy: ☒ 2: BOM/Formula:

The actual items to be configured are set up as any other item. In our example, item 60052 high performance CPU is a purchased item and we have set the order policy to POQ. Cost data is added as with any other purchased or manufactured item.

Item Planning Data for configured items should be carefully considered as these items may also be used individually, as used in kits.

Configured Item Structure Maintenance

Configured Structure Maintena... x

Go To Actions Copy Print Preview Attach

Parent Item: 01040 (2) Component Item: 60050

Parent Item: 01040 Item: CC UM: EA
Industrial Ultrasound
Feature: CPU

Mandatory: ☒

Component Item: 60050 Base Unit / CPU
Start Effective: [dropdown]

Quantity Per: 1.0 EA Structure Type: 0
Scrap: 0.00% Rev: [dropdown]
Forecast Percent: 80.00%

Default Option: ☒

Lead Time Offset:
Operation:
Start Effective:
End Effective:
Sequence Number:
Remarks:

QAD CP-SU-060

This function allows you to create product structure records outside of the Product Structure function. All of the items must be previously defined in Item Master Maintenance. The organization into Features is the unique function of this transaction. In our example, we will have two Features: CPU and battery.

The feature CPU offers two options: 60050 Base Unit /CPU and 60052 High Performance CPU.

The feature may be designated as Mandatory, as shown here, meaning at least one of the options must be selected.

The option may be designated as Default, as shown here, to indicate you will receive this option is no selection is made.

In this example, if you make no selection you will receive the standard base unit/CPU.

Note the forecast of 80% indicating we expect 80% of the orders for display racks to include a standard base unit/CPU.

Configured Item Structure Maintenance

Configured Structure Maintena... X

Go To Actions Copy Print Preview Attach

Parent Item: 01040 (2) Component Item: 60052

Parent Item: 01040 Item: CC UM: EA
Industrial Ultrasound
Feature: CPU Mandatory: ☒

Component Item: 60052 High Performance CPU
Start Effective:

Quantity Per: 0.0 EA Structure Type: 0
Scrap: 0.00% Rev:

Forecast Percent: 20.00%

Default Option: ☒
Lead Time Offset:
Operation:
Start Effective:
End Effective:
Sequence Number:
Remarks:



CP-SU-070

Here we see the setup for the other CPU option. Note the quantity per is zero indicating you must specify a quantity to receive any. Also the forecast has been set to 20% indicating we expect 20% of the orders for industrial ultrasound products to include high performance CPUs.

Configured Item Structure Maintenance

Configured Structure Maintenance

Go To Actions Copy Print Preview Attach

Parent Item: 01040 (2) Component Item: 60005

Parent Item: 01040 Item: CC UM: EA
Industrial Ultrasound
Feature: Battery Mandatory: ☐

Component Item: 60005 Battery
Start Effective:

Quantity Per: 4.0 EA Structure Type: 0
Scrap: 0.00% Rev:
Forecast Percent: 60.00%
Default Option: ☐
Lead Time Offset:
Operation:
Start Effective:
End Effective:
Sequence Number:
Remarks:




CP-SU-080

In this view we see the setup for the battery feature. Note the quantity per is 4. The Structure Type is set to O for option. This will also be seen in the Product Structure Maintenance function. Other fields are the same as Product Structure Maintenance such as start and end effectivity dates, scrap percent and lead time offset.


Configured Structure Inquiry

Configured Structure Inquiry

10/28/10



Parent	Item	Description	UM	As Of	Levels	Output
01040		Industrial Ultrasound	EA	10/28/10		PAGE
Level	Feature	Component Item	Quantity	Per	UM	Ph T Iss
1		02003	2.0		EA	
		Standard Connector				
.2		90031	2.0		EA	
		Packaging				
.2	Operation 10	62050	0.0001		RL	
		Beryllium Copper				
.2	Operation 30	62050	0.0001		RL	
		Beryllium Copper				
1		50001	1.0		EA	
		Probe Unit - 10 Mhz				
.2		02003	1.0		EA	
		Standard Connector				
..3		90031	2.0		EA	
		Packaging				
..3	Operation 10	62050	0.0001		RL	
		Beryllium Copper				
..3	Operation 30	62050	0.0001		RL	
		Beryllium Copper				
.2		60004	1.0		EA	
		Transducer - 10 Mhz				
1		50002	1.0		EA	
		Probe Unit - 500 kHz				
.2		02004	1.0		EA	
		Laptop Connector				
..3		90031	2.0		EA	
		Packaging				
..3	Operation 10	62050	0.0001		RL	
		Beryllium Copper				
..3	Operation 30	62050	0.0001		RL	
		Beryllium Copper				
.2		60016	1.0		EA	
		Transducer -500 kHz				


CP-SU-090

The inquiry allows you to view the configured structure. This will reflect the quantities for the default mandatory options. In sales order maintenance if you select Standard Bill you will receive the items and quantities shown here.

