PeopleSoft®

EnterpriseOne B73.3.1 Customer Service Management PeopleBook

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Overview

Customer Service Management Overview

The Customer Service Management system (CSMS) allows your manufacturing and distribution company to also deliver world-class customer service efficiently, accurately, and consistently. CSMS allows you to manage all aspects of customer service, including:

- Receiving and responding to calls
- Scheduling equipment repair
- Generating service contracts
- Tracking customer purchases and service

Customer service is critical to the long term survival and success of every company for the following reasons:

- The level of service your customers receive before, during, and after the original sale has a significant impact on your customers' next purchase. This applies to both your product offerings as well as service offerings, and ultimately determines your position in the market.
- The efficiency and effectiveness of your service operations directly impact your organization's bottom line. Efficient service processes increase overall profit by minimizing product support costs and creating customer confidence that often results in ongoing service contracts.

The Customer Service Management system allows your organization to meet its service goals by providing the mechanism to:

- Provide world-class customer responsiveness
- Operate efficient and cost effective customer service processes
- Achieve maximum service revenue

System Integration

To simplify your processes and facilitate communication within your organization, the system integrates with other J.D. Edwards systems, including:

Foundation

Address Book	The Address Book system contains addresses, tax IDs, adjustment schedules, and pricing information for customers and service providers.

Financials

Accounts Receivable	The Accounts Receivable system allows you to receive payment for services provided or for product purchases.
Accounts Payable	The Accounts Payable system allows you to pay service providers.
General Accounting	The General Accounting system allows you to review, approve, and post inventory journal entries to the general ledger.
Fixed Assets	The Fixed Assets system allows you to depreciate company-owned equipment, which may be used for loaners or rentals.

Human Resources and Payroll

Human Resources and Payroll Foundation	The Human Resources and Payroll Foundation system allos consultants to record time spent assisting a customer on a call.

Manufacturing

Plant and Equipment Management	The Plant and Equipment Management system allows you to set up maintenance schedules for your products.
Work Orders	The Work Orders system contains records that you create in the Service Order Management module.
Service Billing	The Service Billing system allows you to generate and print invoices for contracts and service orders.

Distribution

Advanced Pricing	The Advanced Pricing system allows you to apply complex pricing methods to service contracts and service orders.
Inventory Management	The Inventory Management system allows you to issue inventory to a service order.
Sales Order Management	The Sales Order Management system allows you to update the Installed Base Management module to create installed base records for new pieces of equipment.
Procurement	The Procurement system allows you to purchase spare parts and supplies.

System Features

The Customer Service Management consists of four modules:

- Call Management
- Installed Base Management
- Service Contract Management
- Service Order Management

Call Management

The Call Management module provides the features and functions to record contact between customers and consultants. It is the central point of contact for all customer interaction. This module allows you to store and track customer issues. An issue is a question or problem for which a customer wants a solution. You can track the ownership of the issue, the date and time that an issue is received and completed, the root cause analysis, and the client data, throughout the life of the issue.

Installed Base Management

The Installed Base Management module allows you to enter and manage product registration and product master records. You can create and track current and historical information associated with each product or piece of equipment that you manufacture or sell. Key product information that you can track includes product model, serial number, work order, inventory location, purchase date, shipment date, owner, and warranty information.

Service Contract Management

The Service Contract Management module allows you to record and manage service contract agreements. You can also configure multiple types of contracts to fit your company's needs. A contract is a written agreement between a customer and a provider (contractor).

This module also provides features to accommodate various pricing methods, including advanced pricing, and help you manage contract renewals by automatically generating new contracts when contracts expire.

Service Order Management

The Service Order Management module allows you to process customer requests that cannot be resolved over the phone, you can create a service order. You enter service orders to request work to be performed at the customer site or at a repair depot. Service orders provide the central database for all service and repair information and events associated with an equipment record, inventory item number, or product model.

The system also provides the means for managing Returned Material Authorizations (RMAs). This is an authorization from the supplier for the customer to return inventory for credit, replacement, or repair.

Setup

General Setup

Before you can use certain features of Customer Service Management, you need to define the critical information that the system needs for processing and to set up the information necessary to use when you enter data throughout the system.

General setup tasks are the tasks that you must perform to set up any or all of the modules that comprise the Customer Service Management system (CSMS).

General setup includes the following tasks:

- ❑ Setting up system constants
- ❑ Setting up user defined codes for CSMS
- ❑ Setting up next numbers for CSMS
- ❑ Setting up product family and model combinations
- ❑ Setting up customers and service providers
- ❑ Setting up inventory information

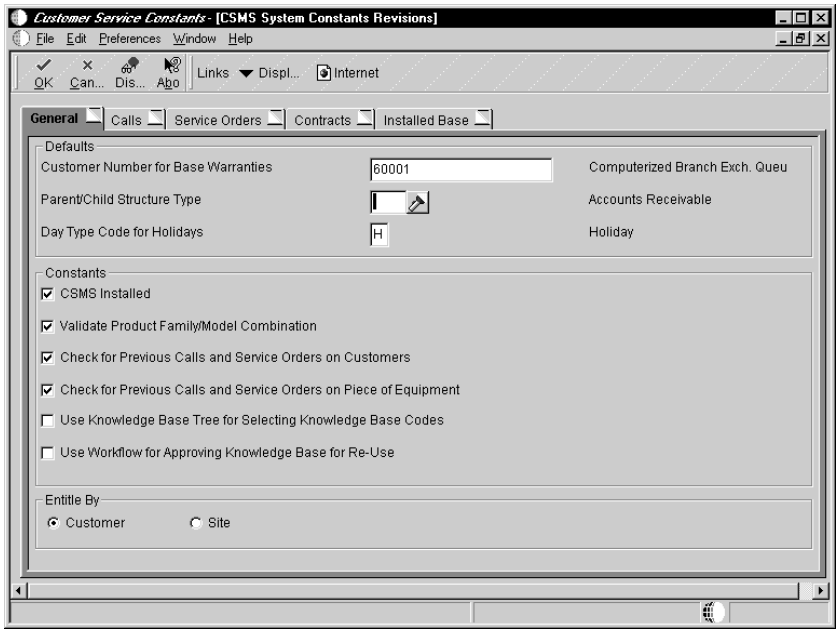
Setting Up System Constants

Set up system constants to define default information for the entire system. Constants control the types of information that you track and the rules that the system uses to perform certain calculations.

▶ To set up system constants

From the Customer Service Setup menu (G1740), choose Customer Service Constants.

On CSMS System Constants Revisions



1. Enter the customer address book number in the following field:

   - Customer Number for Base Warranties

   If you enter an address book number in this field, the base warranties that are created using the Installed Base Update program and the Installed Base Revisions are created with this address book number as the customer number. If you leave this field blank, base warranties are created using the Sold to Address Book Number on the sales order or the owner address book number on the Installed Base record as the customer number.

2. To specify the type of organizational structure in address book to use when searching for parent/child contracts, complete the following field:

   - Parent/Child Structure Type

3. To specify the code that is used in the Work Day Calendar to indicate holidays, complete the following field:

   - Day Type Code for Holidays

   The system uses this information during the entitlement checking process.

4. To enable CSMS, click the following option:

   - CSMS Installed

5. To validate combinations of product models and families, click the following option:

   - Validate Product Family/Model Combination

   When you turn on this option, the system allows users to enter only the combinations that have been set up in the Product Family/Model combination table.

6. To use the customer number to automatically check for previous calls or service orders when you are entering a call or service order, click the following option:

   - Check for Previous Calls and Service Orders on Customers

7. To use the equipment number, inventory item number, or product model to automatically check for previous calls or service orders when you are entering a call or service order, click the following option:

   - Check for Previous Calls and Service Orders on Piece of Equipment

8. To require users to choose knowledge base codes from the knowledge tree, click the following option:

   - Use Knowledge Base Tree for Selecting Knowledge Base Codes

   If you do not turn on this option, the system allows you to choose knowledge base codes from the knowledge base tree and the Knowledge Base Codes table.

9. To use workflow to approve a knowledge base for reuse, click the following option:

   - Use Workflow for Approving Knowledge Base for Re–Use

10. Click the appropriate option to choose whether to perform entitlement checking for the service order or call by using the customer or site number:

    - Entitle By Customer
    - Entitle By Site

Field	Explanation
Parent/Child Structure Type	A user defined code (01/TS) that identifies a type of organizational structure with its own hierarchy in the Address Book system (for example, e-mail). When you create a parent/child relationship for a customer or supplier, the structure type must be blank.
Day Type Code for Holidays	A code to indicate the type of day. Valid values are: W Work Day E Weekend H Holiday
CSMS Installed	A flag that describes whether there is an interface to the Customer Service Management System (CSMS).

See Also

- *Setting Up Call Management Constants*
- *Setting Up Service Order Constants*
- *Setting Up Contracts Constants*
- *Setting Up Installed Base Constants*

Setting Up User Defined Codes for CSMS

Before you can use the features of the Customer Service Management System, you need to define the critical information that the system uses for processing. You can set up this information to meet the specific needs of your organization. This information is called user defined codes.

Many fields throughout the system require user defined codes. You can customize your system by setting up user defined codes to meet the needs of your organization.

The following is a list of UDCs you need to set up by module.

UDCs for Call Management

You can access these UDCs from the Call User Defined Codes menu (G17431).

17/PR	Call priority
17/CR	Call reason
17/SC	Call source
17/ST	Call status
17/CT	Call type
17/EN	Environment
17/GR	Geographic Region
17/TZ	Time zone
17/WT	Work type
17/CB	Call back

17/CN	Task name
17/01 through 17/10	Call category codes 1 through 10

UDCs for Installed Base Management

You can access most of these UDCs from the Installed Base User Defined Codes menu (G17411).

12/C1	Major accounting class
12/C2	Major equipment class
12/C3 through 12/C0	Equipment category codes 3 through 10
12/F1 through 12/F0	Category codes F/A 11 through 20
12/21 through 12/23	Category codes F/A 21 through 23
17/B1 through 17/B0	Installed base category codes 1 through 10
17/PA	Product Family. Use these codes to categorize and group Installed Base records, based on the type of product, for example, inkjet printers, laser printers, and dot matrix printers.
17/PM	Product Model. User these codes to categorize and group Installed Base records, based on a specific model within a product family.

See Also

- *Understanding User Defined Codes for Equipment/Plant Maintenance* in the *Equipment/Plant Maintenance Guide* for more information about equipment category codes

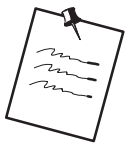
UDCs for Service Contract Management

You can access these UDCs from the Service Contract User Defined Codes menu (G17441).

52/CS	Contract status
51/CT	Contract type
17/CN	Cancellation reason code
17/S1 through 17/S5	Service types 1 through 5
17/C1 through 17/C5	Coverage category codes 1 through 5
17/H1 through 17/H0	Contract header category codes 1 through 10
17/D1 through 17/D5	Contract detail category codes 1 through 5
00/EX (from the Service Contract Setup menu, G1744)	Tax explanation codes. You set up tax explanation codes to attach to your customer master records to calculate taxes in conjunction with the customer's tax area, as applicable. For example, you can set up tax explanation codes for Value Added Tax (VAT) as it applies to your Canadian customers.
H91/TZ	Time zone

UDCs for Service Order Management

You can access these UDCs from the Service Order User Defined Codes menu (G17421).



If you are using the Returned Material Authorization (RMA) module, you must also set up the RMA status user defined codes (40/RN).

17/SG	Service group
17/WT	Time entry hour type

UDCs for Work Orders

You can access these UDCs from the Work Order User Defined Codes menu (G4842).

00/TY	Type codes
00/PR	Priority codes
00/SS	Status codes
00/W1	Phase or matter
00/W2 through 00/W5	User codes 2 through 5

See Also

- *Setting Up Default Managers and Supervisors* in the *Work Orders Guide*
- *Setting Up Activity Rules for Work Orders* in the *Work Orders Guide*

UDCs for Knowledge Management

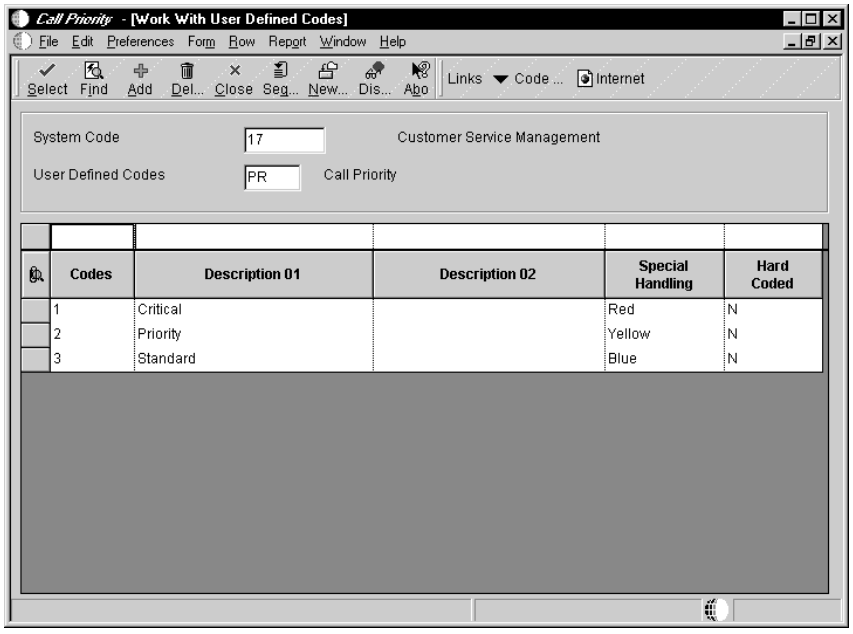
You can access these UDCs from the Knowledge Management User Defined Codes menu (G17451).

48/K1 through 48/K5	Knowledge Management codes CC 1 through 5

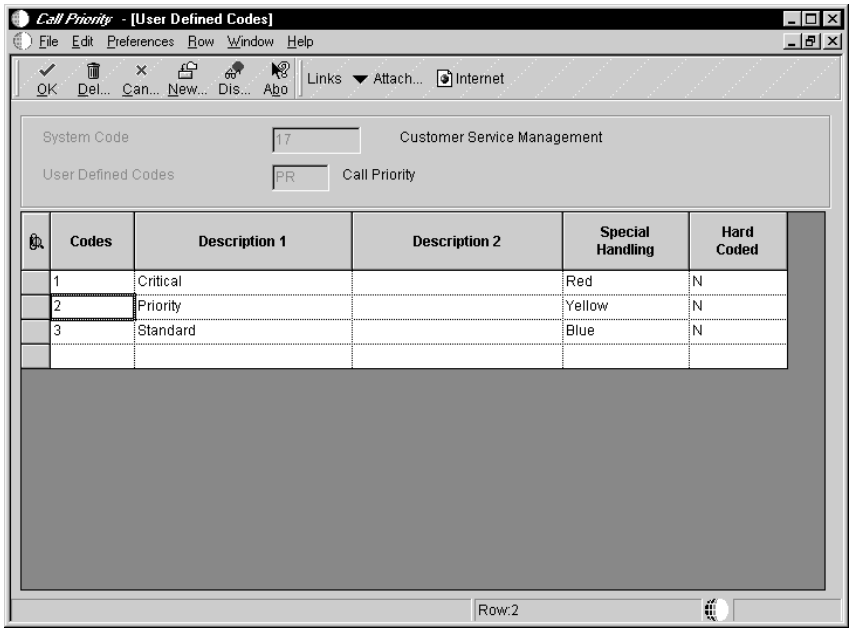
▶ To set up user defined codes for CSMS

Repeat the following procedures to set up all of your user defined codes.

On Work With User Defined Codes



1. Complete the following fields and click Add:
    - System Code
    - User Defined Codes



2. On User Defined Codes, complete the following fields to revise the user defined code table:
    - Codes
    - Description 1

- Special Handling
- Hard Coded

Field	Explanation
System Code	A user defined code (98/SY) that identifies a J.D. Edwards system.
User Defined Codes	A code that identifies the table that contains user defined codes. The table is also referred to as a code type.
Codes	A list of valid codes for a specific user defined code list.
Description 1	A user defined name or remark.
Special Handling	A code that indicates special processing requirements for certain user defined code values. The value that you enter in this field is unique for each user defined code record type. The system uses the special handling code in many ways. For example, special handling codes defined for Language Preference specify whether the language is double-byte or does not have uppercase characters. Programming is required to activate this field.
Hard Coded	A code that indicates whether a user defined code is hard coded. Valid values are: Y The user defined code is hard-coded N The user defined code is not hard-coded For OneWorld, a check indicates that the user defined code is hard-coded.

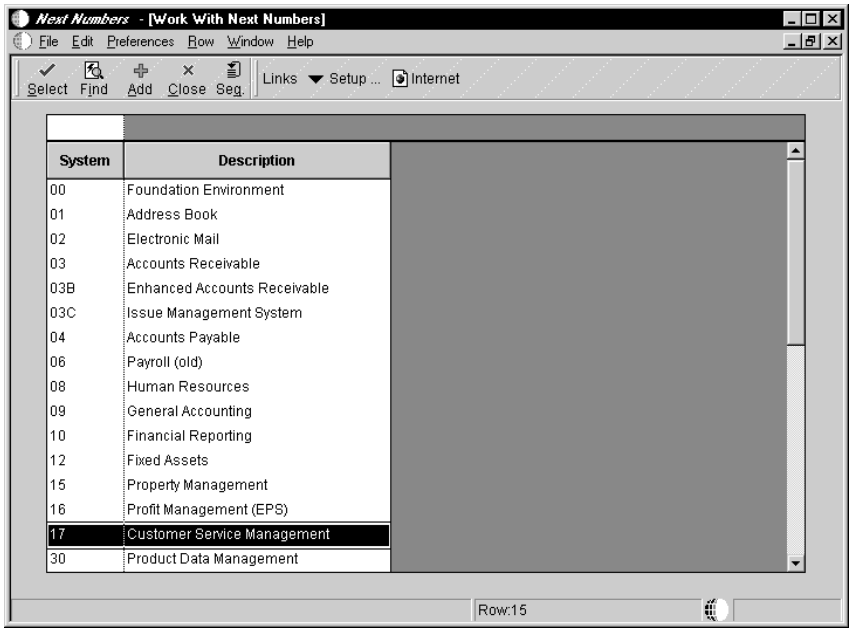
Setting Up Next Numbers for CSMS

You set up next numbers so that the system can assign the next sequential number to the next item, for example calls or contracts, that requires a unique number. Each item has a unique number, which you can use for tracking.

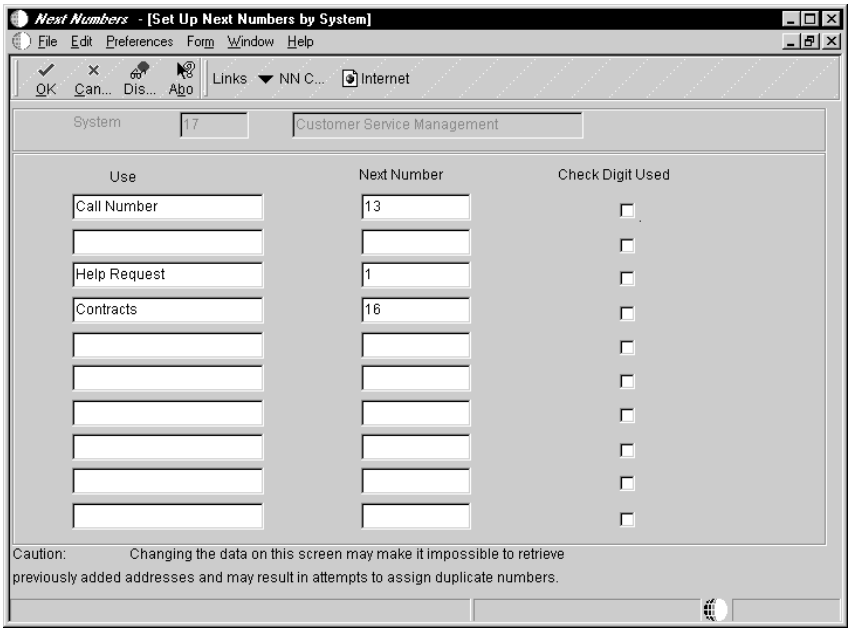
▶ To set up next numbers for CSMS

From the Customer Service Setup menu (G1740), choose Customer Service Next Numbers.

On Work with Next Numbers



1. Choose system 17 and click Select.



2. On Set Up Next Numbers by System, complete the following fields:
   - Next Number
   - Check Digit Used

Field	Explanation
Next Number	The number that the system uses for the next number that it assigns. The system can use next numbers for voucher numbers, invoice numbers, journal entry numbers, employee numbers, address numbers, contract numbers, and sequential W-2s. You must use the next number types already established, unless you provide custom programming.
Check Digit Used	An option that specifies whether the system adds a number to the end of each next number assigned. For example, if you are using check digits and the next number is 2, the system will add a check digit such as 7, making the last two numbers 27. Check digits provide a method of randomly incrementing numbers to prevent the assignment of transposed numbers. In this example, the system would never assign next number 72 while check digits are activated. Valid codes for WorldSoftware are: Y Yes, add a check digit to this next number N No, do not add a check digit For OneWorld software, turn on this option to add a check digit.

Setting Up Product Family and Model Combinations

Set up product family and model combinations to assign a product model to the appropriate product family.

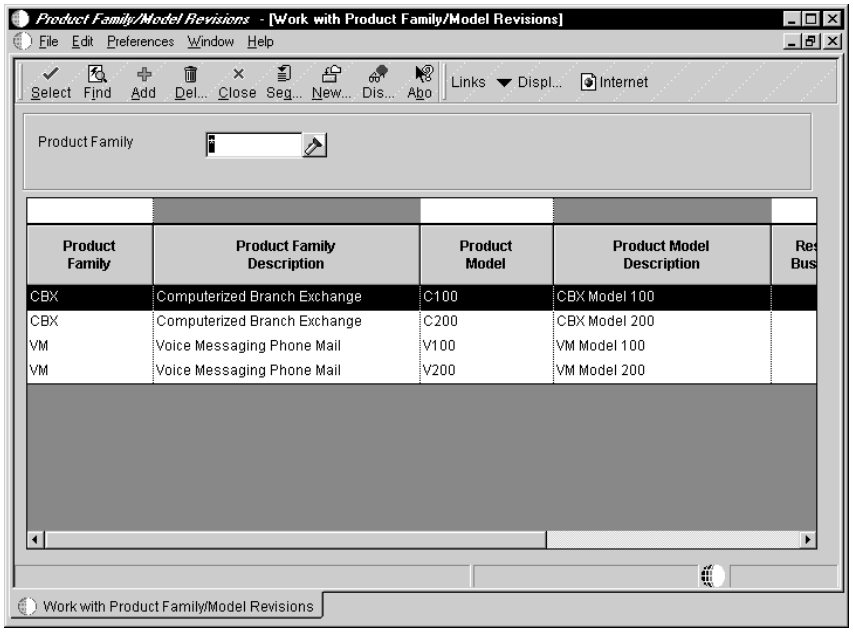
When you set up product family and model combinations, consider the following:

- Product models must belong to product families.
- A product family can contain many product models.
- A product model can only belong to one product family.

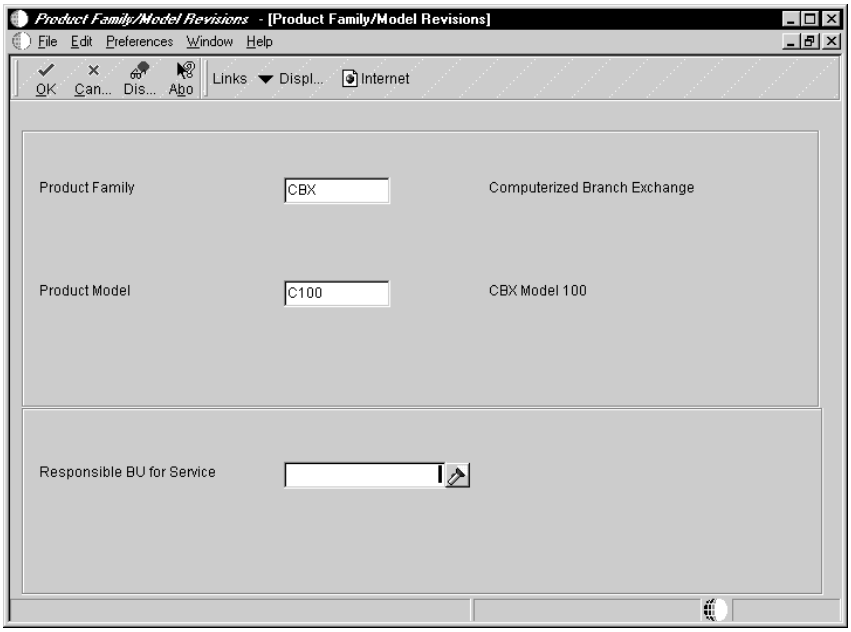
▶ To set up product family/model combinations

From the Customer Service Setup menu (G1740), choose Product Family/Model Revisions.