Chapter 4

Process

Configured Products Process

Sales Order Maintenance

Sales Order Maintenance X

Go To Actions Copy Print Preview Attach

Sales Order: 10S10004 Order: 10S10004 Sold-To: 10C1000

Header Lines Trailer

Lines Line Details Freight Data Tax Info Comments

Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
1	01040	1.0	EA	4,570.00	0.0	4,570.00

Line Details

Desc: Industrial Ultrasound

Loc: 010 Site: 10-100

USD Cost: 2,201.7682

Lot/Serial:

Qty Allocated:

Qty Picked:

Qty Shipped:

Qty to Invoice:

Salesperson 1: 10SP01

Commission 1: 5.00%

Category:

Standard Bill: ☒

Effective Date: 10/29/2010

Final Assembly:

ID: ATO

Configuration: ATO

Due Date: 10/29/2010

Perform Date:

Pricing Date: 10/28/2010

Multiple: ☐

Fixed Price: ☒

Credit Terms Int: 0.00

Ship Type:

UM Conversion: 1.0000

Consume Fcst: ☒

Detail Alloc: ☐

Taxable: ☒

Freight List: 10FRT

Comments: ☐



CP-PR-020

Sales Order Maintenance

In sales order maintenance as you enter a line item for a configured product a popup appears the indicates the standard bill, and shows that this item is a ATO, assembly To Order item, as opposed to a KIT, indicating it will require Final Assembly scheduling. Should you select the Standard Bill the system configures the mandatory default options automatically thus saving some data entry effort.

Sales Order Bill Inquiry - Standard Bill

Sales Order Bill Inquiry - Standard Bill

Sales Order Bill Report - 10/29... X

Sales Order Bill Report

10USA

10/28/10 16:57:10

Page: 1

Sales Order: 10S10004 Sold-To: 10C1000 Wal-Mart

Ln	Item Number	Feature	Component	Description	Required	Qty Ordered	Qty Shipped
1	01040			Industrial Ultrasound	10/29/10	1.0	0.0
			02003	Standard Connector	2.0		
			50001	Probe Unit - 10 Mhz	1.0		
			50002	Probe Unit - 500 kHz	1.0		
			50020	Industrial Housing	1.0		
			60001	Durable Plastic Housing	1.0		
			60003	Keyboard	1.0		
			60005	Battery	1.0		
			60008	Printer	1.0		
			60015	Keyboard Cover	1.0		
			60020	Cooling Fan	1.0		
			60021	Battery Backup, Alkaline	4.0		
			60022	Battery Backup, Lithium	4.0		
			60050	Base Unit / CPU	1.0		
			60052	High Performance CPU	1.0		
			60080	Power Cord - UK	1.0		
			60081	Power Cord - US	1.0		
			60082	Power Cord - Australia	1.0		
			60083	Power Cord - Universal	1.0		
			60088	Power Converter-Standard	1.0		
			60089	Power Converter - Smart	1.0		
			90093	Shipping Carton	1.0		
		CPU	60050	Base Unit / CPU	1.0		

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CP-PR-030

The Sales Order Bill Inquiry can be used to review the options selected.

Sales Order Maintenance

Sales Order Maintenance

Sales Order Maintenance

Go To Actions Copy Print Preview Attach

Sales Order: 10S10004 Order: 10S10004 Sold-To: 10C1000

Header Lines Trailer

Lines Line Details Freight Data Tax Info Comments

Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
2	01040	1.0	EA	4,570.00	0.0	4,570.00

Line Details

Standard Bill: ☐

Effective Date: 10/29/2010

Final Assembly:

ID:

Configuration: ATO

Desc: Industrial Ultrasound
Loc: 010 Site: 10-100
USD Cost: 2,201.7683
Lot/Serial:
Qty Allocated:
Qty Picked: 0.0
Qty Shipped: 0.0
Qty to Invoice: 0.0
Salesperson 1: 10SP01
Commission 1: 5.00%
Due Date: 10/29/2010
Perform Date:
Pricing Date: 10/28/2010
Multiple: ☐
Category:
Credit Terms Int: 0.00
Ship Type:
UM Conversion: 1.0000
Consume Fcst: ☒
Detail Alloc: ☐
Taxable: ☒
Freight List: 10FRT
Comments: ☐
Fixed Price: ☒

CP-PR-040

To uniquely configure the line item clear the Standard Bill option.

Sales Order Maintenance

Sales Order Maintenance

Go To

Actions

Copy

Print

Preview

Attach

Sales Order:10S10004Order:10S10004Sold-To:10C1000

HeaderLinesTrailer

LinesLine DetailsFreight DataTax InfoComments

Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
2	01040	1.0	EA	4,570.00	0.0	4,570.00

01040 Features

Feature	Mandatory
	<input checked="" type="checkbox"/>
Battery	<input type="checkbox"/>
CPU	<input checked="" type="checkbox"/>

Qty Allocated:0.0

Qty Picked:0.0

Qty Shipped:0.0

Qty to Invoice:0.0

Salesperson 1: 10SP01

Commission 1: 5.00%

Sales Acct:

Disc Acct:

Confirmed:☒

Required:

Promised: 10/29/2010

Due Date: 10/29/2010

Perform Date:

Pricing Date: 10/28/2010

Multiple:☐

Fixed Price:☒

Credit Terms Int: 0.00

Ship Type:

UM Conversion: 1.0000

Consume Fcst:☒

Detail Alloc:☐

Taxable:☒

Freight List: 10FRT

Comments:☐

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CP-PR-050

Un-checking the Standard Bill check box brings up a popup with the feature selections.

Sales Order Maintenance - Feature Selection

Sales Order Maintenance — Feature Selection

Sales Order Maintenance X
Go To Actions Copy Print Preview Attach
Sales Order: 10S10004 Order: 10S10004 Sold-To: 10C1000
Header Lines Trailer
Lines Line Details Freight Data Tax Info Comments
Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
2	01040	1.0	EA	4,570.00	0.0	4,570.00

Configured Item: 01040 Mandatory Feature: CPU

Item Number	Required	Selected	List Price	Disc%	Net Price
60050 Base Unit / CPU	1.0	<input type="text" value="1.0"/>	425.00	0.0	425.00
60052 High Performance CPU	0.0	0.0	450.00	0.0	450.00

Qty Shipped: 0.0 Perform Date: Detail Alloc: ☐
Qty to Invoice: 0.0 Pricing Date: 10/28/2010 Taxable: ☒
Salesperson 1: 10SP01 Multiple: ☐ Freight List: 10FRT
Commission 1: 5.00% Category: Fixed Price: ☒ Comments: ☐

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CP-PR-060

Selecting a feature brings up the option selection window for that feature. Note here that the Quantity Required displays the default mandatory configuration. Selecting one of the options moves the cursor to the Selected column and allows you to specify the actual quantity ordered.

Sales Order Maintenance - Option Selection

Sales Order Maintenance

Go To Actions Copy Print Preview Attach

Sales Order:10S10004 Order:10S10004 Sold-To:10C1000

Header Lines Trailer

Lines Line Details Freight Data Tax Info Comments

Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
2	01040	1.0	EA	4,570.00	0.0	4,570.00

Configured Item: 01040 Optional Feature: Battery

Item Number	Required	Selected	List Price	Disc%	Net Price
60005 Battery	4.0	<input type="text" value="8.0"/>	7.50	0.0	7.50

Qty Allocated: 0.0 Promised: 10/29/2010 UM Conversion: 1.0000

Qty Picked: 0.0 Due Date: 10/29/2010 Consume Fcst: ☒

Qty Shipped: 0.0 Perform Date: Detail Alloc: ☐

Qty to Invoice: 0.0 Pricing Date: 10/28/2010 Taxable: ☒

Salesperson 1: 10SP01 Multiple: ☐ Freight List: 10FRT

Commission 1: 5.00% Category: Fixed Price: ☒ Comments: ☐

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CP-PR-070

In this view the battery feature has been selected and you can enter 8 batteries for the order.