On Work with Product Family/Model Revisions



1. Click Add.



2. On Product Family/Model Revisions, complete the following fields:
   - Product Family
   - Product Model
3. To define the default responsible business unit for product family and model combinations, complete the following field:
   - Responsible BU for Service

   The system uses the value from this field only if you have set up your CSMS constants to use the responsible business unit by product family and model.

Field	Explanation
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.

Field	Explanation
Responsible BU for Service	Identifies a separate entity within a business for which you wish to track costs, for example, a warehouse location, job, project, work center, or branch/plant. The business unit field is alphanumeric. You can assign a business unit to a voucher, invoice, fixed asset, and so forth, for responsibility reporting. The system provides reports of open A/P and A/R by business unit, for example, to track equipment by responsible department. Business Unit Security can prevent you from inquiring on business units for which you have no authority.

Setting Up Customers and Service Providers

You can use the Address Book system to create a database of information about your customers and service providers, including their addresses and phone numbers. The system creates a table, the CSMS Address Book Information table (F1797), an extension of the Address Book Master table (F0101). Which stores the additional CSMS address book information.

Setting up customers and service providers includes the following tasks:

- ❑ Setting up customer records
- ❑ Setting up service providers

Setting Up Customer Records

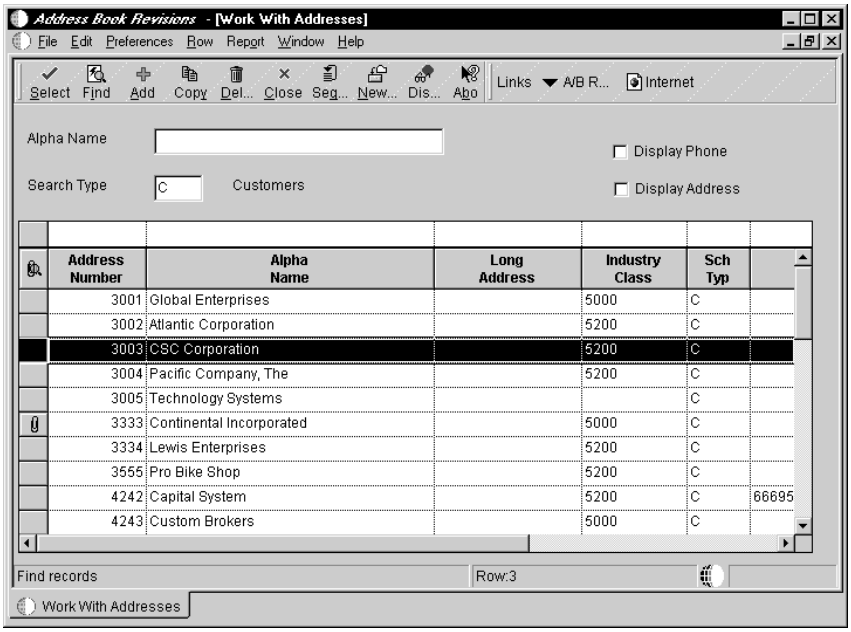
You must create an address book record for a customer before you can use Customer Service Management to create contracts, enter calls, or enter service orders for them.

If you use Quantum to assign geographic codes for tax purposes, the system assigns geographic codes according to the information you enter in the City, State, and Zip code fields on the Mailing tab of the Address Book Revision form.

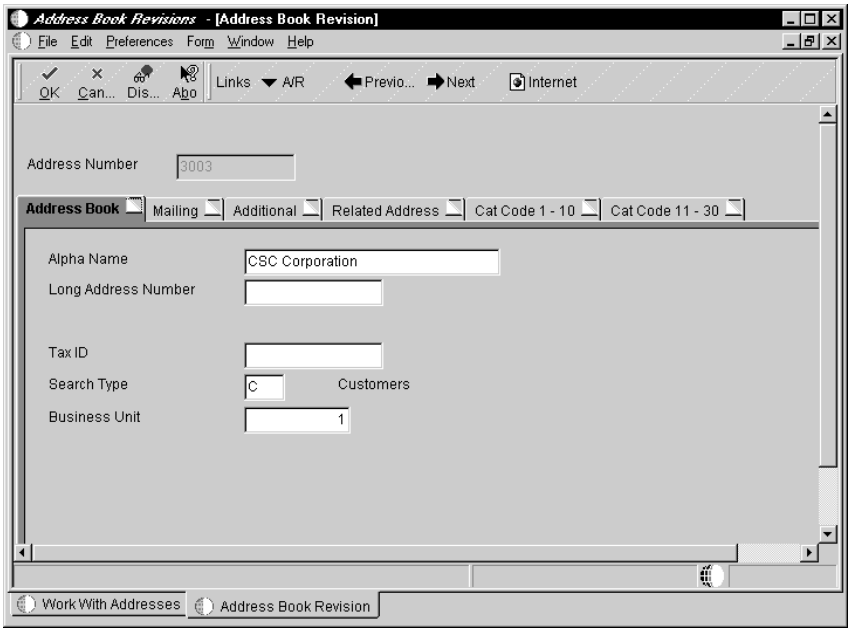
▶ To set up customer records

From Customer Service Setup menu (G1740), choose Address Book Revisions.

On Work with Addresses



1. Click Add.

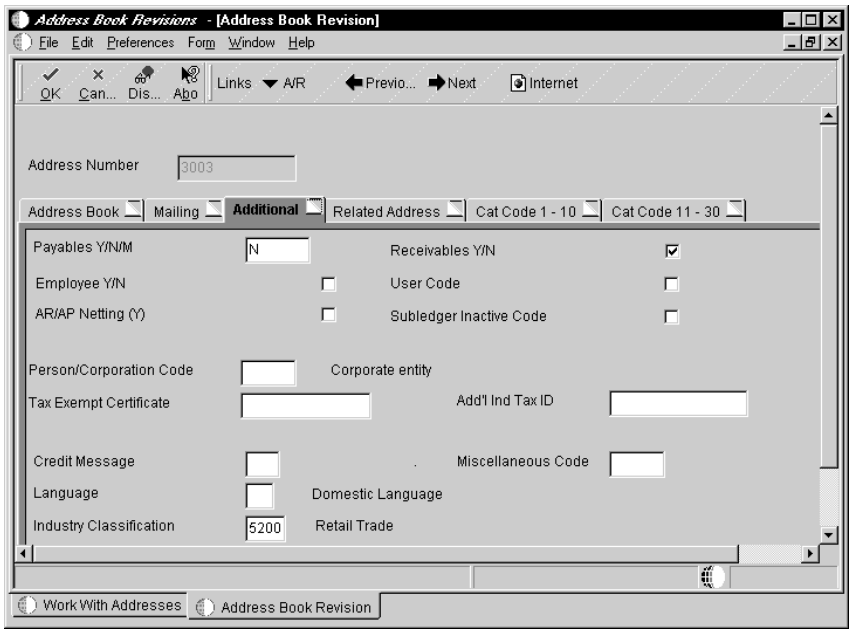


2. On Address Book Revision, complete the steps to enter a customer record.

   See *Working with Address Book Records* in the *Address Book Guide*.

3. Click the Additional tab, and then click the following option to indicate whether you accept receivables from this customer:

   - Receivables Y/N

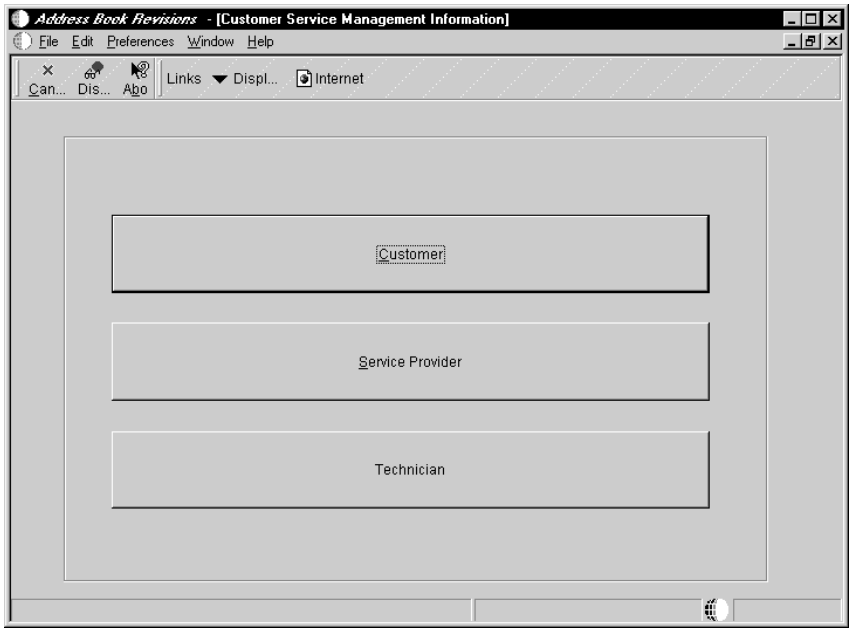


4. To create contracts, enter calls, or enter service orders for your customer, you must also add Accounts Receivable information to the customer record. On Address Book Revision, choose A/R from the Form menu, complete the Customer Master Revision form, and click OK.

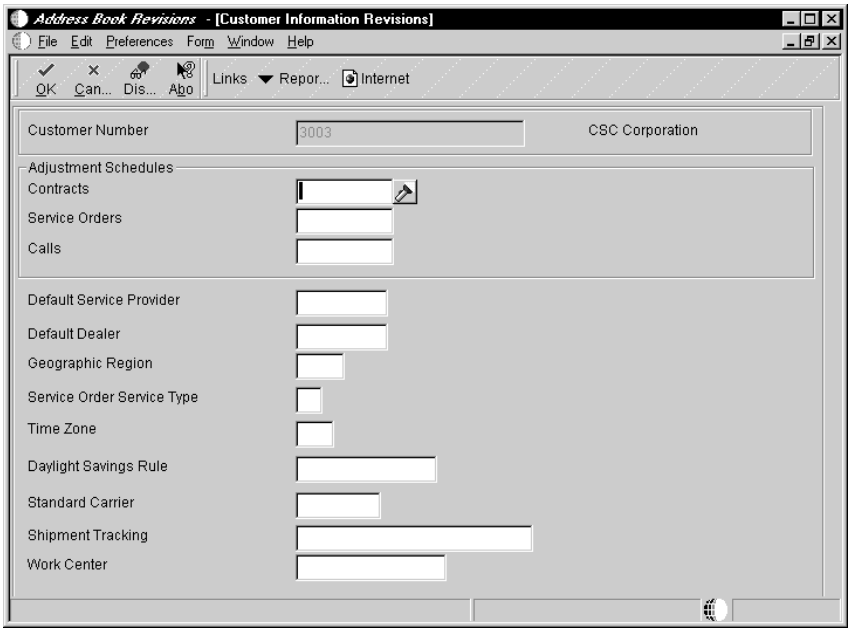
See

- *Creating Customer Records* in the *Accounts Receivable Guide*.

5. On Address Book Revision, choose CSMS from the Form menu.



6. On Customer Service Management Information, click Customer.



7. On Customer Information Revisions, complete the following fields:

   - Contracts

     Enter the adjustment schedule that you want the Advanced Pricing system to use to price contracts.

   - Service Orders

     Enter the adjustment schedule that you want the Advanced Pricing system to use to price parts and labor for service order billing.

   - Default Service Provider

     The system retrieves this information into the service order for your customer.

   - Geographic Region

     The system retrieves this information when you enter a call for this customer.

   - Service Order Service Type

     Type of service defaults into the service order.

   - Time Zone

This is a required field. It contains the time zone of the customer and is used when calculating commitment date and time.

- Daylight Savings Rule

  This applies to the time zone of the customer.

- Work Center

  The work center is used for entitlement checking. It retrieves the work day calendar. If you do not set up your work center, you must set up a work day calendar set for ALL.

The following fields are reserved for future use: Calls, Default Dealer, Standard Carrier, Shipment Tracking.

Field	Explanation
Receivables Y/N	A code in WorldSoftware, or an option in OneWorld software, that identifies the address as a customer. Valid values for WorldSoftware are: Y Yes, this is a customer. A processing option determines whether the customer master record automatically displays after you add an address. N No, this is not a customer. This code does not prevent you from entering an invoice for the address. Code N is informational only, unless you set a processing option. In this case, a warning message appears if both the Receivables and Payables fields are N. For OneWorld software: On This is a customer. Off This is not a customer.
Contracts	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.

Field	Explanation
Service Orders	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.
Calls	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.
Default Service Provider	The address book number of the supervisor. Note: A processing option for some forms allows you to enter a default value for this field based on values for Category Codes 1 (Phase), 2, and 3. Set up the default values on the Default Managers & Supervisor form. After you set up the default values and the processing option, the information displays automatically on any work orders that you create if the category code criterion is met. You can either accept or override the default value.
Default Dealer	The default Dealer for the Customer.
Geographic Region	The geographic region of the customer.
Service Order Service Type	A user defined code (00/TY) that indicates the type classification of a work order or engineering change order. You can use work order type as a selection criteria for work order approvals.
Time Zone	Choose the time zone for which you want to view the date and time.
Daylight Savings Rule	Unique name identifying a daylight savings rule. Daylight savings rules to adjust time for a geographic and political locale.
Standard Carrier	A unique four-character code assigned to the carrier.
Shipment Tracking	The business function which provides access to a carrier’s external shipment tracking function.

Field	Explanation
Work Center	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.

Setting Up Service Providers

Set up service providers in the address book. Service providers fulfill your service orders. By maintaining records on service providers, you can also track customer satisfaction in regard to each service provider. For example, a service provider can be a consultant on a call or a technician on a service call.

▶ To set up service providers

From Customer Service Setup menu (G1740), choose Address Book Revisions.

On Work with Addresses

1. Click Add.
2. On Address Book Revision, complete the steps to enter a customer record.

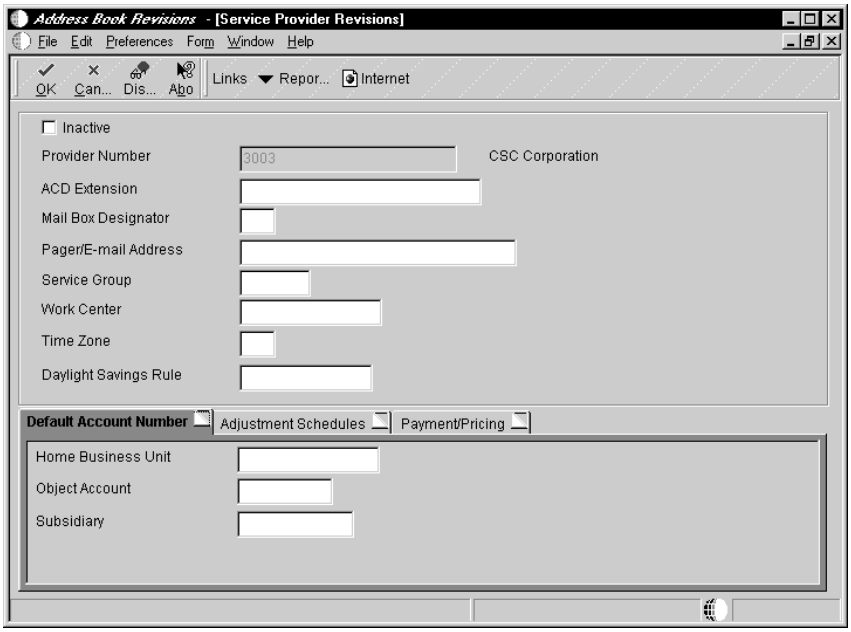
   See *Working with Address Book Records* in the *Address Book Guide*.

3. Click the Additional tab and complete the following field to indicate whether the service provider receives payables from your company:

   - Payables Y/N/M

   If the service provider is also a customer, you must also click the Receivables option.

4. From the Form menu, choose CSMS.
5. On Customer Service Management Information, click Service Provider.



6. On Service Provider Revisions, to view service providers as active or inactive for reporting purposes, click the following option:

   - Inactive

7. Complete the following fields:

   - ACD Extension

     This is an extension of the phone system for the provider. When a service provider is assigned to a call, the system retrieves this extension into a call.

   - Mail Box Designator

     Enter a mail box designator when a call is assigned to a service provider.

   - Pager/E–mail Address

     If you enter a pager or e-mail address, the system notifies the service provider by page or email when a call is assigned to them.

   - Work Center

     Use work center for entitlement checking. It retrieves the work day calendar. If you do not set up your work center, you must set up a work day calendar set for ALL.

   - Time Zone

This is a required field. It contains the time zone of the service provider. The system uses this information when calculating commitment date and time.

- Daylight Savings Rule

  The daylight savings rule applies to the time zone of the service provider.

The Service Group field is reserved for future use.

8. To enter default account number information, complete the following fields:
   - Home Business Unit
   - Object Account
   - Subsidiary

   The system retrieves the account number for time entry purposes when you enter a call.

9. Complete the following field:
   - Claims

   Enter the adjustment schedule that you want the Advanced Pricing system to price parts and labor for service order claims.

10. To indicate the pricing method you are using to pay the service provider, click one of the following options:
    - Flat Rate
    - Time and Materials
    - None

11. To indicate that you are paying the service provider for parts used for a repair, click the following option:
    - Pay Service Provider for Parts

Field	Explanation
Payables Y/N/M	A code that identifies the address as a supplier. Valid values are: Y Yes, this is a supplier. A processing option determines whether the supplier master record automatically displays after you add an address. N No, this is not a supplier. This code does not prevent you from entering a voucher for the address. M This is a miscellaneous, one-time supplier. This code does not prevent you from entering multiple vouchers for the address. F This is a supplier with a foreign address. The IRS requires U.S. companies to identify suppliers with foreign addresses for 1099 reporting. You should assign tax authorities as suppliers. This allows tax payments to be made to tax authorities. Code N is informational only, unless you set a processing option. In this case, a warning message appears if both the Payables and Receivables fields are N.
ACD Extension	The free-form telephone number. You can use any applicable telephone number format. For example, if you are calling from within the United States, the format to call Laramie, Wyoming would be (307) 321-5223; the format to call Singapore would be 011-65-469-8382. When you search for an address using the phone number, you must enter the number exactly as it was set up in the Address Book system. If all phone numbers follow a consistent format, you can specify that format in the data dictionary. For example: ___-____.
Mail Box Designator	A field that determines the mailbox associated with the queue that should be used on delivery of the message.
Pager/E–mail Address	A 40-character field that you can use to enter free-form text.
Service Group	An attribute of a service provider that allows the end user to group the service provider into logical groups, such as regional, type of service provided, billing arrangements.

Field	Explanation
Work Center	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Time Zone	Choose the time zone for which you want to view the date and time.
Daylight Savings Rule	Unique name identifying a daylight savings rule. Daylight savings rules to adjust time for a geographic and political locale.
Home Business Unit	The number of the business unit in which the employee generally resides.
Object Account	The object account portion of a general ledger account. The term “object account” refers to the division of the Cost Code (for example, labor, materials, and equipment) into subcategories (for example, dividing labor into regular time, premium time, and burden). If you are using a flexible chart of accounts and the object account is set to 6 digits, J.D. Edwards recommends that you use all 6 digits. For example, entering 000456 is not the same as entering 456, because if you enter 456, the system will enter three blank spaces to fill a 6-digit object.
Subsidiary	A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account.
Claims	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.

Field	Explanation
Flat Rate	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
Time and Materials	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
None	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
Pay Service Provider for Parts	A code to indicate if the service provider should be paid for parts used during a repair. Valid values are: Y or 1 – Pay the service provider for parts used. N or 0 – Do not pay the service provider for parts used.

Setting Up Inventory Information

Customer Service Management uses the Inventory Management system to store CSMS related information about items in inventory. When you use CSMS with the Inventory Management system, you must create an item master and assign the item to a branch/plant location. The information that is specific to a CSMS item master includes product family and product model information.

Setting up inventory information includes the following information:

- ❑ Creating an item master
- ❑ Assigning an item to a branch/plant

Creating an Item Master

You must enter master information for all stock and non-stock items. Master information includes the item number, item name, description, and other general information about the item. The system uses this information to identify each item in the distribution and manufacturing systems.

You may want to enter one item that you can use as a template when you enter additional items. On your item template, you can enter field values that are common to the other items that you want to add. When you add the new items, you locate the item template and then modify field values as necessary.

When you enter a new item, the system creates an item master record in the Item Master Information table (F4101) and stores information specific to CSMS in the Item Master – Customer Service Extension table (F4117). After you have created the item master record, you cannot delete master information for the item if any of the following information exists:

- Item branch records
- Bills of material
- Item cross-reference numbers
- Supplier relationships
- Sales prices

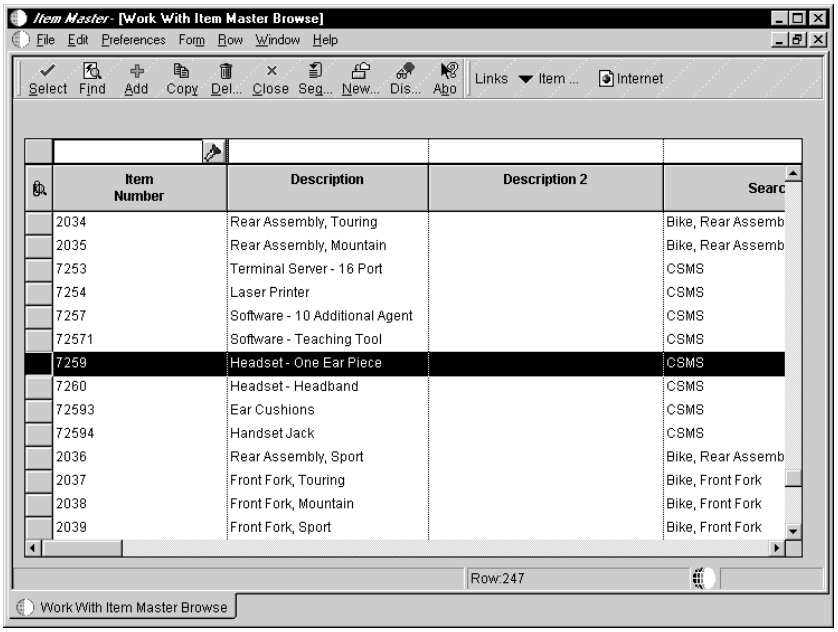
Before You Begin

❑ Enable access to Customer Service information by, clicking the CSMS Installed option on the CSMS System Constants Revisions form. See *Setting Up System Constants*.

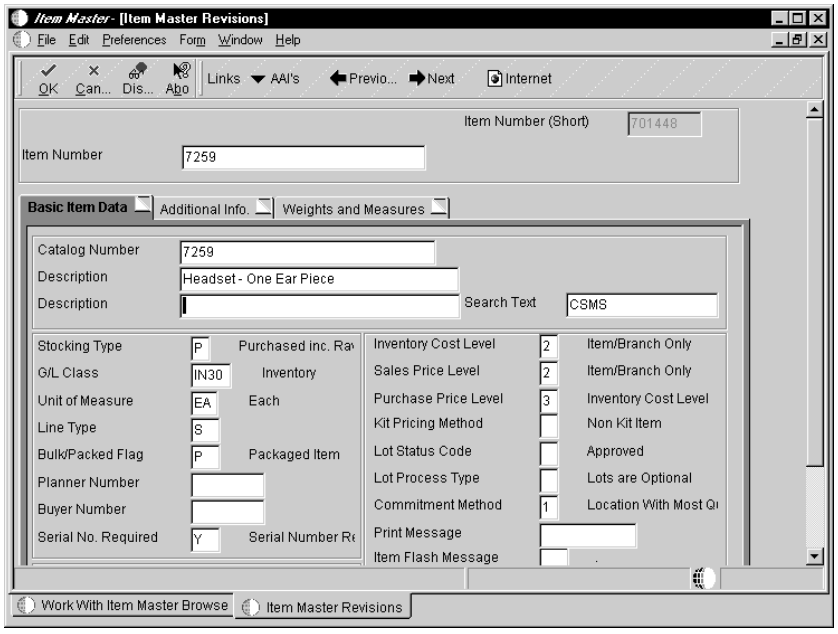
▶ To create an item master

From the Inventory Master/Transactions menu (G4111), choose Item Master.