Sales Order Maintenance - Line Item Price

Sales Order Maintenance — Line Item Price

Sales Order Maintenance X

Go To Actions Copy Print Preview Attach

Sales Order: 10S10004 Order: 10S10004 Sold-To: 10C1000

Header Lines Trailer

Lines Line Details Freight Data Tax Info Comments

Sales Order Line

Ln	Item Number	Qty Ordered	UM	List Price	Discount	Net Price
2	01040	1.0	EA	4,570.00	0.0	4,570.00

Line Details

Desc: Industrial Ultrasound Sales Acct:
Loc: 010 Site: 10-100 Disc Acct:
USD Cost: 2,220.56823 Confirmed: ☒ Credit Terms Int: 0.00
Lot/Serial: Required: Ship Type:
Qty Allocated: 0.0 Promised: 10/29/2010 UM Conversion: 1.0000
Qty Picked: 0.0 Due Date: 10/29/2010 Consume Fcst: ☒
Qty Shipped: 0.0 Perform Date: Detail Alloc: ☐
Qty to Invoice: 0.0 Pricing Date: 10/28/2010 Taxable: ☒
Salesperson 1: 10SP01 Multiple: ☐ Freight List: 10FRT
Commission 1: 5.00% Category: Fixed Price: ☒ Comments: ☐

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CP-PR-060

When finished with the line item configuration, the system returns to the line item view and now displays the price of the configured item, which is the sum of the prices of the individual items. At this point the sales order entry clerk may add a discount for purchasing a configured item. The balance of the line item detail is completed as with any sales order.

Sales Order Trailer

Sales Order Maintenance X

Go To Actions Copy Print Preview Attach

Sales Order:10S10004 Order:10S10004 Sold-To:10C1000

Header Lines Trailer

Trailer Tax Info Trailer Information

Header

Order: 10S10004 Sold-To: 10C1000 Bill To: 10C1000 Ship-To: 10C1000

Trailer

Non-Taxable: 10.24 Currency: USD Line Total: 4,995.00

Taxable: 4,995.00 Discount: 0.00

Tax Date: Freight 20 10.24

Containers: 0.00 Taxable Freight 21 0.00

Line Charges: 0.00 Taxable Service 31 0.00

Total Tax: 349.65

Total: 5,354.89

View/Edit Tax Detail

Trailer Information

CR Initials: Print Sales Order: ☒

Credit card: Print Pack List: ☒

Action Status: Print Inv Hist: ☒

Revision: 0 EDI Inv Hist: ☐

EDI PO Ack: ☐ Partial OK: ☒

Prepaid: 0.00

FOB Point:

Ship Via: FEDX

BOL:

QAD

CP-PR-090

The trailer record is completed as with any sales order.

Sales Order Bill Browse - Standard Bill

Sales Order Bill Inquiry – Standard Bill

Sales Order Bill Report - 10/29... X

Sales Order Bill Report
 10USA

10/28/10 17:12:31
Page: 1

Sales Order: 10S10004 Sold-To: 10C1000 Wal-Mart

Ln	Item Number	Feature	Component	Description	Required	Qty Ordered	Qty Shipped
1	01040			Industrial Ultrasound	10/29/10	1.0	0.0
			02003	Standard Connector	2.0		
			50001	Probe Unit - 10 Mhz	1.0		
			50002	Probe Unit - 500 kHz	1.0		
			50020	Industrial Housing	1.0		
			60001	Durable Plastic Housing	1.0		
			60003	Keyboard	1.0		
			60005	Battery	1.0		
			60008	Printer	1.0		
			60015	Keyboard Cover	1.0		
			60020	Cooling Fan	1.0		
			60021	Battery Backup, Alkaline	4.0		
			60022	Battery Backup, Lithium	4.0		
			60050	Base Unit / CPU	1.0		
			60052	High Performance CPU	1.0		
			60080	Power Cord - UK	1.0		
			60081	Power Cord - US	1.0		
			60082	Power Cord - Australia	1.0		
			60083	Power Cord - Universal	1.0		
			60088	Power Converter-Standard	1.0		
			60089	Power Converter - Smart	1.0		
			90093	Shipping Carton	1.0		
		CPU	60050	Base Unit / CPU	1.0		

CP-PR-100

Here we see the sales order bill inquiry for the configuration just completed.