On Work with Item Master Browse



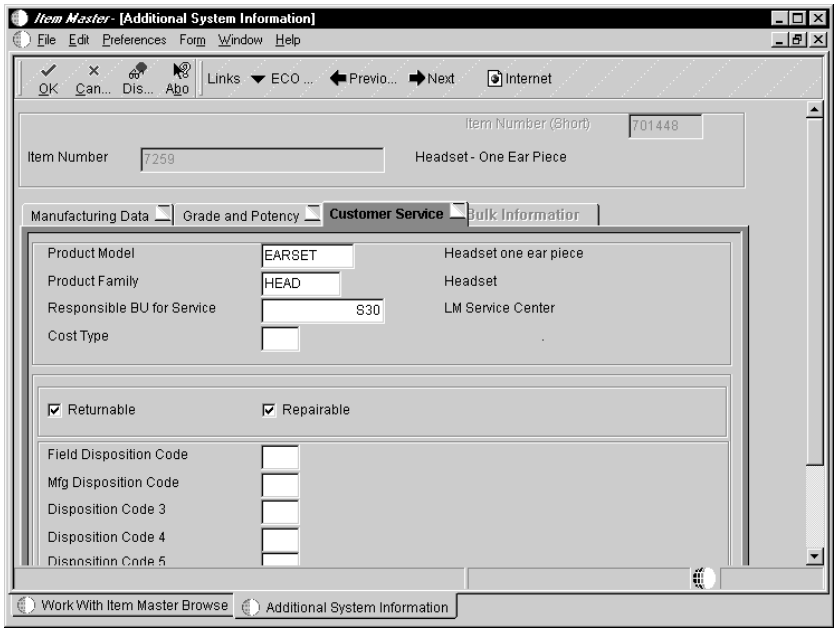
1. Click Add.



2. On Item Master Revisions, complete the steps to enter item master information, then return to the Work with Item Master Browse form.

   See *Entering Item Master Information* in the *Inventory Management Guide*.

3. From the Row menu, choose Additional Info.
4. On Additional System Information, click the Customer Service tab.



5. Complete the following fields:
   - Product Model

- Product Family
- Responsible BU for Service
- Cost Type
- Field Disposition Code
- Mfg Disposition Code
- Disposition Code 3
- Disposition Code 4
- Disposition Code 5

6. Click one or both of the following options:
   - Returnable
   - Repairable

   You can choose Model/Family Search from the Row menu to search for a product model and family combination.

Field	Explanation
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Responsible BU for Service	Identifies a separate entity within a business for which you wish to track costs, for example, a warehouse location, job, project, work center, or branch/plant. The business unit field is alphanumeric. You can assign a business unit to a voucher, invoice, fixed asset, and so forth, for responsibility reporting. The system provides reports of open A/P and A/R by business unit, for example, to track equipment by responsible department. Business Unit Security can prevent you from inquiring on business units for which you have no authority.
Cost Type	A code that designates the item being costed. Examples would be: A1 Material B1 Labor X1 Freight X2 Travel
Field Disposition Code	A user defined disposition code.
Returnable	This is a flag that is used to indicate if the item is returnable.

Field	Explanation
Repairable	Use this flag to indicate that the item is repairable.

Processing Options for Item Master

```
Defaults

      1.  Primary Unit Of Measure (Blank                _____________
      = EA)
      2.  Weight Unit of Measure (Blank                 _____________
      = LB)

Process 1

1.  Specify the from and thru dates to
    be used for effective dates in the
    Item Notes Table:

      From Date (Blank = system date)                   _____________
      Thru Date (Blank = last day of                    _____________
      default century)

Process 2

1.  Enter a '1' for each additional Item
    Master information screen to display
    when performing an add or change.
    If blank, the screen will not
    display.

      Category Codes                                    _____________
      Cost Revisions (Conditional)                      _____________
      Price Revisions (Conditional)                     _____________
      Weights and Measures                              _____________
      Manufacturing Values                              _____________
      Bulk Product Information                          _____________
      Item Revisions – Customer Service                 _____________

Process 3

1.  Enter a '1' to automatically call
    the Item Branch program when adding
    a new item number and return to the
    Item Master screen.  Enter a '2' to
    call the Item Branch program and
    remain on Item Branch.  If left
    blank, the Item Branch program will
    not be called.

      Item Branch                                       _____________

Global Update

1.  Enter a '1' to transfer changes made
    to the 2nd and the 3rd item numbers
    to the Item Branch records or enter
    a '2' to transfer changes to records
    in the selected files (See UDC
    40/IC).

      Transfer Changes                                  _____________
```

```
Versions

Enter the version to be used for each
    program.  If left blank, ZJDE0001
    will be used.

      1.  Item Availability (P41202)          _____________
      2.  Item Branch (P41026)                _____________
```

Assigning an Item to a Branch/Plant

You can assign an item to a branch/plant to indicate at which branch/plant the item is located. The information about an item might differ from warehouse to warehouse. For example, taxes might be applicable to an item in one warehouse, but not in another. You might also have different quantity requirements for items depending on the warehouse. Every J.D. Edwards system that retrieves item information searches for the item branch/plant information before using item master information.

You can enter item information for a single branch/plant or copy existing item information and duplicate it for multiple branch/plants. You begin entering item information for a branch/plant on the Item Branch Revisions form. Most fields on Item Branch Revisions are identical to those on the Item Master Revisions. The system uses the default values from Item Master Revisions.

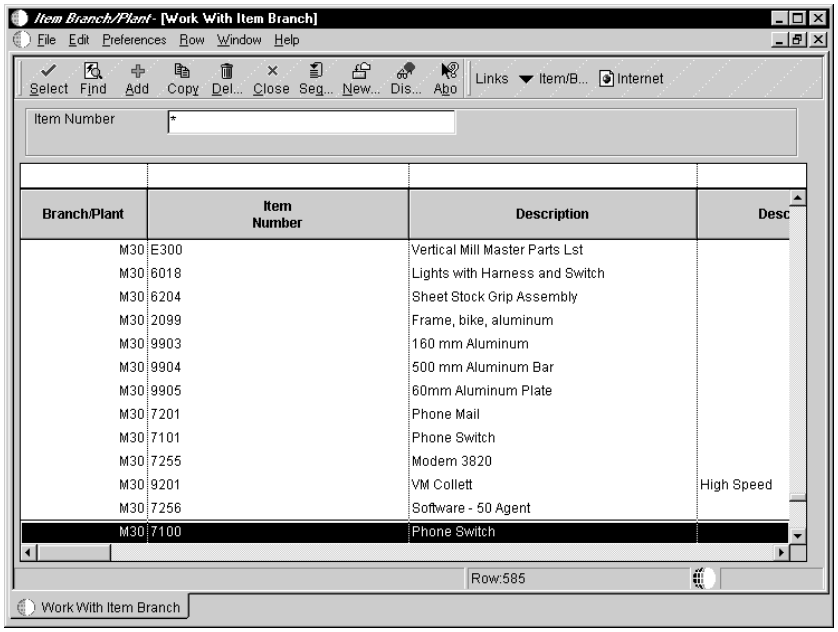
Besides location information, you can enter item processing information for an item on Additional Item Branch Information. Set up processing options to specify that other forms, such as Item Branch Class Codes, appear so you can add or change the information.

When you add branch/plant information, the system creates a record in the Item Branch table (F4102) and stores information specific to CSMS in the Item Branch – Customer Service Extension table (F41171).

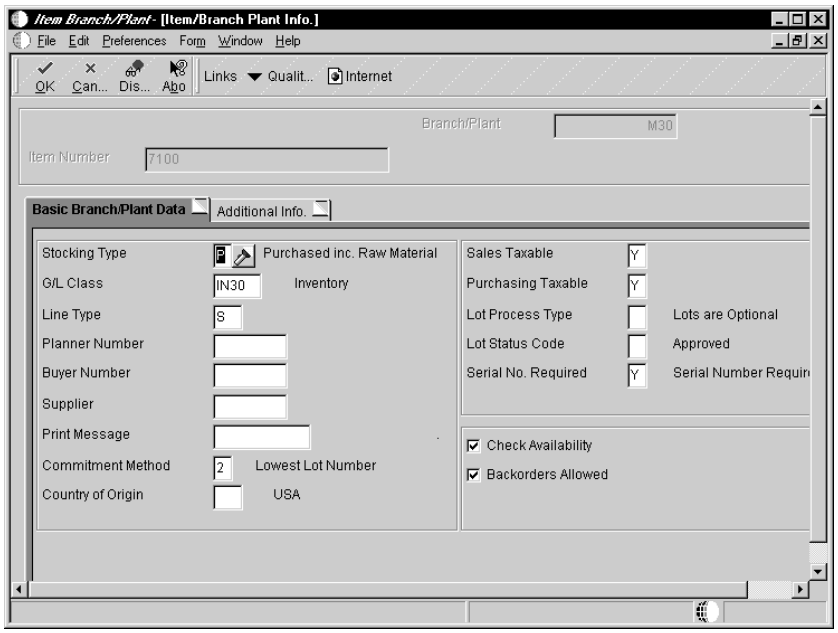
▶ To assign an item to a branch/plant

From the Inventory Master/Transactions menu (G4111), choose Item Branch/Plant.

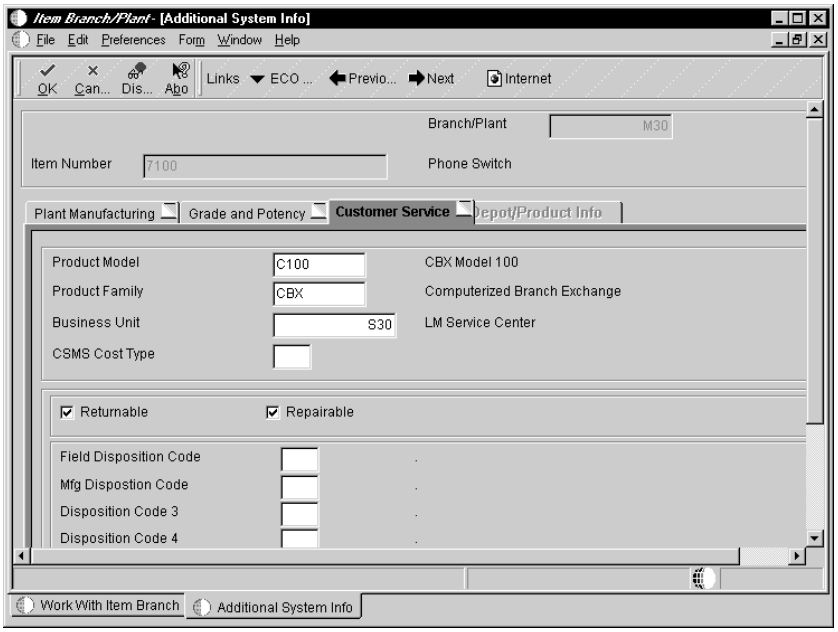
On Work with Item Branch



1. Click Add.



2. On Item/Branch Plant Info., complete the following fields and click OK:
   - Branch/Plant
   - Item Number
3. Return to the Work with Item Branch form.
4. From the Row menu, choose Additional Sys. Info.
5. On Additional System Info, click the Customer Service tab.



6. Revise the following fields or accept the system defaults:
   - Product Model
   - Product Family
   - Business Unit
   - CSMS Cost Type

     The system retrieves this value into the parts list on a service order and also uses it with costing.

7. Complete the following fields:
   - Field Disposition Code
   - Mfg Dispostion Code
   - Disposition Code 3
   - Disposition Code 4
   - Disposition Code 5
8. Click one or both of the following options:
   - Returnable
   - Repairable
9. Click OK.

The system retrieves item information from the Item Master, but you must click OK to update the database. If you click Cancel, information from the form is not saved to the database.

After you assign an item to a branch, you can follow the steps to assign a primary location within the branch/plant.

Field	Explanation
Branch/Plant	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Business Unit	Identifies a separate entity within a business for which you wish to track costs, for example, a warehouse location, job, project, work center, or branch/plant. The business unit field is alphanumeric. You can assign a business unit to a voucher, invoice, fixed asset, and so forth, for responsibility reporting. The system provides reports of open A/P and A/R by business unit, for example, to track equipment by responsible department. Business Unit Security can prevent you from inquiring on business units for which you have no authority.
CSMS Cost Type	A code that designates the item being costed. Examples would be: A1 Material B1 Labor X1 Freight X2 Travel
Field Disposition Code	A user defined disposition code.
Returnable	This is a flag that is used to indicate if the item is returnable.

Field	Explanation
Repairable	Use this flag to indicate that the item is repairable.

See Also

- *Entering Branch/Plant Information* in the *Inventory Management Guide*
- *Working with Item Locations* in the *Inventory Management Guide* for descriptions of fields on Item Branch Revisions and Additional Item Branch Information

Processing Options for Item Branch

Process

1. Enter a '1' to select the Item Branch information screens to automatically call when performing an add or a change. If left blank, screen will not display.

   Category Codes _____
   Cost Revisions _____
   Price Revisions _____
   Units of Measure _____
   Quantities _____
   Manufacturing Data _____
   Item Profile _____
   Bulk Product Information _____
   Item Branch Revisions – Customer Service _____

Versions

Enter the version to be used for each program. If left blank, ZJDE0001 will be used.

   1. Summary Availability (P41202) _____
   2. Item / Location Information (P41024) _____

Call Management

Call Management

The Call Management system provides features and functions to record contact between customers and consultants. Call Management is the central point for customer interaction and for storing and tracking customer issues. An issue is a question or problem for which a customer wants a solution. You use Call Management to record what transpires between the customer and the consultant. For each issue, the system can track the ownership, the date and time that issues are received and completed, the root cause analysis, and the client data, throughout the life of the issue.

The system stores all current and history information about the call in one database. Each time you make changes to a call, the system saves the entire record as well as the new information.

You can use Call Management to manage issues and perform the following tasks:

- Track an issue with a single record
- Track tasks assigned to another open or personal queue
- View issues based on selection criteria

You can maintain a database of symptoms, problems, analysis, and resolutions that you can search and reuse. You can also track severity and highlight critical issues.

Call Management allows an organization to create a central point of contact for all customer service processes by including the following:

- Call capture
- Call queue management
- Service order management
- Request fulfillment

Call Capture

You use the call capture process to select or create a customer record associated with a call. The system automatically generates a call number that you can use to track the progress on the call. Consultants can also view detail information about the customer including call history and contracts.

Call Queue Management

The call queue management process assigns calls to queues and to responsible persons. You might use call queue management to ensure that foreign language calls are directed to the appropriate person, or you might use each queue to represent a specific product and assign calls to consultants who are knowledgeable about that product.

Call Management Process

System Integration

To allow you to manage and store call information, the Call Management module integrates with the J.D. Edwards Inventory Management and Advanced Pricing systems, and wit the following CSMS modules:

- Service Order Management
- Installed Base Management
- Contract Management

Service Order Management

Use Call Management with Service Order Management to perform the following tasks:

- Create a service order to fix the product
- Enter a service order for the call
- Search online for parts and enter a parts recommendation
- Check parts availability and place reservations on required parts, such as hardware, software patches, literature, or drivers
- Select a service type for the call from either a list of entitled services or per call services to which the caller is entitled or billable

Installed Base Management

Use Call Management with Installed Base Management, you to perform the following tasks:

- Review system configurations (hardware, software, communication types) which reflect version, quantities, parts, serial numbers, and status
- Select or create an equipment installed base for use when capturing a call that can be updated

Contract Management

Use Call Management with Contract Management, you to perform the following tasks:

- Review entitlement information for the customer and for the piece of equipment. Information stored by Contract Management includes the contract type and the services, coverage, and dates covered by the contract.
- Check entitlement of the customer and of the piece of equipment.

Terms and Concepts

The following Call Management terms are used in this guide:

Analysis	The research and tests you perform in order to resolve a customer issue.
Call	The format for receiving customer issues. They include: • telephone • facsimile • e-mail
Call work center	A central location that allows you to view all open and personal queues, and allows you to move calls between queues.
Issue	A question or problem generated by a customer and for which the customer wants a solution. A customer can communicate the issue via telephone, facsimile, or e-mail. Issues are contained within calls.
Knowledge management	The database you use to store symptoms, analysis, and resolutions associated to issues.

Open queue	A folder that contains open, unassigned calls and tasks. It may also display teams associated with the queue.
Personal queue	A folder that contains assigned calls and tasks associated with one responsible consultant.
Resolution	The solution attached to an issue. Resolutions are stored separately from symptoms and can be searched for and reused for other issues.
Symptom	The problems attached to an issue. Symptoms are stored separately from resolutions and can be searched for and reused for other issues.
Task	An action related to an issue. A consultant can assign a task to another consultant or to an open queue.
Computer Telephony Integration (CTI)	The interface that enables a computer to act as a call center. It accepts incoming calls and routes them to the appropriate device or person.

Understanding the Interface

The Call Management interface uses the following icons and colors to help you capture call information.

Icons

Phone	This icon represents a call in the work center.
Ringing phone	This icon represents a callback in the work center.
Person	This icon represents product history in the call.
Tools	This icon represents customer history in the call.
Open Folder	This icon represents open tasks in the call.
Triangle	This icon represents tasks in the work center.
Bucket with paint brushes	This icon represents additional contacts for the call.

Green checkmark	This icon indicates that a customer is entitled.
Circle with a line through the middle	This icon indicates that a customer is not entitled.

Colors

You can assign colors and attach the color to a priority level. Enter the color of the priority you want in the second description of the UDC (17/PR). There are 13 valid colors.

Call Management includes the following tasks:

- ❑ Setting up call management
- ❑ Entering call information
- ❑ Working with calls
- ❑ Working with Computer Telephony Integration
- ❑ Resolving calls
- ❑ Managing the call work center
- ❑ Reviewing call management reports

Setting Up Call Management

Before you can use any of the features of Call Management, you need to define information that the system uses for processing. You also specify information that is used when you enter data, such as call and issue information, into the system.

Setting up Call Management includes the following tasks:

- ❑ Setting up Call Management constants
- ❑ Setting up call queues
- ❑ Setting up group distribution lists
- ❑ Setting up queue security
- ❑ Setting up queue properties
- ❑ Setting up routing information
- ❑ Defining supplemental data
- ❑ Setting up next numbers for Call Management

You also need to set up user defined codes. For more information, see *Setting Up User Defined Codes for CSMS*.

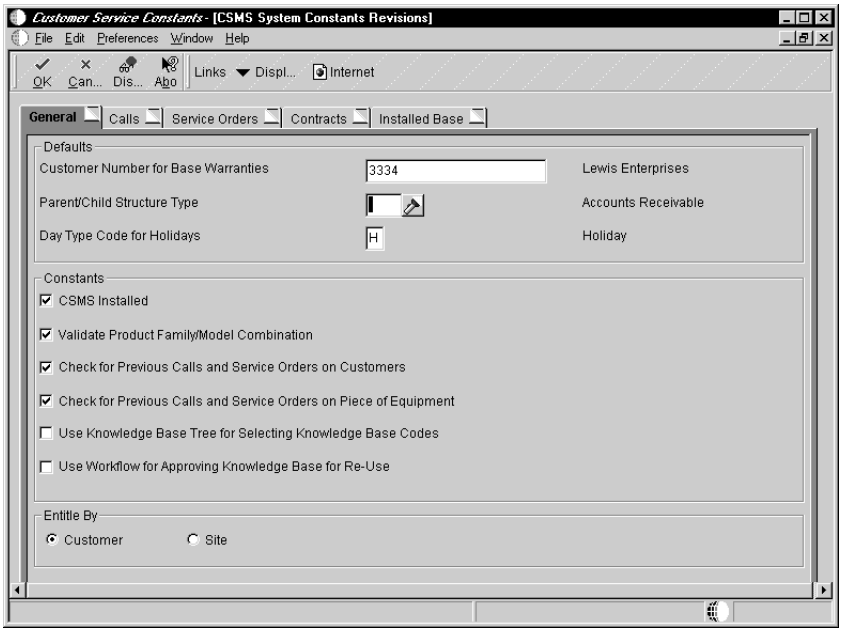
Setting Up Call Management Constants

To define default information for the entire system, you set up system constants. Constants control the types of information that you track and the rules that the system uses to perform certain calculations.

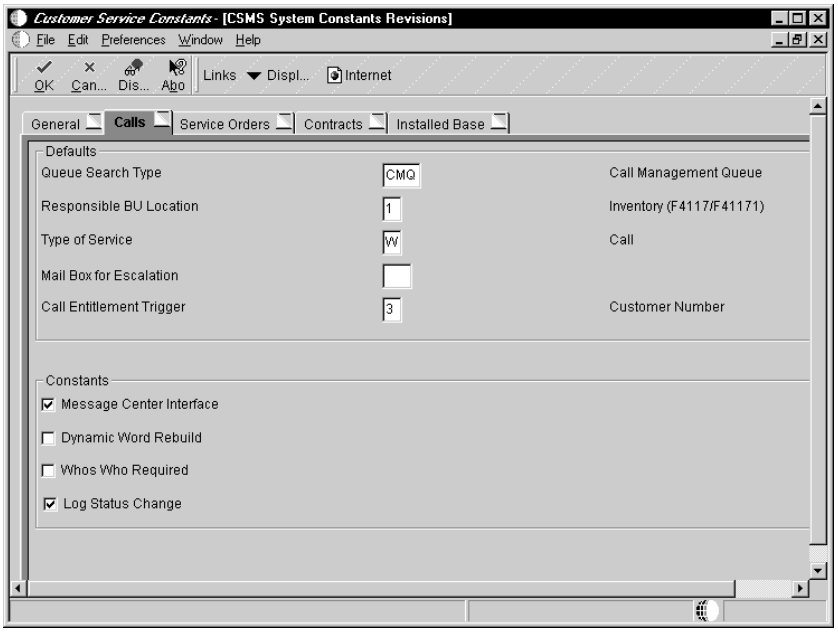
▶ To set up call management constants

From the Customer Service Setup menu (G1740), choose Customer Service Constants.

On CSMS System Constants Revisions



1. To instruct the system to automatically check for history on a piece of equipment, an item number, or a product model, click the following option:
   - Check for Previous Calls and Service Orders on Piece of Equipment
2. To instruct the system to automatically check for customer history, click the following option:
   - Check for Previous Calls and Service Orders on Customers
3. Click the Calls tab.



4. To identify the kind of address book record you want the system to select when you are searching for a queue or creating a call queue, complete the following field:

   - Queue Search Type

   Enter a user defined code (01/ST).

5. To identify the classification of a call that is assigned for entitlement checking, complete the following field:

   - Type of Service

   This is the type of service assigned to a call for entitlement checking. Enter a user defined code (00/TY).

6. To hold messages for escalation, enter the location in the following field:

   - Mail Box for Escalation

7. To indicate the field that triggers entitlement checking when entering a call, complete the following field:

   - Call Entitlement Trigger

   If the processing options are set to automatically check for entitlements, use this field to define which data item causes the system to run an entitlement check.

8. To use the call work center along with the workbench choose the following option:

   - Message Center Interface

   The workbench is the default.

9. To indicate that the caller must be identified in the Who's Who database for a consultant to accept their calls, choose the following option:

   - Whos Who Required

10. To create a log each time you change the status, click the following option:

    - Log Status Change

    When you log status changes, the status codes are added before and after each status change in the text area of the media object attached to the call.

Field	Explanation
Check for Previous Calls and Service Orders on Piece of Equipment	The value in this field instructs the system whether or not the system is to automatically check for previous calls and service orders for the current product. If the option is checked, the system uses the inventory item number to check for previous calls or service orders as you enter call or service order information.
Check for Previous Calls and Service Orders on Customers	The value in this field instructs the system whether or not the system is to automatically check for previous calls and service orders for the current customer. If the option is checked, the system uses the customer number to check for previous calls or service orders as you enter call or service order information.
Queue Search Type	A user defined code (01/ST) that identifies the kind of address book record you want the system to select when you search for a name or message. For example: E Employees X Ex-employees V Suppliers C Customers P Prospects M Mail distribution lists T Tax authority
Type of Service	A user defined code (00/TY) that indicates the type of classification of a call used for an entitlement check.
Call Entitlement Trigger	A user defined code (17/ET) that indicates what field should trigger entitlement checking when entering a CSMS call.
Message Center Interface	A field used to specify an interface to the Work Center. If the value is 1, the system creates a message for the call and task records that are viewable in the Work Center.
Whos Who Required	A value that identifies that the caller and all additional contacts for a call must have Who's Who records. If the value is a 1, you cannot add the call unless the caller and all additional contacts reside in the Who's Who table.
Log Status Change	This field specifies whether changes to the Call Status field should be written to the text associated with the call. If the value is a 1, the original status, new status, user, and date/time stamp are written as a line in the text.