Sales Order Release to Work Order

Sales Order Release to Work Order

Sls Order Release to Work Ord... X

Go To Actions Copy Print Preview Attach

Sales Order:10S10004 Sales Order:10S10004 Batch ID:

Sales Order: 10S10004 Sold-To: 10C1000 Release Alt: ☒ Batch ID:

Ln	Item Number	Qty Ordered	Qty Shipped	Due Date	Release
11	01040	1.0	0.0	10/29/2010	<input checked="" type="checkbox"/>

QAD

CP-PR-110

This function allows you to automatically release the sales order as a Final Assembly Work Order

Work Order Management

Work Order Maintenance

Work Order Maintenance
Go To Actions Copy Print Preview Attach

Work Order: 10S10004.1
ID: 2287245
Site: 10-100

Work Order: 10S10004.1

Item Number: 01040

Type: F

Site: 10-100

ID: 2287245

Industrial Ultrasound

Quantity Ordered: 1.0

Quantity Completed: 0.0

Qty Rejected: 0.0

Order Date: 10/28/2010

Release Date: 10/25/2010

Due Date: 10/29/2010

Work Order Status: E

Sales/Job: 10S10004

Supplier:

Yield Percent: 100.00%

Remarks:

Comments:

Site: 10-100

Routing Code: 01040

BOM/Formula Code:

Post variances at SFC: ☒

The work order created by the release may be managed in Work Order Maintenance as any other work order.

Note the Work Order number is the sales order number with a dot extension of the sales order line number. Thus a sales order with several different item configurations would have a separate work order for each line item.

Note the work type has been set to F for Final Assembly and the status is E exploded, which indicates the work order bill of material has already been set by the sales order configuration.

Work Order Release and Print

Work Order Release/Print

Work Order Release/Print

Go To

Actions

Copy

Print

Preview

Attach

Work Order:10S10004.1ID:2287245Output:PAGE

Work Order: 10S10004.1

ID: 2287245

Batch:

Print Picklist:☒

Print Routing:☒

Print Co/By-Products:☒

Deliver To:

Print Bar Code:☐

Operation:☒

Item Number: 01040

Industrial Ultrasound

Quantity Ordered: 1.0

Quantity Completed: 0.0

Sales/Job: 10S10004

Remarks:

Release Date: 10/25/2010

Work Order Due Date: 10/29/2010

Work Order Status: E

Supplier:

Output: PAGE

Batch ID:

QAD

CP-PR-130

The Final Assembly work order is released and printed (optionally) as any other work order.

Work Order Pick List

Work Order Pick List

Work Order Release/Print - 10/... X

Work Order Release/Print
10USA

10/28/10 17:20:59
Page:1

Work Order Picklist

Work Order: 10S10004.1
 ID: 2287245
 Batch:
 Item Number: 01040
 Remarks: Industrial Ultrasound
 Qty Ordered: 1.0

Rev: CC
 Work Order Due Date: 10/29/10
 Sales/Job: 10S10004
 Deliver To:

Issue Date: 10/28/10
 EA

Item Number	Rev	Site Location	Lot/Serial Ref	Required Qty to Issue	UM	Issued
22003		10-100		2.0	EA	
Standard Connector						
*****				Quantity Not Available:	2.0	*****
50001	AA	10-100		1.0	EA	
Probe Unit - 10 Mhz		020	50001-0710-24	1.0	()
50002	B	10-100		1.0	EA	
Probe Unit - 500 kHz						
*****				Quantity Not Available:	1.0	*****
50020		10-100		1.0	EA	
Industrial Housing						
*****				Quantity Not Available:	1.0	*****
60001		10-100		1.0	EA	
Durable Plastic Housing		020		1.0	()

CP-PR-140

The work order pick list reflects the options and quantities configured on the sales order. Note there is no routing for this item. The pick list is also advising that some items are not in stock.

Work Order Component Issue

Work Order Component Issue

Work Order Component Issue

Go To

Actions

Copy

Print

Preview

Attach

Work Order: 10s10004.1

ID: 2287245

Item:

Item Number:

Work Order: 10s10004.1

ID: 2287245

Op:

Effective: 10/28/2010

Item Number: 01040

WD Stat: R

Issue Alloc: ☐

Industrial Ultrasound

Issue Picked: ☒

Document:

Item Number	Qty Open	Qty Alloc	Qty Picked	Qty to Iss	Qty B/O
02003	2.0	2.0	0.0	0.0	2.0
50001	1.0	0.0	1.0	1.0	0.0
50002	1.0	1.0	0.0	0.0	1.0

Item Number:

Op:

Site:

Loc:

Description:

Lot/Serial:

Quantity:

UM:

Reference:

Substitute: ☐

Cancel B/O: ☐

Multi Entry: ☐

Document:

QAD

CP-PR-150

The configured components may be issued or backflushed as with any other work order bill.