Setting Up Call Queues

Set up call queues to direct issues to the specialists who are trained to receive calls about specific product groups or issues.

Setting up call queues includes the following tasks:

- ❑ Adding a call queue
- ❑ Setting up call types
- ❑ Setting up call queue priorities
- ❑ Setting up call queue status

You can specify call types, priorities, and queue status information to each queue that you set up, or you can use generic information for all of your queues.

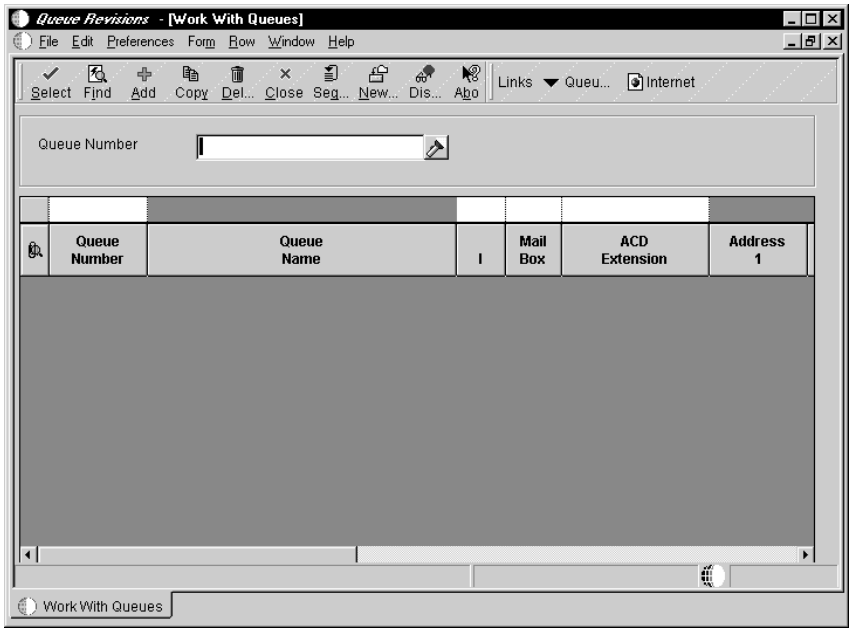
Adding a Call Queue

You must set up at least one queue and assign calls to this queue. You might add call queues if your organization expands its product groups or you decide to assign specialists to answer calls by knowledge of product groups.

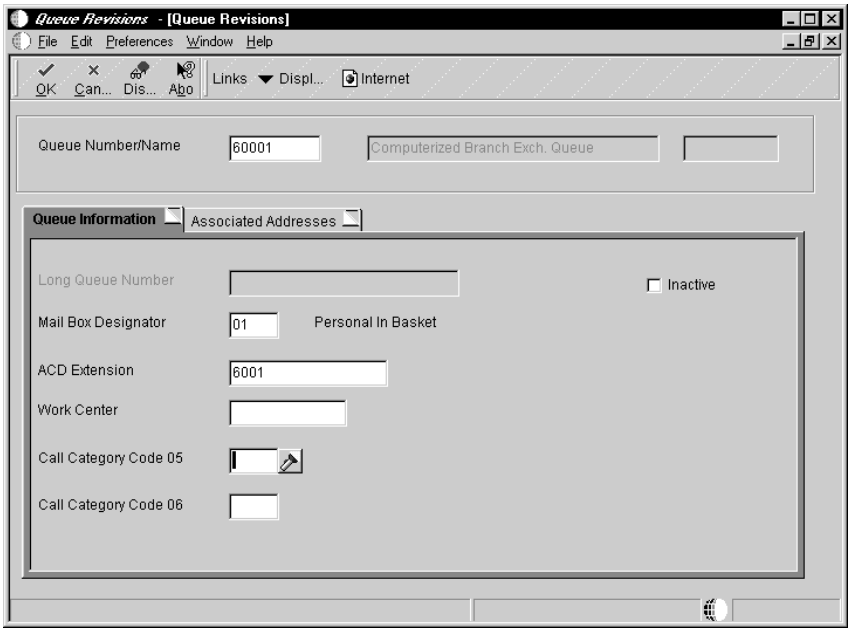
▶ To add a call queue

From the Call Setup menu (G1743), choose Queue Revisions.

On Work with Queues



1. Click Add.



2. On Queue Revisions, enter an existing address book number in the following field:

   - Queue Number/Name

   If you leave this field blank, the system assigns an address book number to the queue. To create a queue without using an existing address book number, you can either manually enter a queue number or you can leave the field blank and allow the system to assign a queue number. The system creates an address book record for this new queue with that queue number.

3. To designate the queue name that you want to appear in the call work center, complete the following fields:

   - Name – Alpha
   - Long Queue Number

4. Enter mailbox and telephone number information in the following fields:

   - Mail Box Designator

     Enter the mailbox associated with the queue. This is the mail box that calls are directed to when assigned to the open queue.

   - ACD Extension

5. To calculate commitment date and time if you are not using entitlements, complete the following field:

   - Work Center

   The system also uses the work center to calculate the elapsed time and the time remaining on the call.

6. For additional reporting, complete the following fields:

   - Call Category Code 05
   - Call Category Code 06

     Use Call Category Codes to enter information on a call. You can use this information for reporting on queues.

   - 5th Address Number
   - 6th Address Number

     The system defaults Address Number information into a call assigned to a queue.

7. To associate a consultant, such as the queue manager, with a queue, click the Associated Addresses tab and complete any of the following fields:

   - 1st Address Number
   - 2nd Address Number
   - 3rd Address Number
   - 4th Address Number

   Do not associate the address book number of consultants who receive calls for this queue in this field. Instead, associate consultants with the queue that are appropriate for reporting purposes or for workflow.

Field	Explanation
Queue Number/Name	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.
Name – Alpha	The text that names or describes an address. This 40-character alphabetic field appears on a number of forms and reports. You can enter dashes, commas, and other special characters, but the system cannot search on them when you use this field to search for a name.
Long Queue Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Mail Box Designator	A field that determines the mailbox associated with the queue that should be used on delivery of the message.

Field	Explanation
Work Center	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Call Category Code 05	User defined category code used when assigning customer issues.

Processing Options for Work With Queues

```
Versions

      1.  Enter the Version for the                    _____________
      Address Book update.  Default is
      ZJDE0001 if blank.

Default

      1.  Enter 1 to display Call                      _____________
      Queues.  If left blank, Service
      Order Queues will be displayed.
      2.  Enter the Document Type for                  _____________
      the Queue Status Rules.
```

Setting Up Call Types

To organize calls, you can set up the various call types, depending on how your organization chooses to receive calls. The types of calls might include:

- facsimile
- live telephone call
- returned phone call
- e-mail

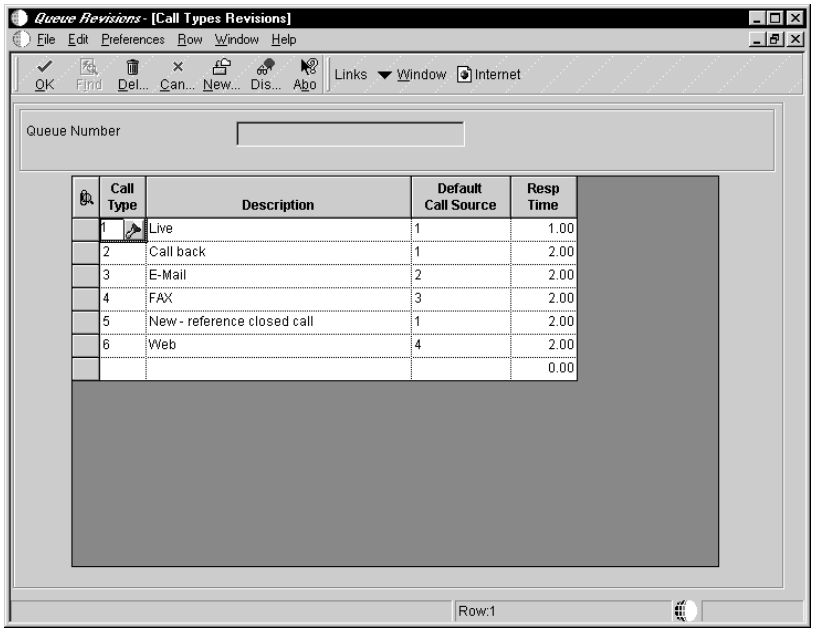
▶ To set up call types

From the Call Setup menu (G1743), choose Queue Revisions.

On Work with Queues

1. Locate the queue to which you want to add call types.
2. From the Row menu, choose Queue Type Setup.

   To set up a call type that encompasses all queues, choose Queue Type Setup from the Form menu instead of the Row menu.



3. On Call Types Revisions, complete the following fields:
   - Call Type
   - Default Call Source
   - Resp Time

   Enter Response Time to define a guaranteed length of time a consultant responds to an issue. This guaranteed response time is used to calculate commitment date and time, and escalation date and time if the call is not covered under a contract.

If there is a contract covering a call, then the contract response time overrides the response time on the Call Types Revisions form.

Field	Explanation
Field	Explanation
Call Type – 1	A code used to specify the type of Response Line Call.
Default Call Source	A code used to specify the billing of a call. Allowed values are as follows: Blank Nothing enered W Warranty R Response Line
Resp Time	The guaranteed time in which service will be completed when a provider logs a Help Desk call or service work order as provided by a service contract. This unit of time is directly related to a Service Type in the Service Contracts Services table (F1725). The response time is entered in hours.

Setting Up Call Queue Priorities

You can set the call priorities associated with a queue. When you set call priorities, the system updates the Call Priority table (F1753).

You can set up as many escalation levels as necessary. The system sends escalation messages until the issue is closed or until there are no more escalation levels.

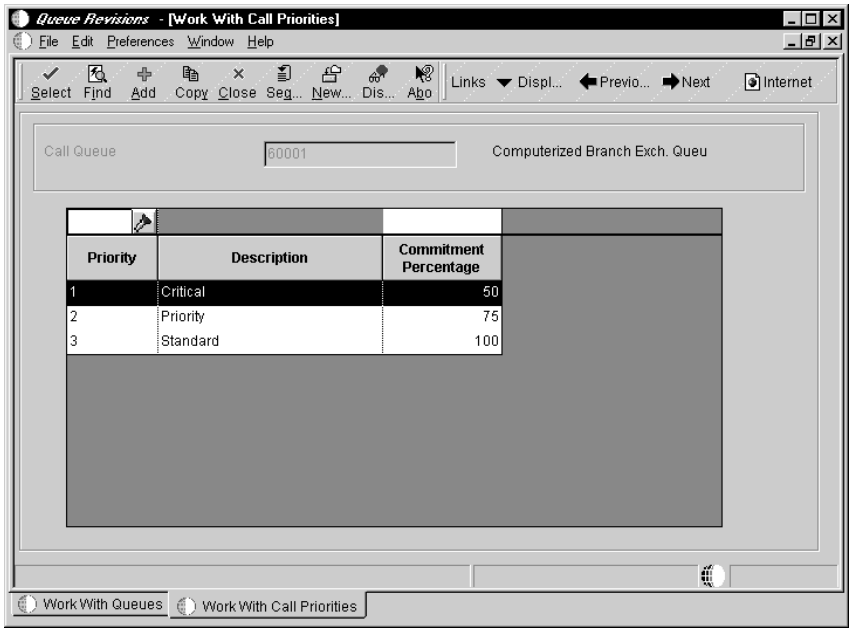
▶ To set up call queue priorities

From the Call Setup menu (G1743), choose Queue Revisions.

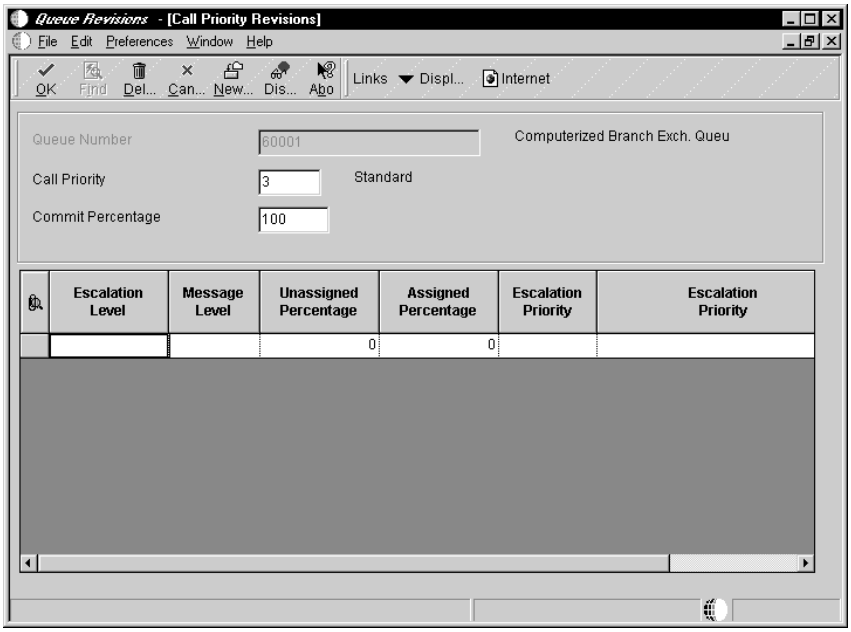
On Work with Queues

1. Locate the queue to which you want to add priorities.
2. From the Row menu, choose Queue Priorities.

   To set up priority revisions that encompasses all queues, choose Queue Priorities from the Form menu instead of the Row menu.



3. On Work with Call Priorities, click Add.



4. On Call Priority Revisions, enter the level of severity of the customer issue in the following field:
   - Call Priority
5. To define the percentage used to calculate commitment date and time, and escalation date and time when the call is not covered under a contract, complete the following field:
   - Commit Percentage

When a call is not covered under a contract, the calculation for Commitment Date and Time is Current Date and Time + (Guaranteed Response Time x Commit Percentage).

6. Complete the following fields:

   - Escalation Level

     The escalation level comes from a call and must be greater than or equal to 1.

   - Message Level

     The message level is associated with the group number on the Address Parent/Child Revisions form and helps determine who should be sent messages when the call is escalated.

   - Unassigned Percentage

     The system uses the unassigned percentage to calculate escalation date and time for unassigned calls when the call is not covered under a contract. The calculation is Escalation Date and Time = Commitment Date and Time x Unassigned Percentage.

   - Assigned Percentage

     The system uses the assigned percentage to calculate escalation date and time for assigned calls when the call is not covered under a contract. The calculation is Escalation Date and Time = Commitment Date and Time x Assigned Percentage.

   The values in the percentage field can be over 100% since you can send escalation messages after the commit time has been reached.

7. Complete the following optional fields:

   - Escalation Priority

     To escalate a call to a higher priority, enter the priority here. If you do not enter a priority, the system only sends messages as opposed to changing the call priority and sending messages.

Setting Up Call Queue Status

You set up call queue status to define the status flow and to define the next step based on the current status. In order for the system to continue to the next step, you must enter the next status in the Last Status field. If you do not include the next status, the call is considered complete. If you attach an open status code one of the other columns, you can reopen the call.

The following table shows an example of how you might set up queue statuses. The Last Status column shows the status of the call and the Description column provides a description of the status. The remaining columns in the table show the next statuses allowable for the call at this (Last Status) status. For example, a call that is open (100), can become an active call (150), you might leave a message (250), or you might cancel the call (997). This table also shows that a call that is complete (999) can be reopened.

Last Status	Status Description	Next Status	Other	Other
100	Open	150	250	997
150	Active	999		
250	Left Message	999		
997	Cancel			
999	Complete		100	

Statuses can be based on call document type, call queue and call type, or they can be set up to cover all document types, queues and call types.

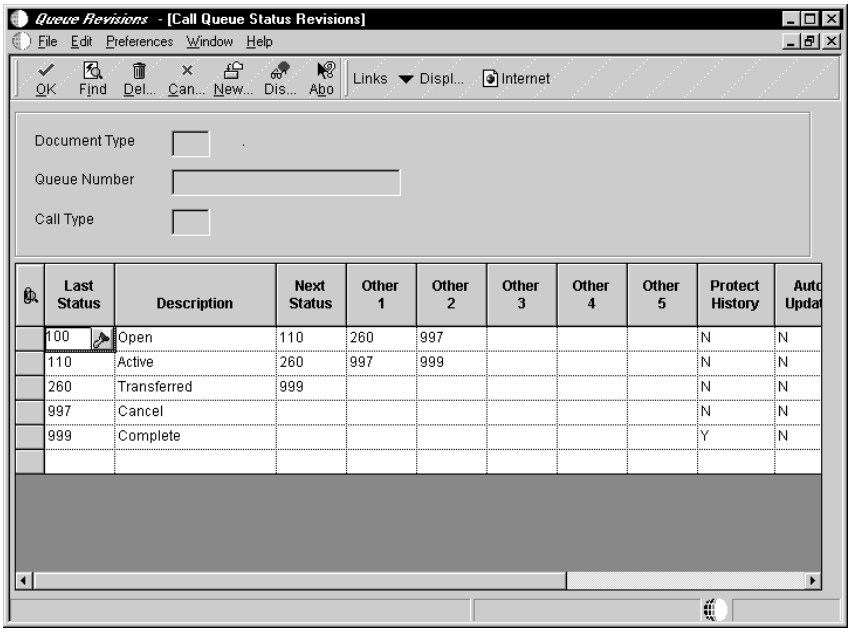
▶ To set up call queue status

From the Call Setup menu (G1743), choose Queue Revisions.

On Work with Queues

1. Locate the queue that you want to further define.
2. For each call type that you are setting up, choose Queue Status Revisions from the Row menu.

   To set up status revisions that encompass all queues, choose Queue Status Revisions from the Form menu instead of the Row menu.



3. On Call Queue Status Revisions, enter the status code that you are revising in the following field:

   - Last Status

   In the Next Status field, enter the status the call will go to if auto update is enabled. If the last status you are entering is considered a “closed” call, leave this field blank. The only way the system knows the call is closed, is if the Next Status field is blank. If you want to be able to be reopen a closed call, enter that status in one of the “Other” status fields.

4. To designate that call text can or cannot be changed at a particular status, complete the following field:

   - Protect History

   Enter a code to determine whether a call can be changed at a particular status.

5. Complete the following fields:

   - Auto Update

     This specifies to change the status of a call automatically when you click OK.

   - Time Entry
   - Knowledge Base

The Subledger Inactive field is reserved for future use.

Field	Explanation
Last Status	A code to indicate the status of a response line call.

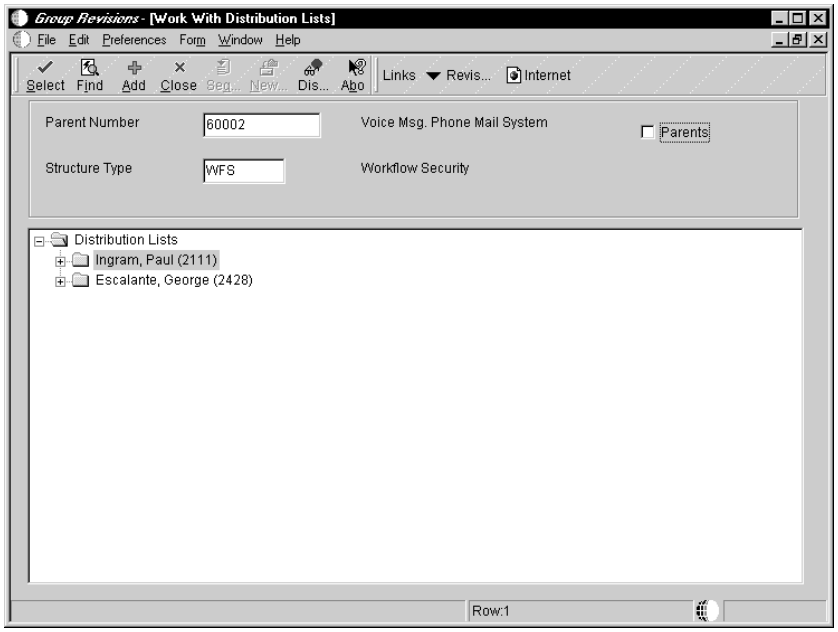
Setting Up Group Distribution Lists

You use distribution lists to attach assignees to queues. When you define organizational structures, you create hierarchies of relationships between parents and children.

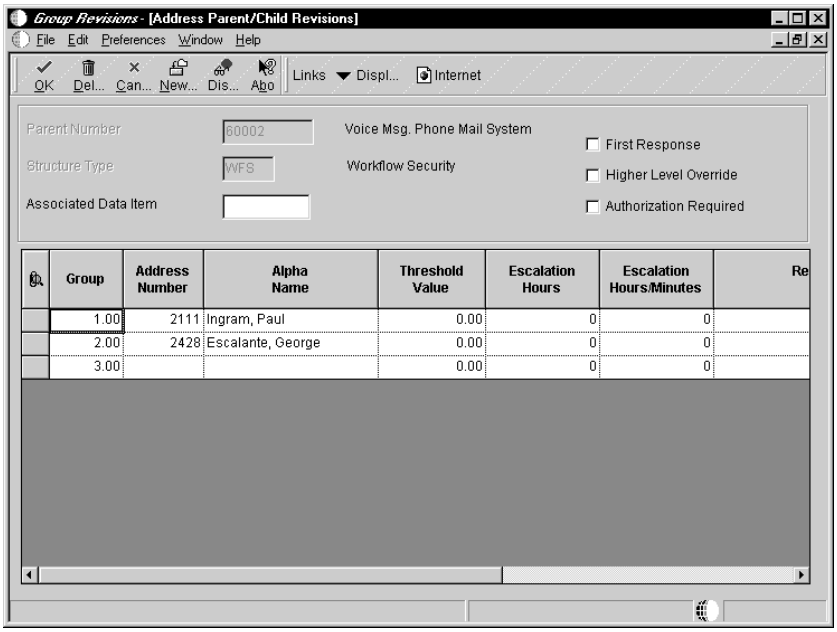
▶ To set up group distribution lists

From the Call Setup menu (G1743), choose Group Revisions.

On Work with Distribution Lists



1. Click Add.



2. On Address Parent/Child Revisions, complete the following fields:
   - Parent Number
3. Enter WFS in the following field:
   - Structure Type
4. For each assignee in this queue, complete the following fields:
   - Group
   - Address Number
5. Complete the following optional fields for each assignee:
   - Remark
   - Begin Eff Date
   - End Eff Date
6. Click OK.

Field	Explanation
Parent Number	The Address Book number of the parent company. The system uses this number to associate a particular address with a parent company or location. For example: • Subsidiaries to parent companies • Branches to a home office • Job sites to a general contractor This address must exist in the Address Book Master table (F0101) for validation purposes. . . . . . *Form-specific information* . . . . . The Address Book number of the primary level in a hierarchy, or reporting relationship. A parent in one hierarchy can be a child in another hierarchy. A hierarchy can be organized by business unit, employee, or position. For example, you can create a hierarchy that shows the reporting relationships between employees and supervisors.
Structure Type	A user defined code (01/TS) that identifies a type of organizational structure with its own hierarchy in the Address Book system (for example, e-mail). When you create a parent/child relationship for a customer or supplier, the structure type must be blank. . . . . . *Form-specific information* . . . . . Identifies the type of distribution list, such as WFS for workflow, ORG for group, and EML for e-mail.
Group	A number that reorders a group of records on the form.
Address Number	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.
Remark	A generic field that you use for a remark, description, name, or address.
Begin Eff Date	The date on which the address book record will appear in the structure. The Beginning Effective Date field will prevent the address number from occurring in the structure until the beginning effective date is the same as the current date. If left blank, the address number will always occur in a structure unless there is an ending effective date.
End Eff Date	The date on which the address book record will cease to exist in the structure.

See Also

- *Understanding Distribution Lists* in the *Enterprise Workflow Management Guide*

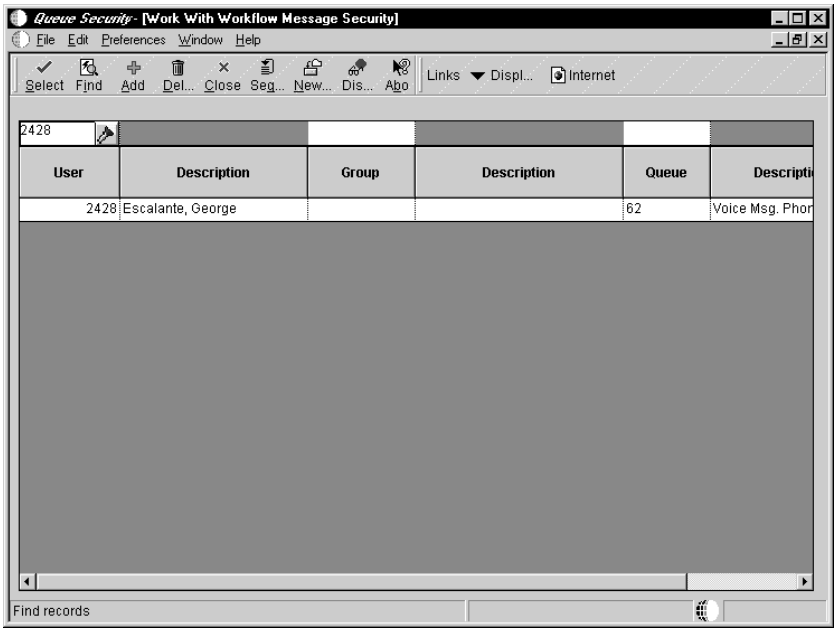
Setting Up Queue Security

You can set up the security status for a use or group of users within a workflow message queue. You can add security by user, distribution list, or both. For example, you might set up security for a manager so that they can monitor all messages within certain queues.

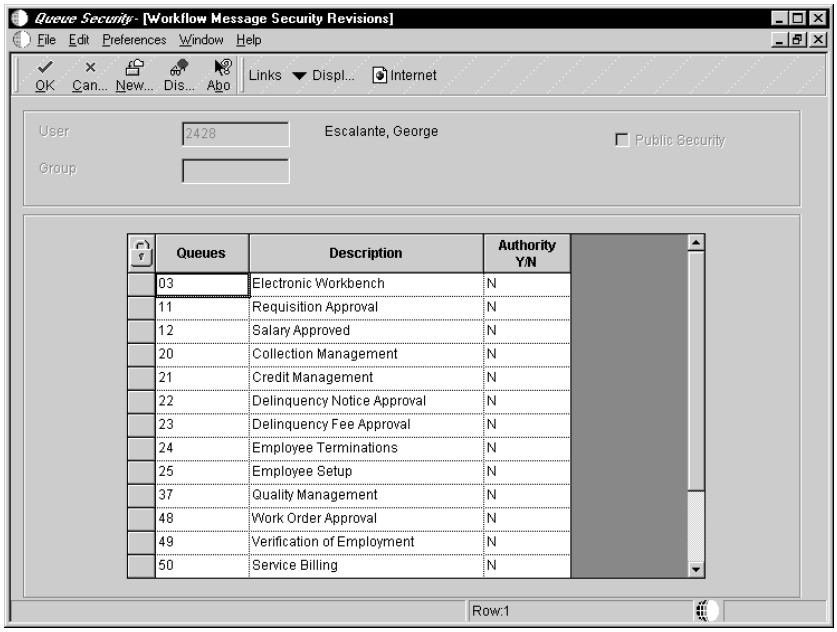
▶ To set up queue security

From the Call Setup menu (G1743), choose Queue Security.

On Work With Workflow Message Security



1. Click Add.



2. On Workflow Message Security Revisions, complete the following fields:
   - User
   - Group
3. Specify the queues that a user can view by completing the following field and clicking OK:
   - Authority Y/N

Field	Explanation
User	A user in the workflow system.
Group	A group or list of users in the the workflow system. This is the number of the workflow distribution list.
Authority Y/N	Indicates whether the user is authorized to make changes to security information. . . . . . *Form-specific information* . . . . . . For workflow, indicates whether the user can view other queues in the Work Center.

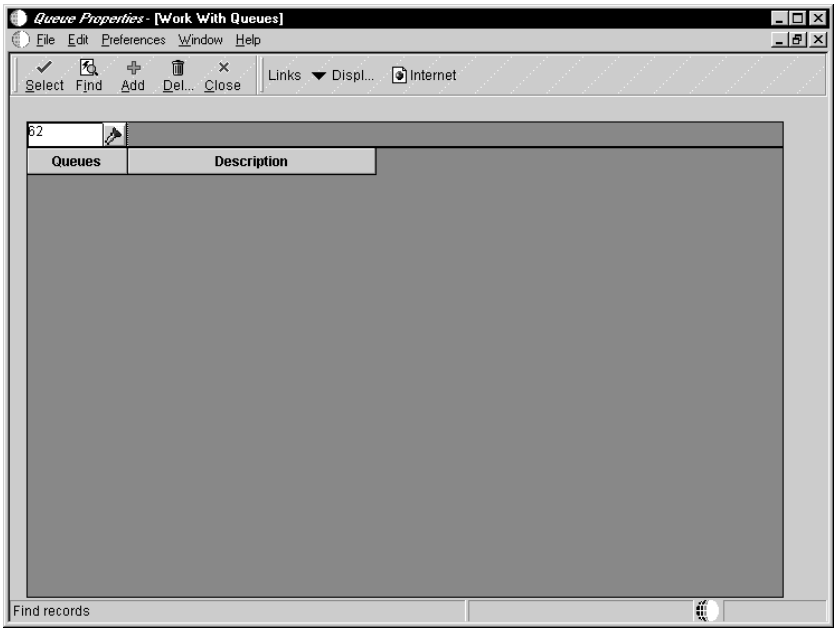
Setting Up Queue Properties

Setting up queue properties provides a link to a OneWorld application if, for example, you want a recipient to review information within a OneWorld application whenever they open messages in that particular queue.

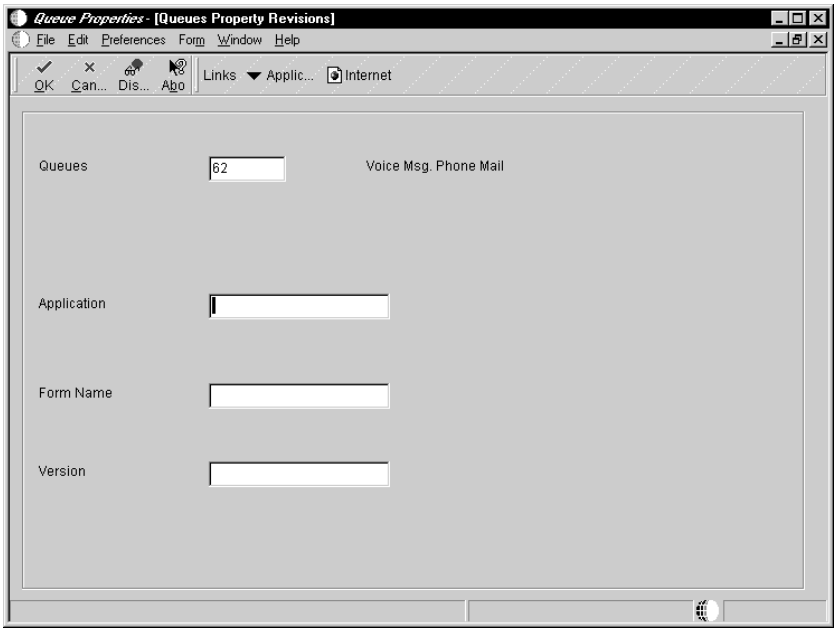
To set up queue properties

From the Call Setup menu (G1743), choose Queue Properties.

On Work With Queues



1. Click Add.



2. On Queues Property Revisions, complete the following fields:
   - Queues
   - Application
   - Form Name
   - Version

Field	Explanation
Queues	A field that determines the mailbox associated with the queue that should be used on delivery of the message.
Application	The OneWorld architecture is object-based. This means that discrete software objects are the building blocks for all applications, and that developers can reuse the objects in multiple applications. Each object is stored in the Object Librarian. Examples of OneWorld objects include: • Batch Applications (such as reports) • Interactive Applications • Business Views • Business Functions • Business Functions Data Structures • Event Rules • Media Object Data Structures
Form Name	The unique name assigned to a form.
Version	Identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by J.D. Edwards.

Setting Up Routing Information

When you set up routing information, you can direct calls to the queues you set up and in the order that you determine as the most logical.

Setting up routing information includes the following tasks:

- ❑ Setting up a routing sequence
- ❑ Setting up routing rules

Setting Up a Routing Sequence

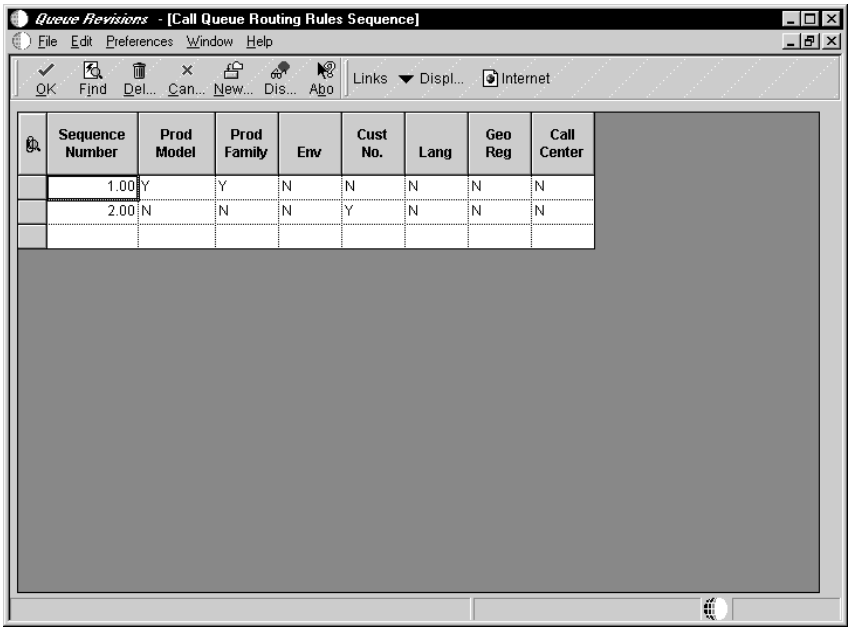
You can manage the order that a call is routed to queues. Use routing sequence to define how the system searches through the routing rules to determine the queue to which an incoming call is directed.

To set up a routing sequence

From the Call Setup menu (G1743), choose Queue Revisions.

On Work With Queues

1. From the Form menu, choose Routing Sequence.



2. On Call Queue Routing Rules Sequence, complete the following fields:
   - Sequence Number
   - Product Model
   - Product Family
   - Environment
   - Customer Number
   - Language
   - Geographic Region
   - Call Center

   define the order that the system will use to search for a match between the call and routing rules. The system uses a hierarchical search method, from most specific to most general. Complete the fields with a Y to include them in the hierarchical search..

Field	Explanation
Sequence Number	A number that reorders a group of records on the form.

Setting Up Routing Rules

You can add to or revise the prescribed path that allows you to assign calls to the proper queue. You can assign calls to a queue based on any of the following or any combination of the following information:

- Customer address book number
- Call center location
- Product model
- Product family
- Environment
- Address book language code
- Address book geographic region code

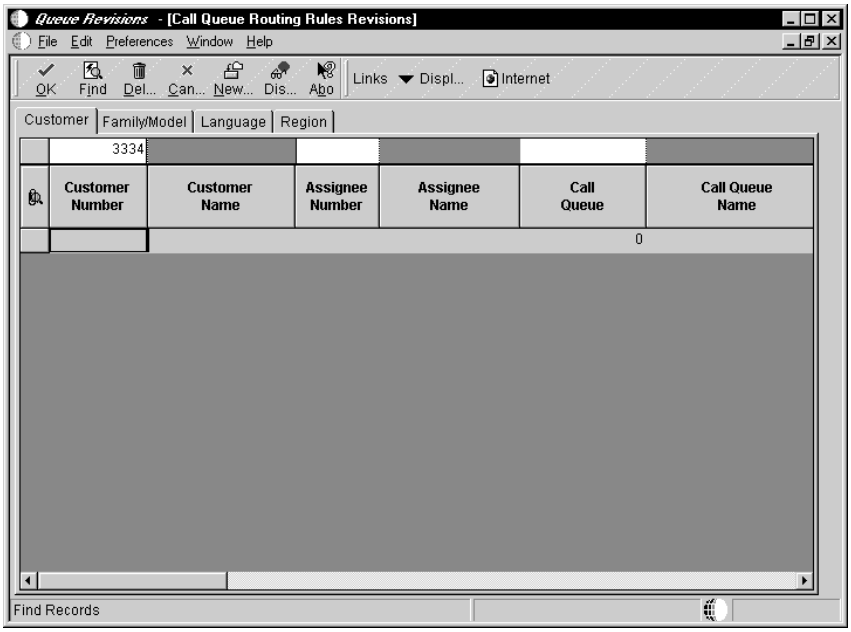
By creating these rules, you might assign calls to certain queues or individuals based on their knowledge of a product family or a language.

▶ To set up routing rules

From the Call Setup menu (G1743), choose Queue Revisions.

On Work with Queues

1. From the Form menu, choose Routing Rules.



2. On Call Queue Routing Rules Revisions, to narrow your search complete any of the following fields:
    - Customer Number
    - Call Center Location
    - Product Model
    - Product Family
    - Environment
    - Language
    - Geographic Region Code
3. To assign a person to a customer, complete the following field:
    - Assignee Number
    - Call Queue

Field	Explanation
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.

Field	Explanation
Environment	The operating environment of the user. Some examples include Windows 95, Windows NT, UNIX or AS/400.
Language	A user defined code (01/LP) that specifies a language to use in forms and printed reports. Before any translations can become effective, a language code must exist at either the system level or in your user preferences.
Geographic Region	The geographic region of the customer.
Call Queue	The address number of the call queue. Calls are assigned to queues working to resolve a customer problem.
Assignee Number	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.

Defining Supplemental Data

From the Daily Call Processing menu (G1713), choose Call Entry.

You can set up exits from the Form menu to access other programs. This allows you to customize the software for your processes but does not require custom programming.

See Also

- *Creating Menu/Toolbar Exits* in the *Development Tools Guide*

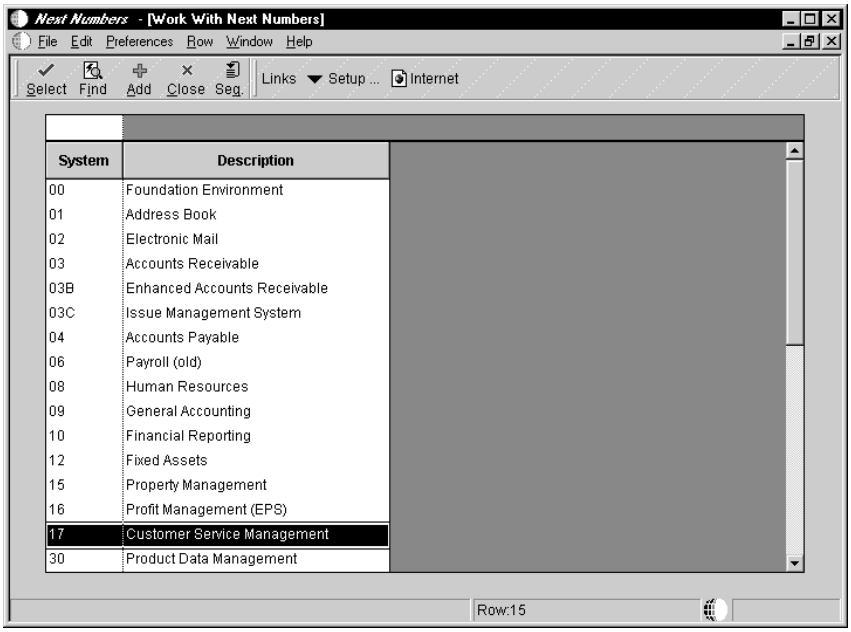
Setting Up Next Numbers for Call Management

You set up next numbers for call management so that the system assigns the next sequential number to a call as you capture it. Each call then has a unique number by which you and the customer track it.

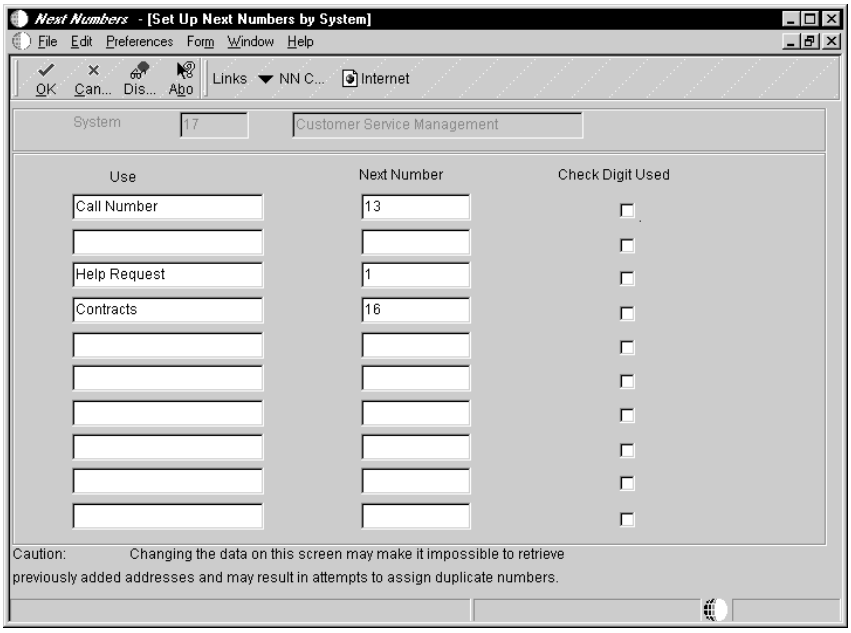
▶ To set up next numbers for Call Management

From the Call Setup menu (G1743), choose Next Numbers.

On Work with Next Numbers



1. Choose system Customer Service Management (system 17) and click Select.



2. On Set Up Next Numbers by System, complete the following fields:
   - Next Number
   - Check Digit Used

Field	Explanation
Next Number	The number that the system uses for the next number that it assigns. The system can use next numbers for voucher numbers, invoice numbers, journal entry numbers, employee numbers, address numbers, contract numbers, and sequential W-2s. You must use the next number types already established, unless you provide custom programming.
Check Digit Used	An option that specifies whether the system adds a number to the end of each next number assigned. For example, if you are using check digits and the next number is 2, the system will add a check digit such as 7, making the last two numbers 27. Check digits provide a method of randomly incrementing numbers to prevent the assignment of transposed numbers. In this example, the system would never assign next number 72 while check digits are activated. Valid codes for WorldSoftware are: Y Yes, add a check digit to this next number N No, do not add a check digit For OneWorld software, turn on this option to add a check digit.

Entering Call Information

Each of the following tasks is integral for entering call information:

- ❑ Entering the issue
- ❑ Reviewing call information
- ❑ Working with tasks

Entering the Issue

Consultants can add issues, by entering specific information about the call. To add an issue, you must provide the following minimum information:

- One of the following:
  - Address book number of the customer
  - Equipment number
  - Item number
  - Product model
- The name of the person initializing the call.
- A brief description of the issue.
- A queue number, if routing has not been set up. The system can also provide a default queue number based on the processing options.

When you add an issue, the system assigns a number to the issue and assigns it to the queue. The issue remains in the queue until you assign it to another queue or to another consultant. You can also set your processing options so that this issue is automatically assigned.

You may enter additional information when you add the issue, including:

- An attachment of free-form text that allows you to provide more detail than the Issue Symptoms field allows.
- A task or an action related to an issue that you can assign to another open or personal queue. In certain circumstances, you might assign yourself a task and reassign the issue to another open or personal queue.

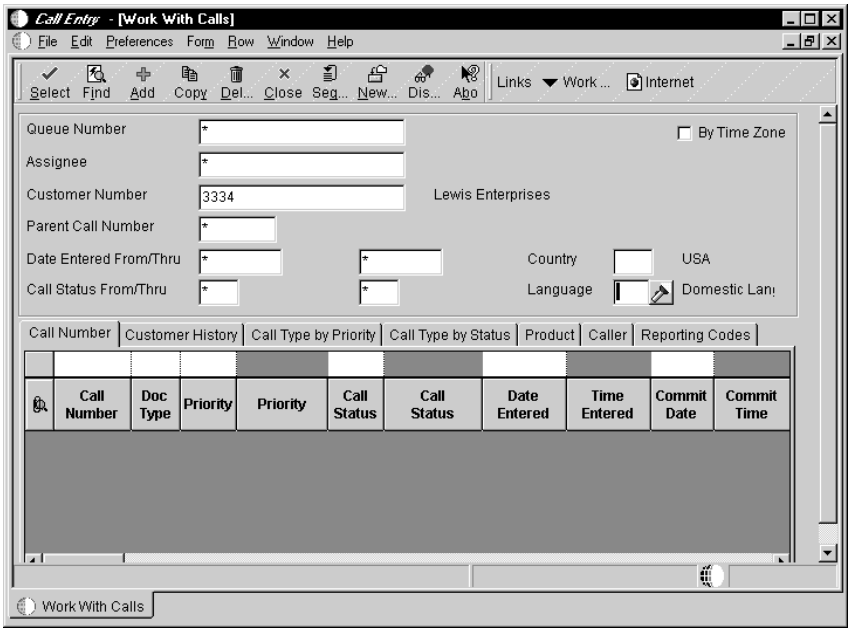
- A resolution or the solution you attach to the issue. Resolutions are stored separately from issues and can be searched for and reused for other issues. You can search for a resolution to your issue and attach it, or you can create a new one.

When you enter a call, you review a series of forms to ensure that the information for the customer is accurate.

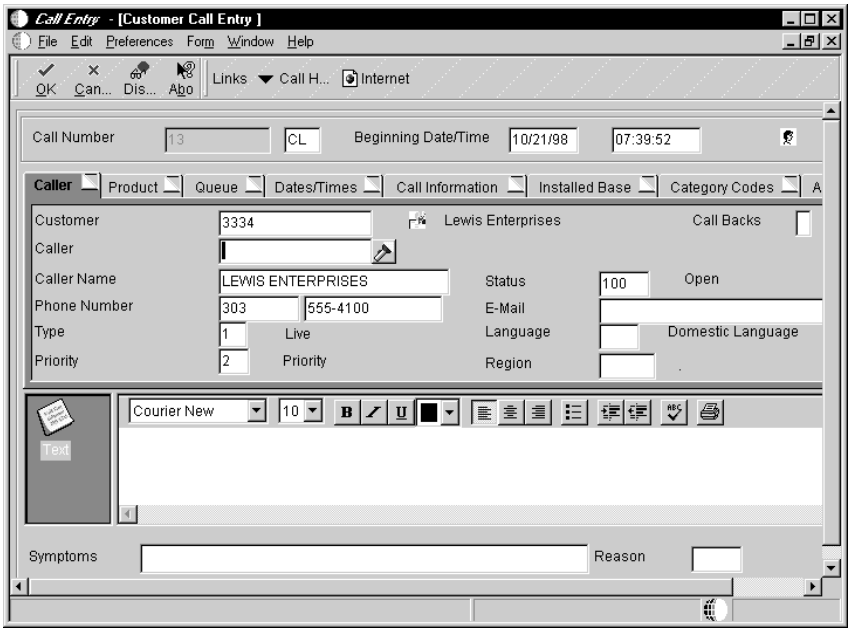
▶ To enter the issue

From the Daily Call Processing menu (G1713), choose Call Entry.

On Work With Calls



1. Click Add.

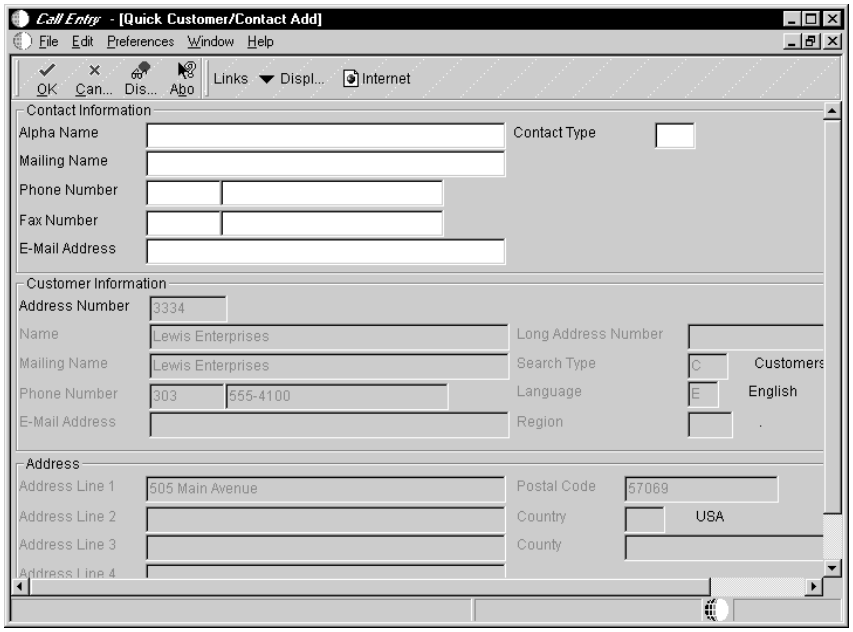


2. On Customer Call Entry, click the Caller tab, and complete the following field and press the tab key to move to the next field:

   - Customer Number

   If the customer is in the system, the system retrieves information about that customer, such as telephone number. These are default values that you can override if necessary.