In our example we have set the Configured Products Control to allow us to receive the work order automatically upon sales order shipment. Thus we will not process the work order receipt.

Sales Order Shipment

Sales Order Shipment

Sales Order Shipments
X

Go To
Actions
Copy
Print
Preview
Attach

Sales Order: 10s10004
Site:

Order: 10s10004
Effective: 10/28/2010
Document:

Ship Allocated: ☐
Ship Picked: ☒

Sold-To: 10C1000
Wal-Mart

Site:

Sales Order Line Items

Ln	Item Number	T	Qty Alloc	Qty Picked	To Ship	Backorder	Site
1	01040		1.0	0.0	0.0	1.0	10-100

CP-PR-160

The sales order shipment is processed as any other sales order. Completing the shipment then allows the system to automatically receive the work order. Thus the uniquely configured item is never in inventory.

Sales Order Shipment

Transactions Detail Inquiry

Go To

Actions

Copy

Print

Preview

Transaction: 27993

Display E-Signature Details: ☒

Output:

Tran Nbr: 27993

Trans Type: ISS-SO

Date: 10/28/2010

Time: 17:29

Effective Date: 10/28/2010

Remarks:

User ID: qmi

Program: sosois.p

Currency: USD

Qty Change: -1.0

Shipper Number:

Ship Date: 10/28/2010

Order: 10S10004

Revision: 0

Item Number: 01040

Description: Industrial Ultrasound

Unit of Measure: EA

Address: 10C1000

Name: Wal-Mart


SO/Job: 10S10004

Ship Type:

Price: 4,995.00

IMC:

2267247

QAD

CP-PR-170

Here we see the detail transaction for the sales order shipment.

Sales Order Shipment

Transactions Detail Inquiry x

Go To Actions Copy Print Preview Attach

Output: PAGE

Transaction: 27992 Display E-Signature Details: ☒ Output: PAGE

Tran Nbr: 27992	Order: 10S10004.1	2287245
Trans Type: RCT-WO	Revision: 0	
Date: 10/28/2010	Item Number: 01040	
Time: 17:29	Description: Industrial Ultrasound	
Effective Date: 10/28/2010	Unit of Measure: EA	
Remarks:	Address:	
User ID: qmi	Name:	
Program: sosois.p	SD/Job: 10S10004	
Currency: USD	Ship Type:	
Qty Change: 1.0	Price: 2,201.76823	
Shipper Number:	IMC:	
Ship Date:		



CP-PR-180

And here the immediately previous transaction is the work order receipt.

Exercises

1 Set up Configured Products Control (8.24).

Field	Data
Receive F/A in SO	Yes [checked]
Receive F/A in WO	No [unchecked]
Automatic Backflush	Yes [checked]

This setup will allow final assembly work orders to be received automatically with the sales order shipment.

2 Use Item Master Maintenance (1.4.1) to create new configured items.

Field	Data
Item Number	01043
Description	Configured Industrial
Prod Line	10
Item Type	COMP
Status	ACTIVE
ABC Class	A
Location	010
Lot/Serial Control:	S
Ship Weight	7.47KG
Net Weight	7.24KG
Volume	14.00CF
Order Policy	LFL
Purchase/Manufacture	C
Configuration Type	KIT

Create the Configured Structure

You will set up two probe units a 10MHz model and a 500kHz model. You must pick at least one of these and probe unit top model in the default option. You will also set up two CPUs a 10MHz model and a 500kHz model.