3. If the customer is not in the system, choose Customer from the Form menu, choose Address Book, and then choose Quick Add.



4. On Quick Customer/Contact Add, enter customer information by completing the following fields:
    - Address Number
    - Name
    - Phone Number
    - E–Mail Address
5. To enter customer address information, complete the following fields:
    - Address Line 1
    - Address Line 2
    - Address Line 3
    - Address Line 4
    - City
    - Postal Code
    - Country
    - County
6. Exit Quick Customer/Contact Add and return to Customer Call Entry.
7. On Customer Call Entry, complete the following field:
    - Customer Number

    As an option, to enter a call, you can complete the Equipment Number, Item Number, or Product Model field on the Product tab.
8. To associate a third party, such as a technician or customer service representative, with the call, complete the following field:
    - Caller Number
9. To indicate the customer contact name for this call, complete the following field:
    - Caller Name

    The system provides the value for the Phone Number field from the Address Book based on the Customer Number.
10. The following fields default in from the processing options:
    - Call Type
    - Call Status

    The system retrieves the value for the Call Status field from the processing options if the call is assigned, otherwise the system retrieves the value from the data dictionary.

The system retrieves the value for the Priority field from the data dictionary.

11. Complete the following field:

    - E–Mail

    The system retrieves the value from the Remark field of the Who's Who line number zero of the customer.

12. The system provides values for the following fields from the CSMS customer address book record:

    - Language
    - Region

13. Enter the reason for the call in the following field:

    - Symptoms

    Depending on how you have set your processing options, the first line from the media object is the default value for the Symptom field. You can also set the processing options to display Routing Information for your review after you have entered a call.

14. To indicate the reason for the issue, complete the following field:

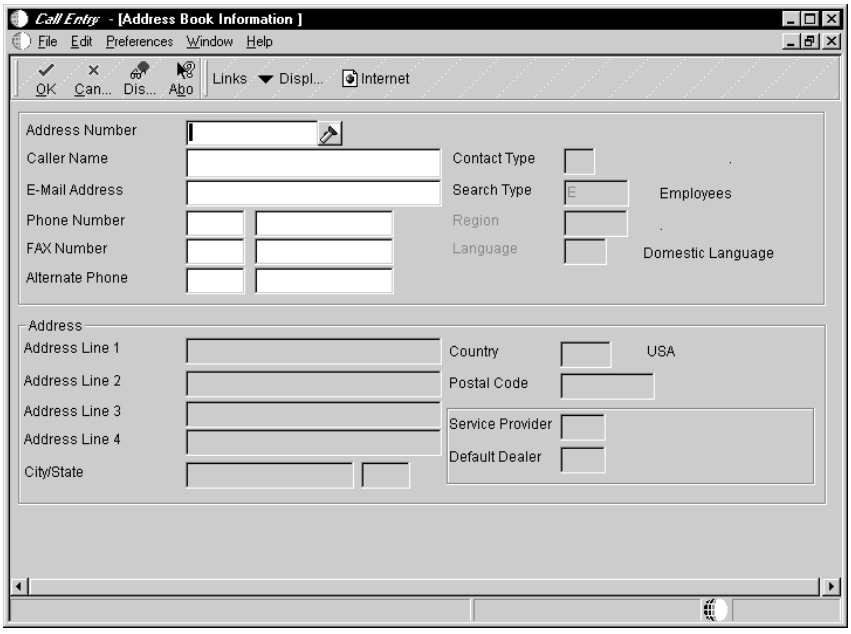
    - Reason

15. To attach additional text to a call when it is protected, choose Attachments from the Form menu. If the text is not protected, you can enter additional text in the text box on the form.

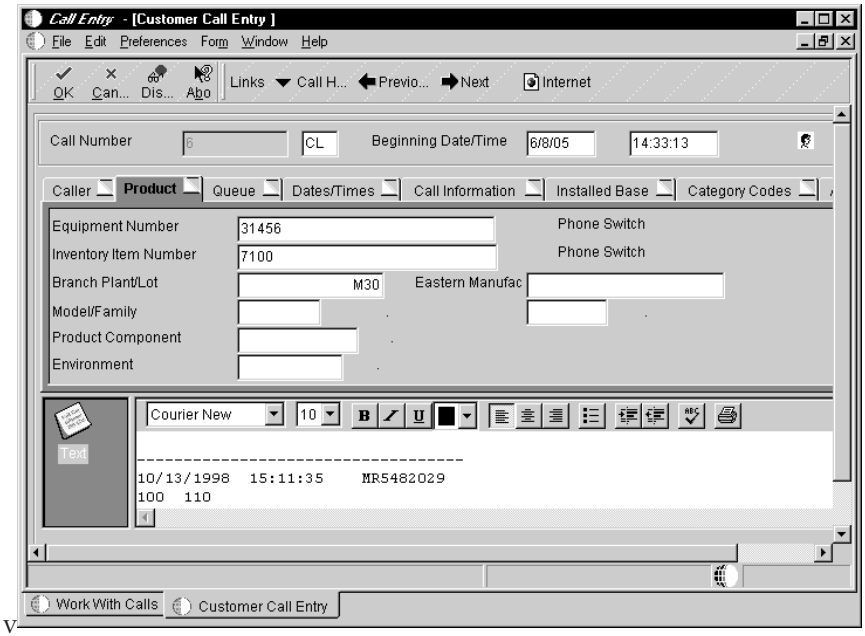
    When you define your status rules, you can define when and if you want to protect the text attached to a call. When you protect text, you are preventing changes to the text attached to a call. You can add text to existing text that is protected, but you cannot make changes to existing text.

    The system appends a timestamp to the text area when the information changes. Your organization might use supplemental data to attach more information to the call. See *Defining Supplemental Data*.

16. On Customer Call Entry, to associate an additional person with a call, without affecting the address book record, choose Customer from the Form menu, choose Address Book, and then choose Contact One.



17. On Contact One, complete any of the following fields and click OK:
    - Caller Name
    - E–Mail Address
    - Phone Number
    - FAX Number
    - Alternate Phone
18. Click the Product tab.



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19. Complete any of the following fields:

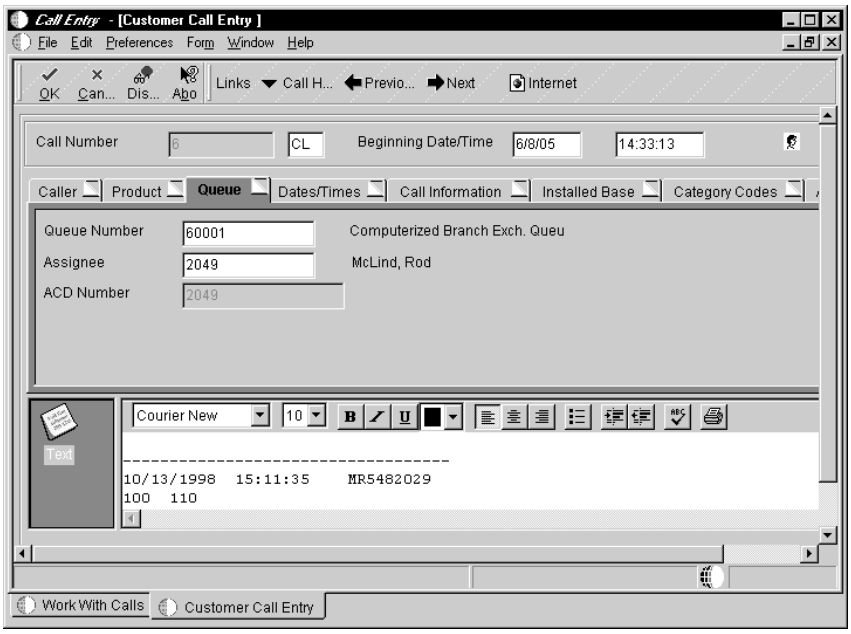
    - Equipment Number
    - Inventory Item Number
    - Product Model/Family

    The system retrieves the information on the Product tab based on Installed Base record information.

20. Complete the following optional fields:

    - Product Component
    - Environment

21. Click the Queue tab.



22. To enter the call queue assignment, enter the group number in the following field:

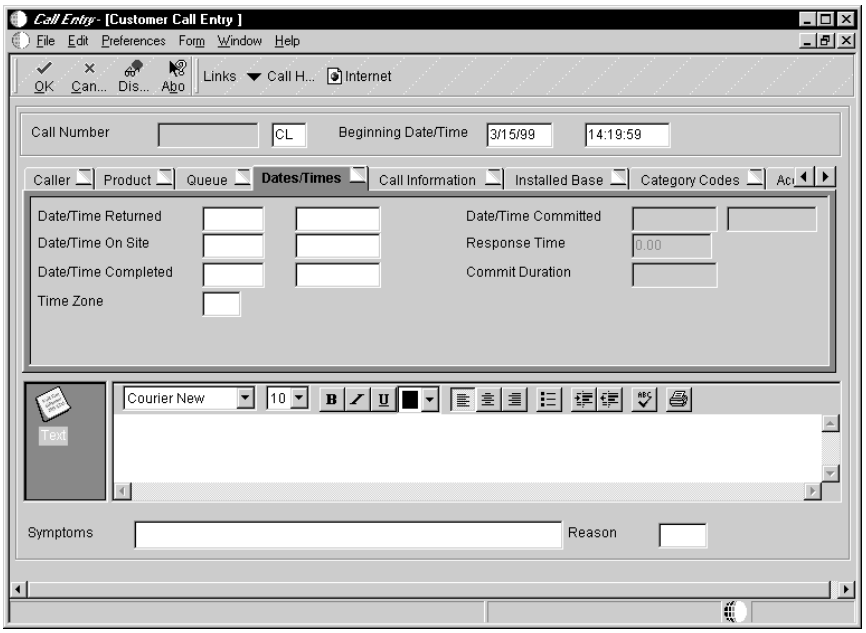
    - Queue Number

    If your company has set up routing rules, the system automatically assigns issues to a specific queue and/or person based on the type of call received. You might need to enter the routing rules or assign the call to yourself.

23. To enter the call person assignment, enter the employee number in the following field and click OK:

    - Assignee

24. Click the Dates/Times tab.



25. To enter date and time information for the call, complete the following fields:

- Date/Time Returned

  When a call is first assigned to a consultant, the system populates the Date/Time Returned field.

- Date/Time On Site

  This is a user-defined field.

- Date/Time Completed

  The system fills in this field with the date and time that the call is closed. If the call is reopened, the system clears this field.

- Time Zone

  The system retrieves the time zone of the service provider as the default value.

- Date/Time Committed

  If the call is covered under a contract, then Date/Time Committed is the Current Date and Time + the Guaranteed Response Time on the contract. If the call is not covered under a contract, then Date/Time Committed is the Current Date and Time + (Guaranteed Response Time x Commitment Percentage). The system retrieves the Guaranteed Response Time from the Queue and Call Type. The system retrieves the Commitment Percentage from the Queue and Priority.

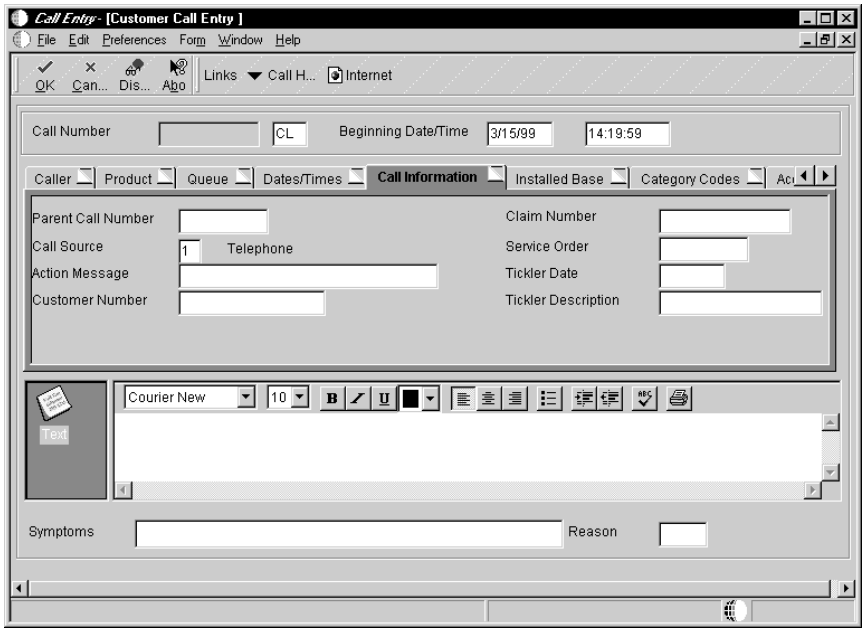
- Response Time

  If the call is covered under a contract, then Response Time is the Guaranteed Response Time from the contract. If the call is not covered, the Response Time is the Guaranteed Response Time based on the Queue and Call Type.

- Commit Duration

  This is the amount of time between the date and time that the call is entered and the date and time of when the call is first assigned.

26. Click the Call Information tab.



27. To enter additional information that appears in the workbench, use a short description to complete the following field:

    - Action Message

28. Complete the following fields, if applicable:

    - Parent Call Number
    - Call Source
    - Customer Number
    - Claim Number
    - Service Order

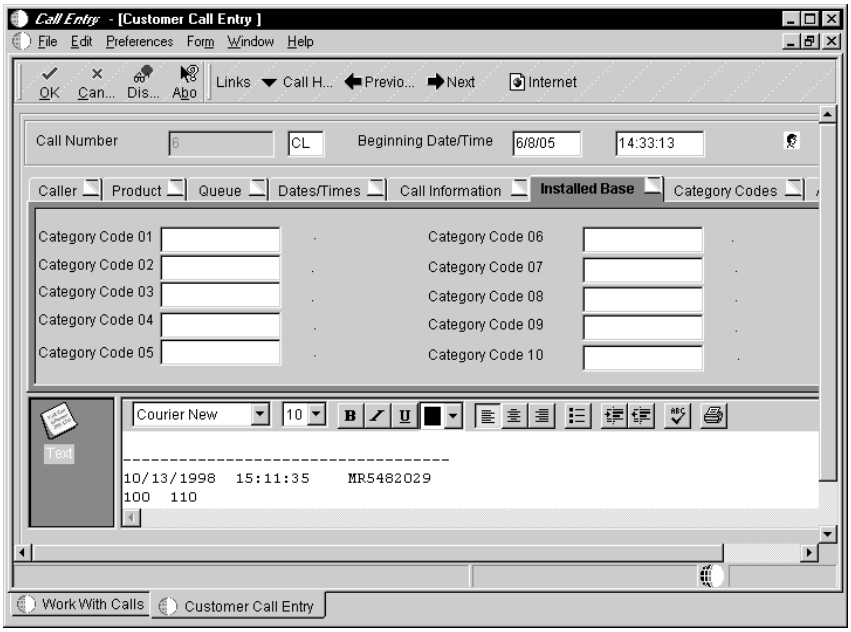
29. To set a reminder that appears in the call work center, complete the following fields:

    - Tickler Date

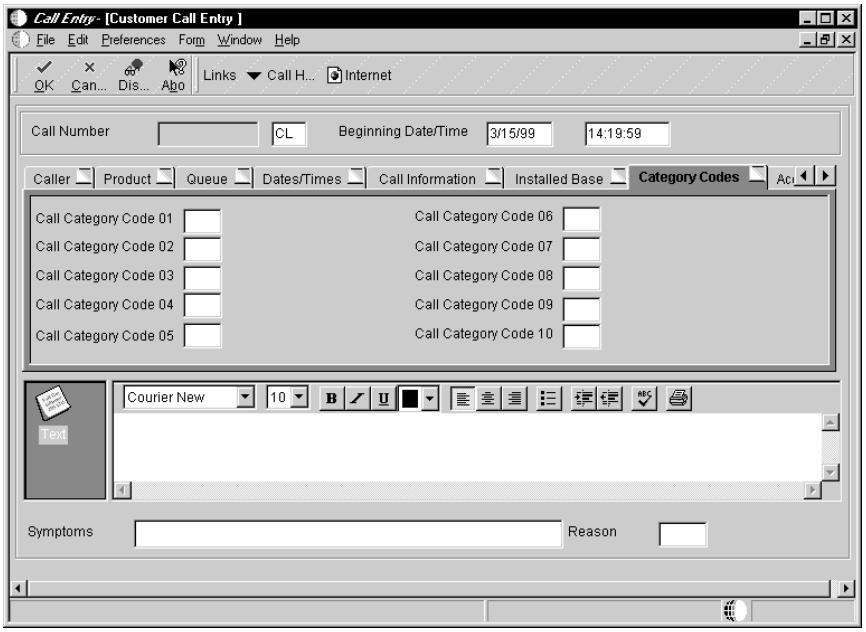
- Tickler Description

When you enter tickler dates, the system creates a message in the mailbox of the queue or assignee with a date of the tickler date. For example, you can use the tickler fields if you want to call a customer back after closing the call to ensure that the issue does not require further attention.

30. To review installed base reporting codes, click the Installed Base tab.



31. To review category codes, click on the Category Codes tab.



32. Click OK.

Field	Explanation
Address Number	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.
Name	The text that names or describes an address. This 40-character alphabetic field appears on a number of forms and reports. You can enter dashes, commas, and other special characters, but the system cannot search on them when you use this field to search for a name.
Symptoms	A description of the customer issue.
Reason	The underlying reason for the customer issue.
Equipment Number	An identification code for an asset that you can enter in one of the following formats: 1 Asset number (a computer-assigned, 8-digit, numeric control number) 2 Unit number (a 12–character alphanumeric field) 3 Serial number (a 25-character alphanumeric field) Every asset has an asset number. You can use unit number and serial number to further identify assets as needed. If this is a data entry field, the first character you enter indicates whether you are entering the primary (default) format that is defined for your system, or one of the other two formats. A special character (such as / or *) in the first position of this field indicates which asset number format you are using. You assign special characters to asset number formats on the Fixed Assets system constants form. Note: This field appears only when reviewing a message on Message Log.
Inventory Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Product Model/Family	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Queue Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Assignee	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.

Field	Explanation
Action Message	A description, remark, name, or address.
Claim Number	The number linking a claim that an end user of a product submits. Claim numbers are often found on pre-printed forms.
Tickler Date	The date on which this transaction takes effect. The effective date is used generically. It can be the date of the next raise, a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, change in well status, or whatever is appropriate.
Tickler Description	A user defined name or remark.

Reviewing Call Information

From the Daily Call Processing menu, choose Call Entry.

Reviewing call information consists of the following tasks:

- Reviewing history information
- Reviewing product model and family information
- Reviewing customer entitlements

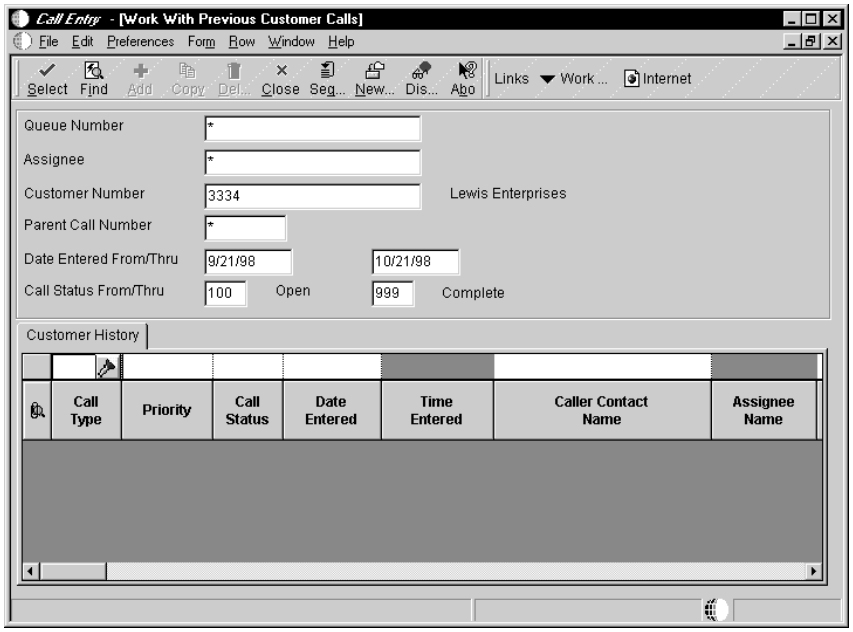
▶ To review history information

After you complete the steps to enter an issue, you review history information. You can review information on past repairs or past maintenance to help you resolve the current issue.

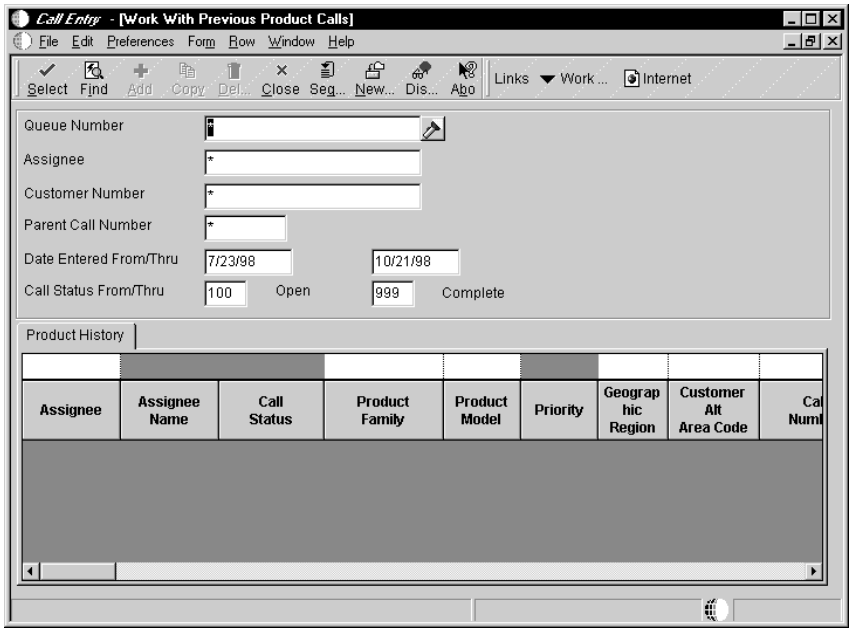
Default dates and status codes are defined by processing options. You can override default information by entering new data in the date or status fields. When you set your processing options, you can enter different statuses and dates to limit the type of history information you want to review.

On Customer Call Entry

1. Click the Customer icon.



2. On Work With Previous Customer Calls, review the information.
3. Click Close.
4. On Customer Call Entry, to review history for a specific product, enter the serial, inventory, or product number in the applicable field:
   - Equipment Number
   - Inventory Item Number
   - Product Model
5. Click the Product icon.



6. On Work with Previous Product Calls, review the information.
7. Click Close to return to Customer Call Entry.

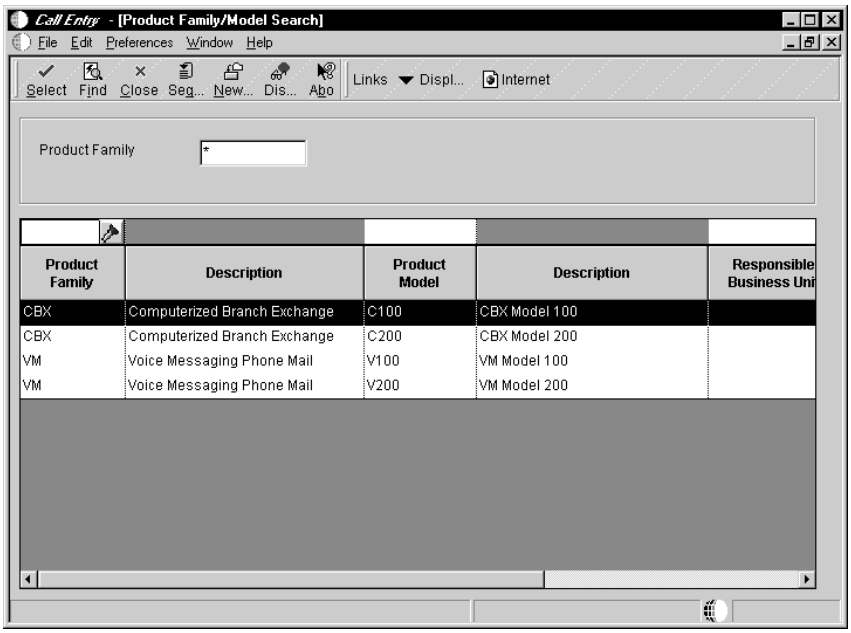
▶ To review product model and family information

After you complete the steps to review history information, you review product and model information.