3 Use Configured Structure Maintenance (8.1) to create the following configured item.

Field	Data
Parent Item	01043
Feature	Probe Unit
Mandatory	Yes
Component Item	50001
Quantity Per	1
Default Option	Yes

[click Next]

Field	Data
Component Item	50002

Quantity Per	1
Default Option	No

[click Back]

Field	Data
Parent Item	01043
Feature	CPU
Mandatory	Yes
Component Item	60050
Quantity Per	1
Default Option	Yes

[click Next]

Field	Data
Component Item	60052
Quantity Per	1
Default Option	No

[click Back]

Field	Data
Parent Item	01043
Feature	Battery Backup
Mandatory	No
Component Item	60021
Quantity Per	4
Default Option	Yes

[click Next]

Field	Data
Component Item	60022
Quantity Per	4
Default Option	No

[click Back]

Field	Data
Parent Item	01043
Feature	Power Cords
Mandatory	No
Component Item	60080
Quantity Per	1
Default Option	Yes

[click Next]

Field	Data
Component Item	60081

Quantity Per	1
Default Option	No

[click Next]

Field	Data
Component Item	60082
Quantity Per	1
Default Option	No

[click Next]

Field	Data
Component Item	60083
Quantity Per	1
Default Option	No

[click Back]

Field	Data
Parent Item	01043
Feature	Power Convert
Mandatory	No
Component Item	60088
Quantity Per	1
Default Option	Yes

[click Next]

Field	Data
Component Item	60089
Quantity Per	1
Default Option	No

[click Back]

Field	Data
Parent Item	01043
Feature	Paint
Mandatory	No
Component Item	60060
Quantity Per	1
Default Option	Yes

[click Next]

Field	Data
Component Item	60061
Quantity Per	1
Default Option	No

[click Next]

Field	Data
Component Item	60062
Quantity Per	1
Default Option	No

[click Back]

Field	Data
Parent Item	01043
Feature	Steel Sheet
Mandatory	No
Component Item	60091
Quantity Per	1
Default Option	Yes

[click Next]

Field	Data
Component Item	60093
Quantity Per	1
Default Option	No

- 4 Using Product Structure Maintenance (13.5), define the rest of the components for item 01043. In the Items tab, double-click on Item 01043. In the upper frame, you will find item 02003, 60002, 60003, 60008, 60015, 60020 and 90083. Double-click each item to add them as component items to item 01043. Quantity per of these items is 1 except for 02003, which is 2.
- 5 Use Configured Structure Inquiry (8.2) to review your work.
- 6 Use Sales Order Maintenance (7.1.1) to create a configured sales order for any existing customer.

Item	01043
Site	10-100
Quantity	1

- a The popup shows Standard Bill is Yes. If you leave this field Yes, you will bypass the configuration screens and will create an order for the default option items and quantities. Set Standard Bill to No.
- b A popup appears with the list of available features. Click in the box for Probe Unit.
- c Another popup appears with the list of available options. Click in the window for the 50002, and enter 1 in the Selected (quantity) field.
- d Click Next until the cursor goes back to the Item Number fields; then click Back. This returns you to the Features window.
- e Click in the box for CPU. Another popup appears with the list of available options. Click in the window for item 60052 and enter 1 in the Selected (quantity) field.
- f Click Back twice to return to the line item screen. Note the line item price.

- g** Proceed to complete the order entry.
- 7** Use Sales Order Release to Work Order (8.13) to release the sales order created in the previous step to final assembly work order.
- 8** Use Work Order Browse (16.2) to view work orders. Your work order should be the last one in the list. Note the Work Order number is the Sales Order Number with a dot extension that is the sales order line number for this item. Note also the status is E, exploded.
- 9** Use Work Order Release/Print (16.6) to release the work order. Review the Work Order Pick List. Note there is no routing for this item.
- 10** Use Work Order Component Issue (16.10) to issue components to the work order.
Accept the default list of components which are the details of the configuration from the sales order, by clicking Next and verifying information.
- 11** Use Sales Order Shipments (7.9.15) to ship the sales order.
- a** In the lower maintenance frame enter line 1 and in the Quantity field enter 1.
- b** Click Next. Verify that all information is correct and complete the trailer section.
- c** Click through the shipping section to complete the transaction.
Because of the control file setting the sales order shipment has received the Final Assembly Work Order.
- 12** Use Transactions Detail Inquiry (3.21.1) to view the following transactions.
- ISS-SO for the shipment just processed
 - RCT-WO for the automatic work order receipt
 - ISS-WO for the component issues to the work order

Course Review

Course Review

- Configured Items Setup
 - Mandatory options
 - Default options.
- Sales Order Process for Configured Item.
- Sales Order Release to Final Assemble Work Order
- Configured Order Work Order Shipped and Closed