You can review all models associated with a family. You might need to review product model information if your customer is unable to provide detailed information for identification.

On Customer Call Entry

1. From the Form menu, choose Model/Fanily Search.



2. On Product Family/Model Search, complete the following field and click Select:
   - Product Family

Field	Explanation
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.

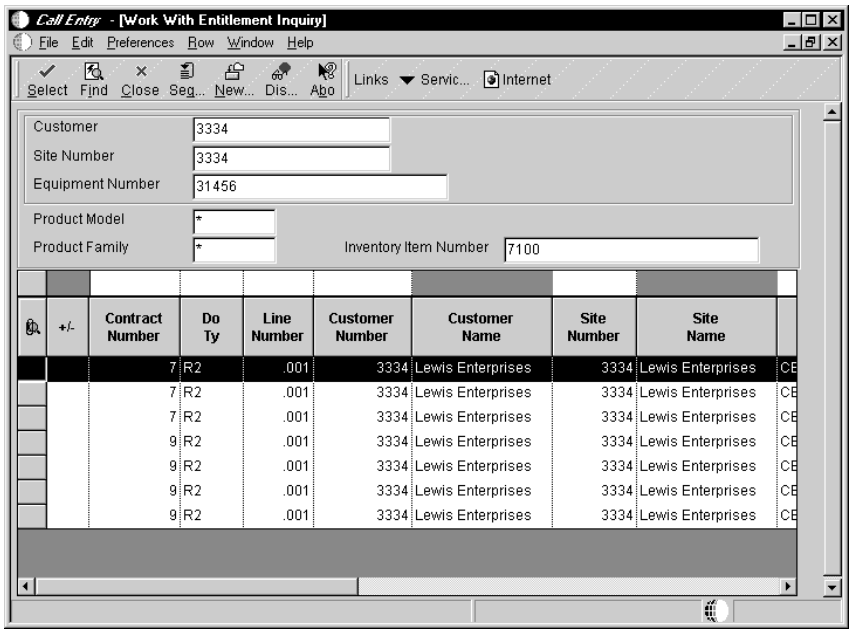
To review customer entitlements

After you complete the steps to review product and model information, you can review customer entitlements.

You can review the details of a customer contract or warranty agreement to determine whether a customer is entitled to receive customer support services and the services they are entitled to. For example, a customer contract might specify that the customer receives support from 7:00 AM until 6:00 PM Eastern Standard Time.

On Customer Call Entry

1. Click the Entitlements icon.



2. On Work with Entitlement Inquiry, review the information.
3. To override entitlement information, choose Entitlements from the Form menu, then choose Entitle Override.
4. On Entitlement Override, make any necessary changes and click OK.

   Only those with authority can make changes on this form.

5. Click the Accounting tab to review contract information.

See Also

- *Working with Address Book Records* in the *Address Book Guide*

Working with Tasks

You can assign the same issue to multiple users. You have the ability to assign tasks to multiple people, but assign ownership to only one person. You can assign tasks as appropriate to the other users who assist in resolving the issue.

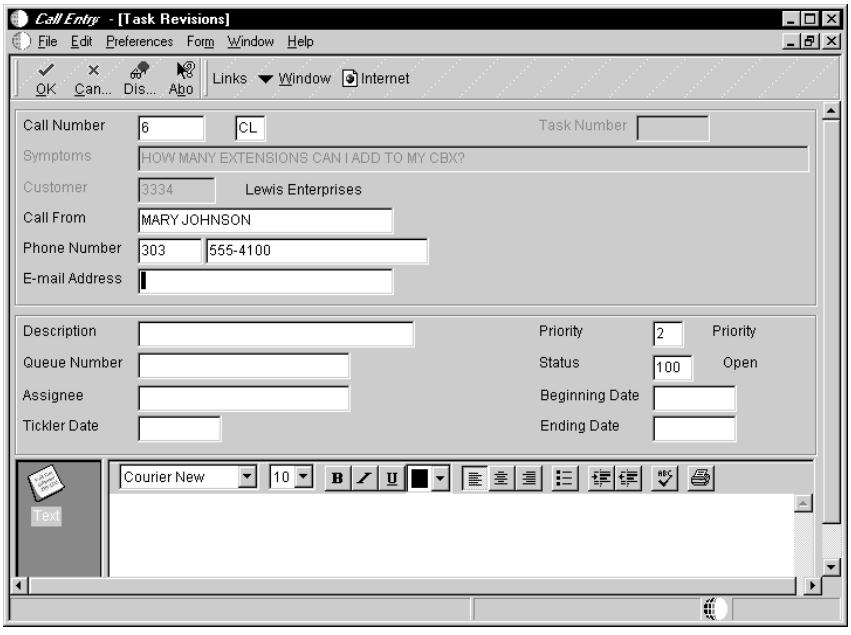
A task is an action related to an issue. You can add multiple tasks to the same issue. You can also add an attachment to a task to enter detailed information about the task. When you complete a task, you need to close it.

▶ To work with tasks

From the Daily Call Processing menu (G1713), choose Call Entry.

On Work With Calls

1. Locate the issue and click Select.
2. On Customer Call Entry, choose Tasks from the Form menu, and then choose Add Task.



3. On Task Revisions, complete the following fields and click OK:
   - Description
   - Queue Number
   - Assignee

   You can repeat this step for each task that you want to add.

4. To close a task, change the code in the following field to indicate that the task is complete:

    - Status

Field	Explanation
Description	A user defined name or remark.
Assignee	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Status	A code to indicate the status of a response line call.

Processing Options for Customer Call Entry

Display

1. Enter a '1' to display Routing Information after pressing the OK button. If left blank, the Routing Information form will not automatically display. _____

2. Enter a '1' to display Equipment information after entering a Customer Number. If left blank, Equipment information will not be retrieved for the Customer Number. _____

3. Enter a '1' to display Who's Who Search and Select when the Customer Number (or Site Number if Entitle By Site is on) is exited and when the Caller Name is blank. _____

Versions

3. Enter the version of Work With Calls (P17500) to use when taking the Work With Previous Customer Calls exit. If left blank, version ZJDE0002 will be used. _____

4. Enter the version of Work With Calls (P17500) to use when taking the Work With Previous Product Calls exit. If left blank, version ZJDE0003 will be used. _____

5. Enter the version of the Work With Calls (P17500) to use when taking the Call History exit. If left blank, version ZJD0004 will be used. _____

6. Enter the version Work With Tasks (P17504) to use when taking the exit. If left blank, version ZJDE0001 will be used. _____

7. Enter the version of Time _____

Entry (P17505) to use when taking the exit. If left blank, version ZJDE0001 will be used.

8. Enter the version of the Call Master Business Function (P1700140) to use. If left blank, version ZJDE0001 will be used. _____

9. Enter the version of the Return Material Authorizations Revisions (P400511) to use . If left blank, version ZJDE0001 will be used. _____

10. Enter the version of the Qucik Customer/Contact Add (P01015) to use. If left blank, version ZJDE0001 will be used. _____

11. Enter the version of the Address Book Revisions (P01012) to use. If left blank, version ZJDE0001 will be used. _____

12. Enter the version of the Customer Master (P03013) to use. If left blank, version ZJDE0001 will be used. _____

13. Enter the version of the Customer Ledger Inquiry (P03B2002) to use. If left blank, version ZJDE0001 will be used. _____

14. Enter the version of the Vendor Master (P04012) to use. If left blank, version ZJDE0001 will be used. _____

15. Enter the version of the A/P Standard Voucher Entry (P0411) to use. If left blank, version ZJDE0001 will be used. _____

16. Enter the version of the Payment Inquiry (P0413M) to use. If left blank, version ZJDE0001 will be used. _____

17. Enter the version of the Eligibility (P08334) to use. If left blank, version ZJDE0001 will be used. _____

18. Enter the version of the Employee DBA Instructions (P050181) to use. If left blank, version ZJDE0001 will be used. _____

19. Enter the version of the Employee Profile (P060116) to use. If left blank, version ZJDE0001 will be used. _____

20. Enter the version of the Work With Employee (P0801) to use. If left blank, version ZJDE0001 will be used. _____

21. Enter the version of the Sales Order Entry (P4210) to use. If left blank, version ZJDE0006 will be used. _____

22. Enter the version of the Supply and Demand Inquiry (P4021) to use. If left blank, version ZJDE0001 will be used. _____

23. Enter the version of the _____

Inquiry by Equipment (P48201) to use. If left blank, version ZJDE0002 will be used.

24. Enter the version of the Service Order Revisions (P17714) to use. If left blank, version ZJDE0001 will be used. _____

25. Enter the version of the Work With RMA (P40051) to use. If left blank, version ZJDE0001 will be used. _____

26. Enter the version of the Supplemental Data – Customer (P00092) to use. If left blank, version ZJDE0003 will be used. _____

27. Enter the version of the Supplemental Data – Item (P00092) to use. If left blank, version ZJDE0001 will be used. _____

28. Enter the version of the Supplemental Data – Work Order (P00092) to use. If left blank, version ZJDE0007 will be used. _____

29. Enter the version of the Supplemental Data – Sales Order (P00092) to use. If left blank, version ZJDE0018 will be used. _____

30. Enter the version of the Knowledge Base – Symptom (P17764) to use. If left blank, version ZJDE0001 will be used. _____

31. Enter the version of the Intalled Base Inquiry (P1701) to use. If left blank, version ZJDE0001 will be used. _____

32. Enter the version of the Installed Base Revisions (P1702) to use. If left blank, version ZJDE0001 will be used. _____

33. Enter the version of the Contracts (P1720) to use. If left blank, version ZJDE0001 will be used. _____

34. Enter the version of the Entitlement Override (P17501) to use. If left blank, version ZJDE0001 will be used. _____

35. Enter the version of the Print Call (R17674) to use. If left blank, version XJDE0003 will be used. _____

Process

35. Enter a ’1’ to copy the text when copying the existing call. If left blank, no text will be copied. _____

36. Enter a ’1’ to put the date/time stamp at the buttom of the comments. If left blank, it will be put at the top of the comments. _____

Processing Options for Customer Call MBF Processing Options

Defaults

1. Enter the Document Type for the Customer Call. If left blank, document type CL will be used. _____

2. Enter a '1' to default the Symptoms from the first line of the media object text. If left blank, the Symptoms will not be defaulted. _____

3. Enter a '1' to default the Caller Name to the Customer Name. If left blank, the Caller Name will not be defaulted. _____

4. Enter a '1' to default the user entering the Call to the Assignee field. If left blank, the Assignee will not be defaulted. _____

5. Enter a '1' to default the reporting codes of the Assignee from the CSMS Service Provider information . If left blank, the reporting codes will not be defaulted. _____

6. Enter the phone number type for the Fax number. If left blank, the Fax number will not be retrieved from the Phones table (F0115). _____

7. Enter the status for a call that was assigned to the user or assigned through routing to an assignee. If left blank, the status will be defaulted from the data dictionary. _____

8. Enter a default queue. If left blank, the queue will not be defaulted. Note: This queue will overwrite the queue from the routing rules. _____

9. Enter a default call type. If left blank, the call type will be defaulted from the data dictionary. _____

Edits

Entitlement

10. Enter a '1' to check entitlement using the date table (F1791). Enter a '2' to check entitlement without the date table. If left blank, no entitlement checking will be performed. _____

Reopening Call

11. Enter the maximum number of days a Call can be closed and then _____

reopened. If this is left zero, then checking for days closed will not be done.

12. Enter a '1' to default Date/Time Opened to today. If left blank, the original Date/Time Opened will be left in the Call. _____

13. Enter a '1' to clear Date/Time Returned when the call is reopened. If left blank, the original Date/Time Returned will be left in the Call. _____

General

code and phone number. If left blank, the area code and phone number will not be required.

14. Enter a '1' to require area code and phone number. If left blank, the area code and phone number will not be required. _____

Process

15. Enter a '1' to protect the Queue Number. If left blank, the Queue Number can be changed. _____

16. Enter a '1' to allow the Pricing Method to be changed. If left blank, the Pricing Method can not be changed. _____

17. Enter a '1' to prompt the user to change the Customer number associated with Installed Base if inconsistent with Customer referenced on the Call. Enter a '2' to automatically update Installed Base. Leave blank to provide no editing against Installed Base. _____

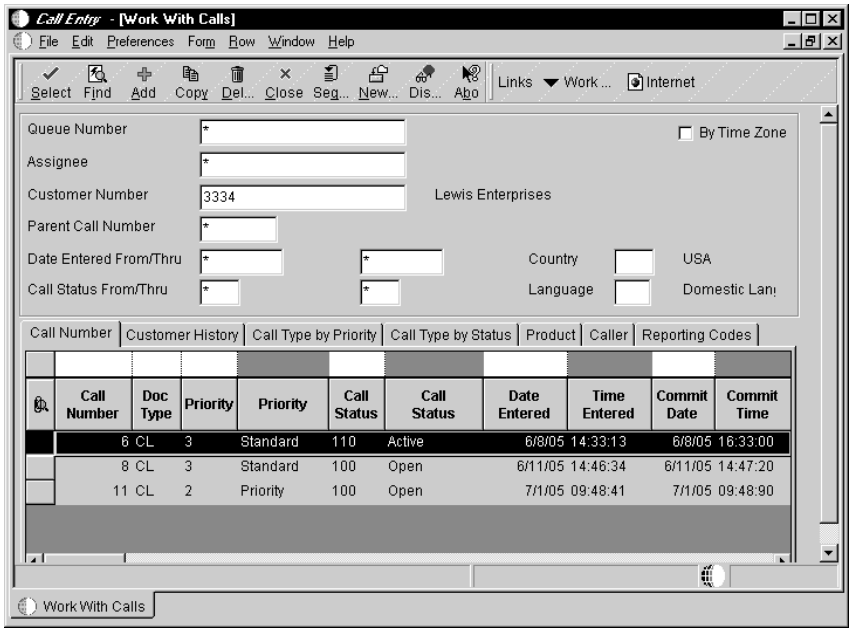
18. Enter a '1' to prompt the user to change the Site number associated with Installed Base if inconsistent with Site number referenced on the Call. Enter a '2' to automatically update Installed Base. Leave blank to provide no editing against Installed Base. _____

Working with Calls

From the Daily Call Processing menu (G1713), choose Call Entry.

This interface provides the most flexibility for consultants using the system. It allows consultants to customize the workbench using processing options to include only the information they are working with directly.

Some of the options available to consultants include call sequencing, sorting calls by priority or status, and preloading information to the workbench to limit the information that appears.



Field Information

By Time Zone

By choosing this option, the system displays dates and times using the time zone of the customer instead of the time zone of the service provider.

Total Elapsed Hours — Elapsed time is the difference between the current date and time (or completed date and time) and the date and time the call was entered. The elapsed time is rounded to the nearest quarter hour. The work day calendar defined for the queue calculates the number of work days. This is then converted to hours.

Time Remaining — This is the difference between the current date and time and the commitment date and time. The time remaining is rounded to the nearest quarter hour. The work day calendar defined for the queue calculates the number of work days. This is then converted to hours. If there is time remaining, it appears in red. It is only calculated if the returned date and time field is blank. If there is no commitment date and time, the value is zero.

Processing Options for Work With Calls

Display

1. Enter a '1' to check the time zone filter. _____
2. Enter the starting call back time for the time zone filter. _____
3. Enter a '1' to display Country Code as Selection Criteria. If left blank, Country Code will not display in the Selection Criteria. _____
4. Enter a '1' to display Language as Selection Criteria. If left blank, Language will not display in the Selection Criteria. _____
5. Enter the default from status. _____
6. Enter the default to status. _____
7. Enter the number of days to use for calculating create data filter. If zero, filter will not be pre-loaded. _____
8. Enter a '1' to display priority column with color coding. _____
9. Enter a '1' to display the CTI Interface when entering this application. If left blank, the CTI Interface form will not be displayed. _____

Defaults

1. Enter a default Country Code. If left blank, the default Country is USA. _____
2. Enter a default Language. If left blank, the default Language is Domestic Language. _____
3. Enter a '1' to default the Assignee to User. _____
4. Enter a Default Call Queue. _____

Versions

1. Enter the version of Customer Call Entry (P17501) to used when taking Work With Calls exit. If left blank, version ZJDE0001 will be used. _____

2. Enter the version of Supplemental Data (P00092) to use. If left blank, version ZJDE0003 will be used. _____

3. Enter the version of Work With Tasks (P17504) to use. If left blank, version ZJDE0001 will be used. _____

4. Enter the version of Work Center (P012501) to use. If left blank, version ZJDE0005 will be used. _____

5. Enter the version of Print Call (R17674) to use. If left blank, XJDE0003 will be used. _____

Working with Computer Telephony Integration

Computer Telephony Integration (CTI) is an interface between a telephone system and the Call Management system. Using CTI, a computer can accept incoming calls and route them to the appropriate device or person.

Working with Computer Telephony Integration includes the following tasks:

- ❑ Setting up Computer Telephony Integration properties
- ❑ Using Computer Telephony Integration

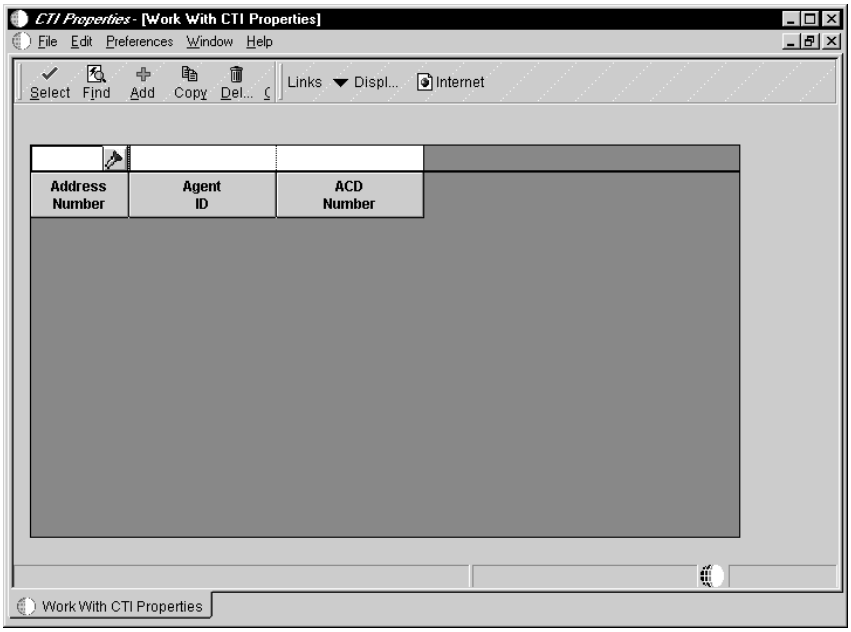
Setting Up Computer Telephony Integration Properties

Set up Computer Telephony Integration (CTI) properties to connect your system applications to the telephony driver. The properties allow you to recreate a keypad for telephone functions.

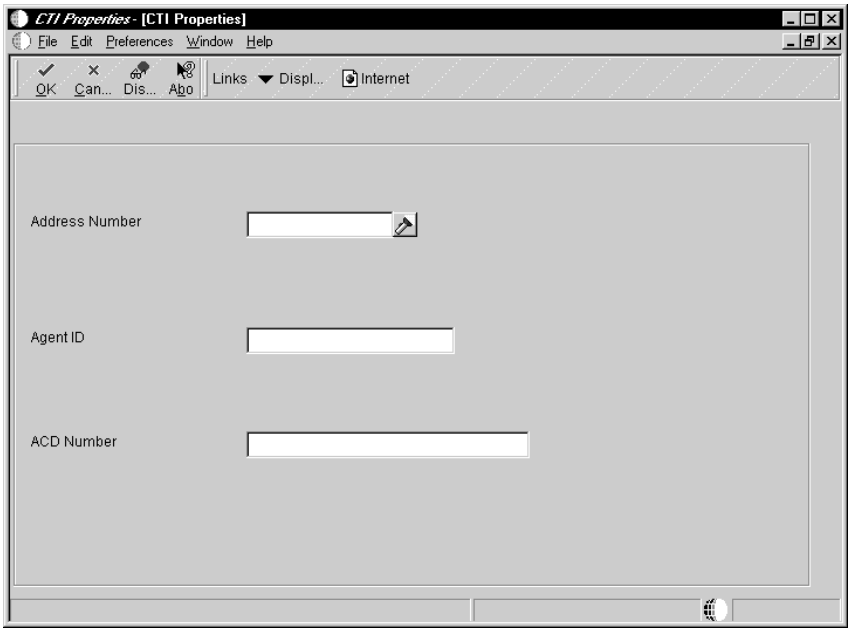
▶ To set up CTI properties

From the Call Setup menu (G1743), choose CTI Properties.

On Work with CTI Properties



1. Click Add.



2. On CTI Properties, complete the following fields:
   - Address Number
   - Agent ID
   - ACD Number

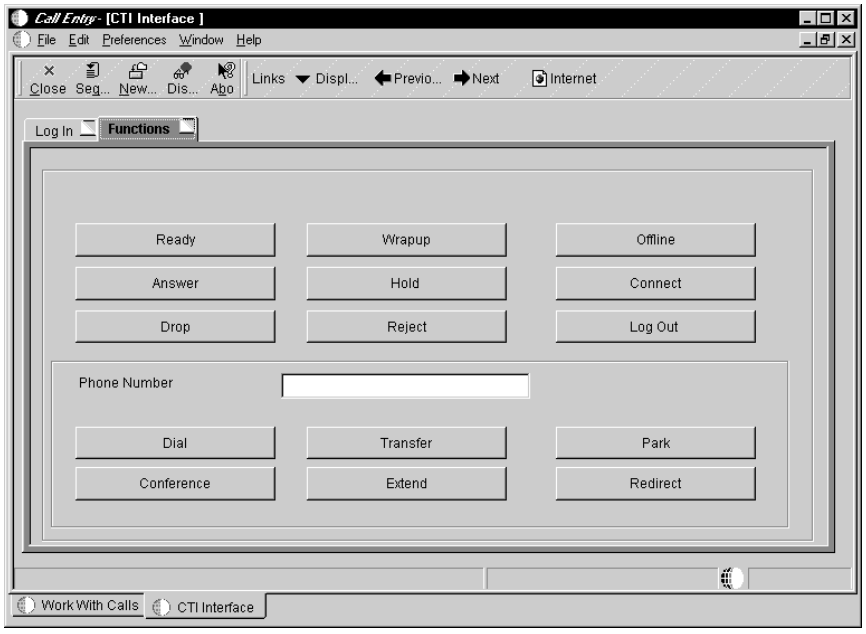
Field	Explanation
ACD Number	The free-form telephone number. You can use any applicable telephone number format. For example, if you are calling from within the United States, the format to call Laramie, Wyoming would be (307) 321-5223; the format to call Singapore would be 011-65-469-8382. When you search for an address using the phone number, you must enter the number exactly as it was set up in the Address Book system. If all phone numbers follow a consistent format, you can specify that format in the data dictionary. For example: ___-____.

Using Computer Telephony Integration

From the Daily Call Processing menu (G1713), choose Call Entry. On the Call Entry form, choose CTI from the Form menu.

When you use CTI, you sign on to the telephone system and access your calls through the Work with Calls program. You are able to access the CTI interface as well as Work with Calls in order to perform your duties.

Depending on how you have set your processing options, the system automatically displays CTI interface as you access the Work with Calls program.



Resolving Calls

Resolving calls includes everything from finding an answer to the customer's inquiry or problem to entering a service order because the issue requires further support. An issue remains in open status until the issue has been resolved. When you resolve the issue, you need to change the status to closed. This allows for accurate reporting. To report your time, you can access time entry as you are closing an issue if processing is set up to do so in the queue statuses.

Resolving calls includes the following tasks:

- ❑ Searching for customer issues and solutions
- ❑ Entering service orders using Call Management
- ❑ Closing issues
- ❑ Charging time to issues

Searching for Customer Issues and Solutions

The Customer Service Management system includes a Knowledge Management module, which provides a database of issues and resolutions. You can search this database to:

- Find an issue that is similar to yours and view the attached resolution
- Find a resolution to your issue

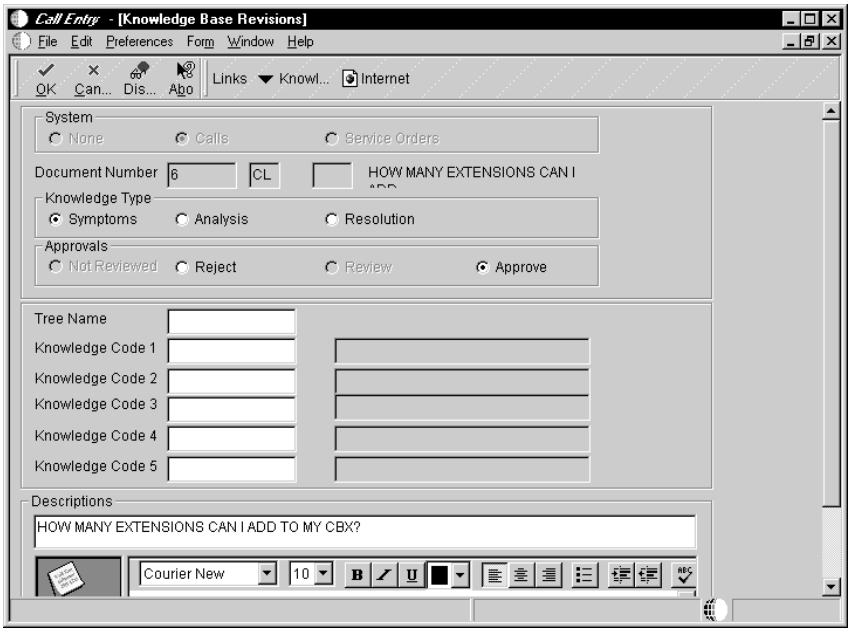
The system searches for symptoms and reporting codes. You can add new symptoms and resolutions, or attach information to existing symptoms and resolutions.

▶ To search for customer issues and solutions

From the Daily Call Processing menu (G1713), choose Call Entry.

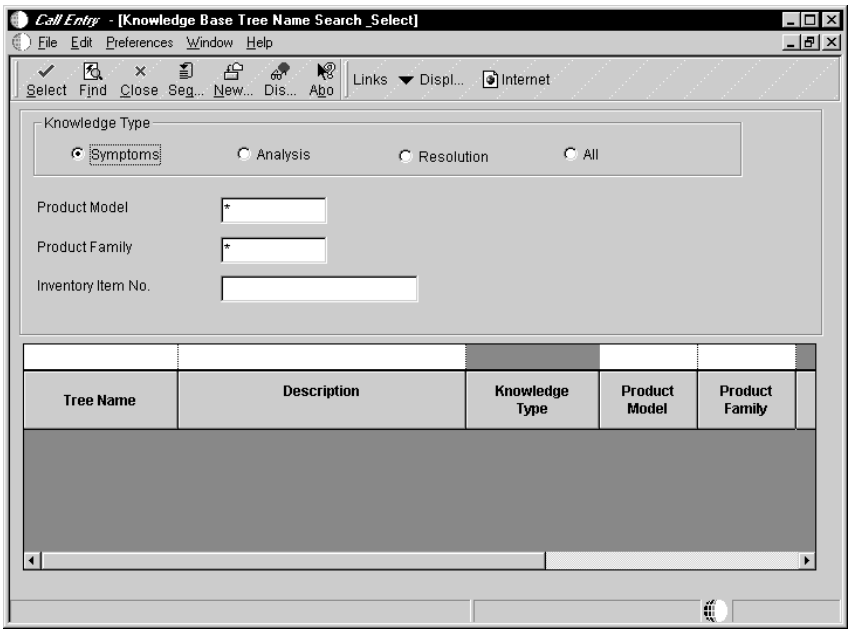
On Work with Calls

1. Click Add.
2. Choose Knowledge Base from the Form menu, choose Add/Attach, and then choose Symptom.



3. On Knowledge Base Revisions, complete the following field:
   - Tree Name
4. From the Form menu, choose Knowledge Tree.

   The system lists the items related to the symptom that you entered.



5. On Knowledge Base Tree Search Select, click on each descending folder that applies to your issue until you find a similar issue.
6. Choose the issue and click Select.

7. On Knowledge Base Revisions, click OK.
8. To add information to existing issues or solutions, enter the information in the attachment.

See Also

- *Working with Knowledge Management Transactions*

Entering Service Orders Using Call Management

Enter service orders to track requests for on-site or in-house repair and to track shipments of replacement parts.

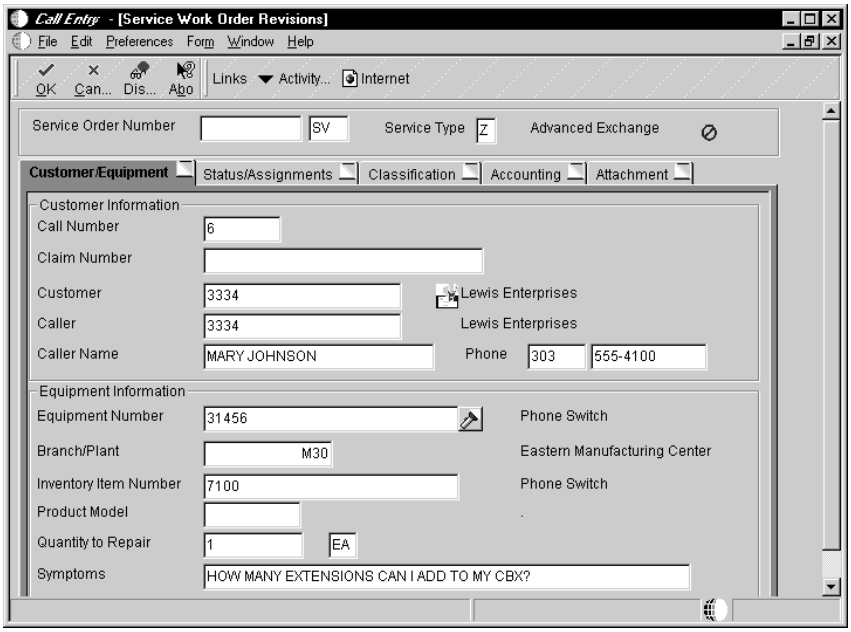
Depending on the nature of the customer request, you must first open a call and then create the service order, or you can create a service order that is not attached to an open call. If a request cannot be resolved by a consultant or if a replacement part is required, you can create a service order.

▶ To enter service orders using Call Management

From the Daily Call Processing menu (G1713), choose Call Entry.

On Work with Calls

1. Locate the call and click Select.
2. On Customer Call Entry, choose Customer from the Form menu, choose Service Orders, and then choose Add Service Order.



3. On Service Work Order Revisions, review the information.

   The system provides call information values as the default for your service order.

See Also

- *Entering a Service Order*

Closing Issues

When you resolve a issue, you need to change the status of the issue to close it. Depending on how your system is set up, the status of the issue might not require you to manually change the code to closed. For example, you might enter a service order that directs the system to close the issue.

After you close the issue, you might need to enter your time entry information in order to bill the customer accurately.

▶ To close issues

From the Daily Call Processing menu (G1713), choose Call Entry.

On Work with Calls

1. Locate the call and click Select.

2. Click the Caller tab and enter the code that indicates that the issue is resolved in the following field:

   - Call Status

   The system updates the time and date the issue is completed. If you set your status rules to display time entry or knowledge base, the system automatically displays these forms.

Field	Explanation
Call Status	A code to indicate the status of a response line call.

Charging Time to Issues

When you resolve a issue, you need to enter your time in order to accurately capture the amount of time spent on the issue for billing purposes. You might have contract and warranty agreements set up with customers that do not require billing by the hour, but the reporting might still be necessary for accounting purposes for your organization. Setup options determine which stages of an issue require time entry. You can set up your system to display the time entry form at any status change, or only when the call is closed.

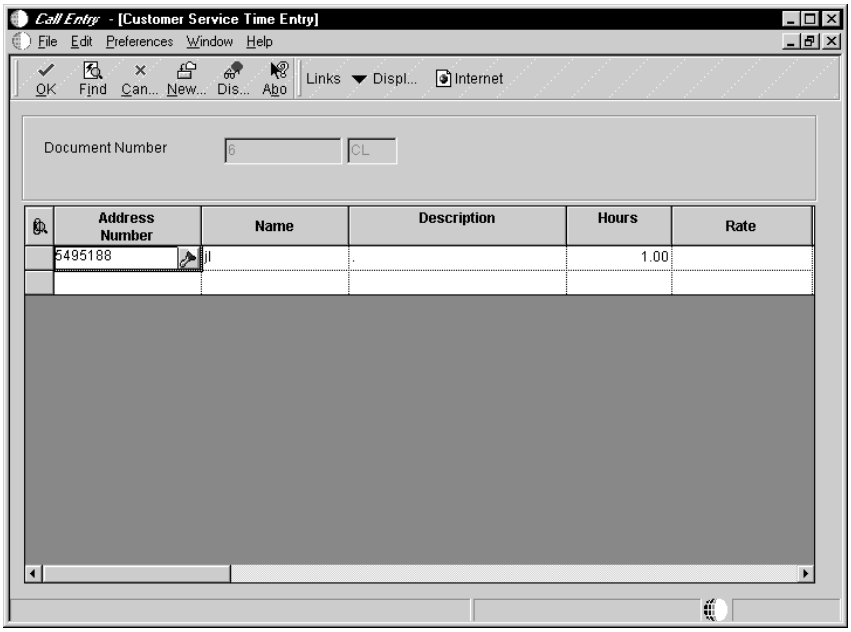
When you enter an issue, the system calculates time entry information based on the time you enter the Call Entry form until the time you exit the form. You can override the information, if necessary.

▶ To charge time to issues

From the Daily Call Processing menu (G1713), choose Call Entry.

On Work with Calls

1. Locate the call and click Select.
2. On Customer Call Entry, choose Time Entry from the Form menu.



3. On Customer Service Time Entry, complete or verify the following fields:
   - Address Number
   - Hours
   - Rate
   - Start Date
   - Start Time
   - End Date
   - End Time
   - Task Number
   - Account Number

   The system retrieves the account number based on the account number set up for a service provider or consultant in the CSMS service provider address book information.

Field	Explanation
Address Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Hours	The number of hours associated with each transaction.

Field	Explanation
Rate	A rate used for the billing of labor services. This rate is often referred to as the billing or recharge rate. The extended amount based on this rate will be charged to the primary distribution account on the timecard with an offset being made to an account derived from the Accounting Rules table. This rate will not affect the employee's payroll. To allow billing rates in time entry, you must set the employee's record type as either 2 or 3 on the Basic Employee Entry form. Enter a rate on any of the following forms to override the rate in the Employee Primary Job table: • Pay Rate Information • Employee Labor Distribution • Occupational Pay Rates • Time Entry by Employee • Time Entry by Job or Business Unit • Daily Timecard Entry • Time Entry by Employee with Equipment • Time Entry by Shop Floor Control
Start Date	The start date for the order. You can enter this date manually, or have the system calculate it using a backsheduling routine. The routine starts with the required date and offsets the total leadtime to calculate the appropriate start date. The system uses the system date as the default date.
Start Time	The time formatted with colons for display.
End Date	The date that the work order or engineering change order is completed or canceled.
End Time	The time formatted with colons for display.
Task Number	This field is used to create a unique key within a file. If you are using a program which will allow you to resequence the records, we recommend you use one of the following data dictionary items: DSS5, DSS7, DSS9.
Account Number	A field that identifies an account in the general ledger. You can use one of the following formats for account numbers: • Standard account number (business unit.object.subsidiary or flexible format) • Third G/L number (maximum of 25 digits) • 8-digit short account ID number • Speed code The first character of the account indicates the format of the account number. You define the account format in the General Accounting Constants program.

What You Should Know About Processing Options

Accounting information Depending on how you set your processing options, the system can create either payroll batch transactions or G/L transactions.

Managing the Call Work Center

The call work center displays calls in a tree structure interface. You can view the queues and all calls within a queue. You can move a call from one queue or assignee to another queue or assignee, and review messages and data related to any call.

As an option, the call work center displays calls in different colors to indicate priority. You define the colors when you set up user defined codes.

Managing the call work center includes the following tasks:

- Reviewing calls
- Working with call escalation workflow

Reviewing Calls

To review calls using the Call Work Center, set the Call Management system constants to write message records. Use the Call Work Center to begin most of your daily procedures. Use the Call Work Center to access issues and tasks in open or personal queues. Each queue has an address book number assigned to it. Issues and tasks are represented by icons.

The Call Work Center interface contains three panels. The left panel is called the tree panel because it contains the tree structure, which is described later in this section. The middle panel is called the icon panel, and the right panel is called the viewer panel.

When you open a queue, important information about the first issue or task in the queue appears in a template in the viewer panel on the right. This information includes such items as who the customer is and the severity and status of the issue. You can view information about any other issue or task in the queue by clicking it.

Queues are organized by a tree structure in a hierarchical format. The queue at the top of the tree panel is the highest in the hierarchy for the address number entered in the Address Number field. Queues listed underneath and indented are queues within the larger group.

Reviewing calls includes the following tasks:

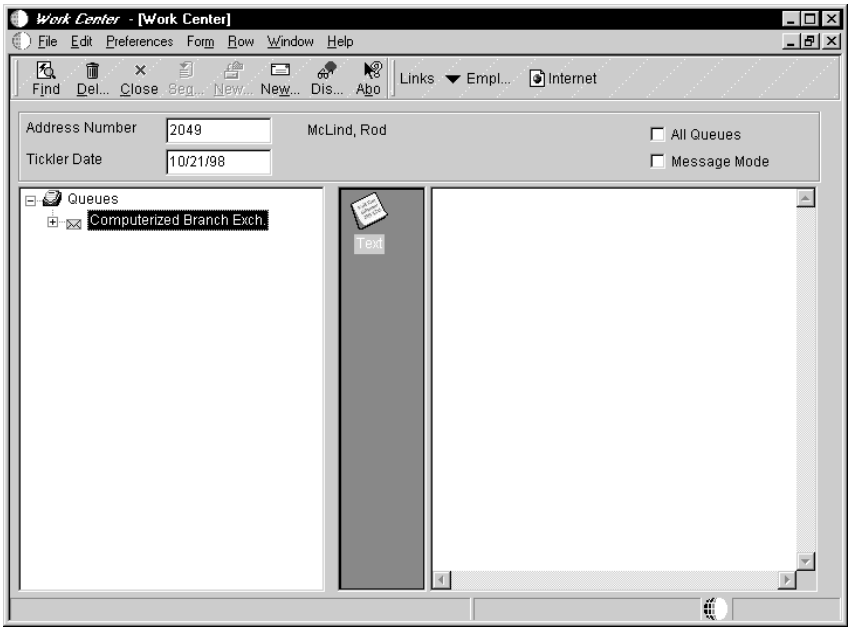
- Reviewing calls by consultant
- Reviewing calls by queue

To review calls by consultant

From the Daily Call Processing menu (G1713), choose Work Center.

You can review the calls assigned to each consultant.

On Work Center



1. Enter the specialist's address book number in the following field and click Find:
   - Address Number
2. To narrow your search, complete the following field:
   - Tickler Date

   The system displays a tree structure arranged by queue then by specialist. Expand each level of the tree structure until you can see the information you need. You can view each call assigned to a specific specialist.
3. To review all queues available associated with a specific address book number, choose the following option:
   - All Queues
4. To display all messages in a specific mailbox, choose the following option:
   - Message Mode
5. Select a call from the tree to view specific information about that call in the right column.

6. To move calls between personal queues, select the call and drag it to the appropriate queue.

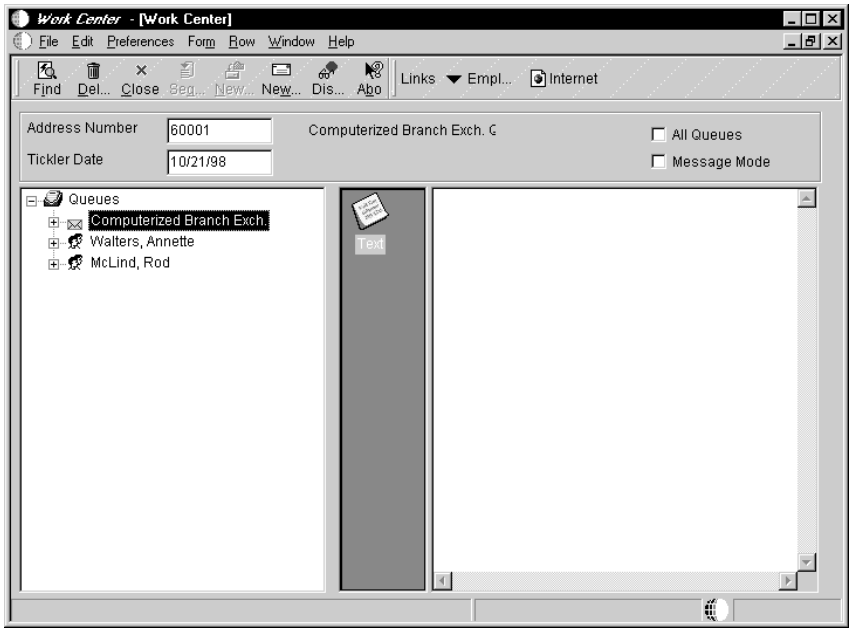
Field	Explanation
Address Number	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.
Tickler Date	The future reminder date. The system does not send the message until this date. The default value is today's date.
All Queues	If checked, all of the mailboxes that exist on the system will show whether there is mail in them for the address number entered or not. If this box is not checked, only those mailboxes that have mail in them for the address number entered will display.
Message Mode	An option that identifies a processing flag for an event.

▶ To review calls by queue

From the Daily Call Processing menu (G1713), choose Work Center.

You can review the calls assigned to each queue.

On Work Center



1. Enter the work group queue address book number in the following field and click Find:
   - Address Number
2. To narrow your search, complete the following field:
   - Tickler Date
3. Select a call from the tree to view specific information about that call in the right column.
4. To move calls between group queues, select the call and drag it to the appropriate queue.

Working with Call Escalation Workflow

You can use the Enterprise Workflow Management system to streamline the process of escalating a call and notifying the necessary individuals that the call has been escalated. Enterprise Workflow Management allows you to automate paper-based tasks into an e-mail-based process across a network.

You can define workflow structures for each queue, priority, and level of escalation. You can have notification messages sent to an unlimited number of people.

You initiate the workflow process when you enter a call into the system. If a call is added to the system and closed at the same time, the workflow process is never activated.

When you add a call to the call database, the system creates a message for display within the Work Center (P012501). This message is placed in a mailbox either at the queue level or at the assignee level. The message is updated with an escalation date and time based on setup of queue, call type, and priority information within Queue Revisions. The system also updates the call record with the same escalation date and time and an escalation level 1. All escalation date and time calculations are based on the commitment date and time that the system calculates based on queue or contract information.

When the escalation time has passed, the system may increase the priority of the call and send notification messages to the appropriate contacts. The system updates the escalation level for the call and awaits a status change or the next level of escalation or notification. When you close the call or reach the end of your escalation levels, the system ends the workflow process.

Do not specify escalation hours at the workflow structure level. You calculate escalation dates and times based on the information set up at the priority within Work with Queues.

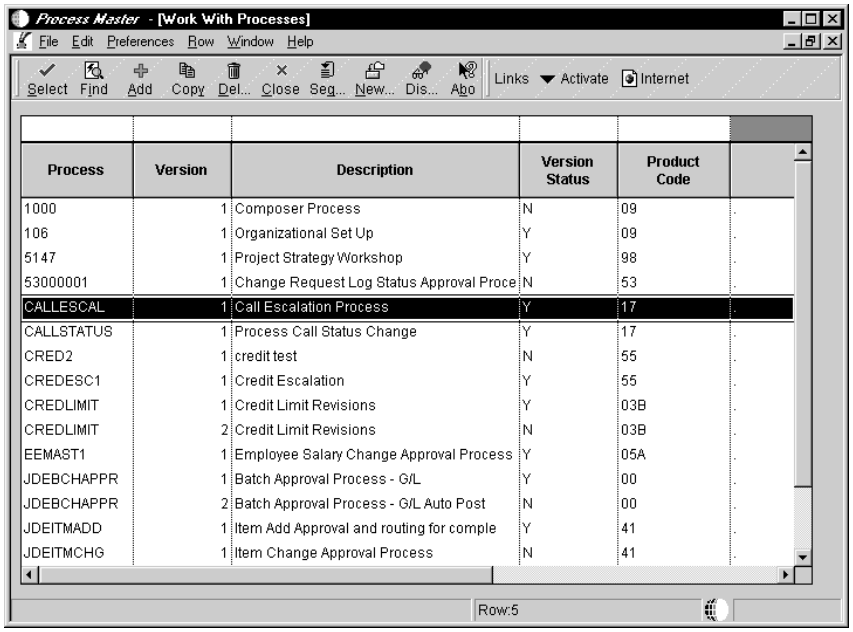
Before You Begin

❑ Create escalation workflow structures and attach the structures to each queue in which you want to escalate calls. Workflow structure setup only allows a single address number at any level. If you want to send the escalation message to multiple people at any escalation level, you must create another workflow structure that includes the list of people and specify it at the appropriate level within your escalation workflow structure. All the people within that structure receive the escalation messages. When creating workflow escalation structures, it is suggested that you use a different search type than your call queues, so that the workflow structures do not display in the call queue search.

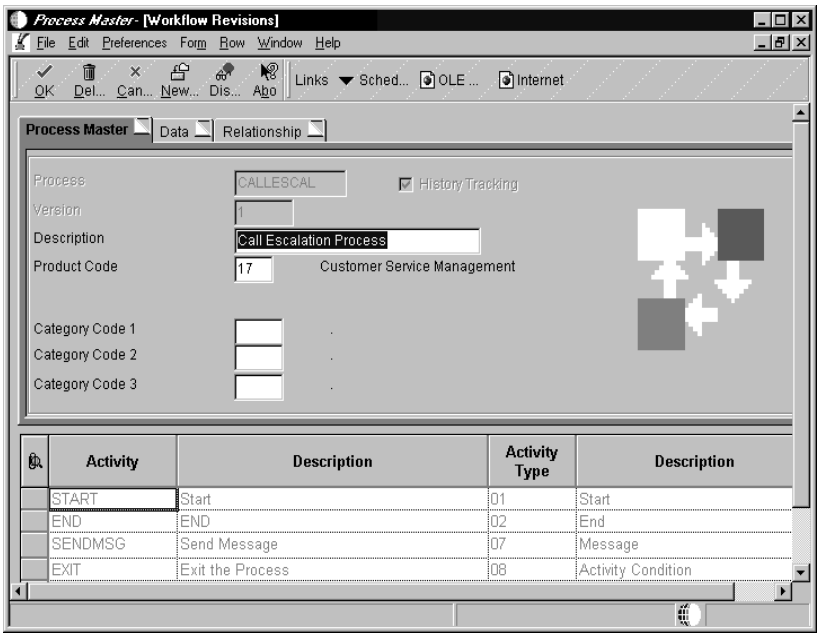
▶ To review the workflow

From the Workflow Management Setup menu (G0241), choose Process Master.

On Work With Processes



1. Click Find.
2. Choose the workflow process CALLESCAL and click Copy in order to create your own version of workflow.



3. On Workflow Revisions, add a rule for each queue that you want to include escalation and click OK.

   To view setup for a sample queue, review queue 12950.

4. Click the Relationship tab.
5. Choose a row and choose Revise Escalation from the Row menu.
6. On Escalation Rules, add a line for each queue using the recipient rules you have defined.
7. Click OK to return to Work with Processes to deactivate the workflow demo version and to activate the version you created.
8. Set up the Check for Call Expired Activity program (R17680) in Scheduler to check for the calls that need to be escalated.

See Also

- *Messages* in the *OneWorld Foundation Guide* for information about understanding message types, sending messages, and managing messages
- *The Enterprise Workflow Management Guide* for information about setting up workflow management
- *Scheduler Overview* in the *System Administration Guide* for scheduler information

Reviewing Call Management Reports

When you want to review call statistics for your company, you can print call reports to verify duration of calls, review the product models that are causing the most calls, and so on.

Reviewing Call Management reports includes the following:

- ❑ Reviewing the Call Detail/Summary report
- ❑ Reviewing the Call Statistics by Assignee report
- ❑ Reviewing the Call Statistics by Product report
- ❑ Reviewing the Call Duration Statistics by Products report

Reviewing the Call Detail/Summary Report

From the Periodic Call Processing menu (G1723), choose Call Detail/Summary Report.

The Call Detail/Summary report provides you the ability to create reports that display detail or summary information for the following types of closed calls:

- Calls by queue
- Calls by product model
- Calls by environment
- Calls by equipment number
- Calls by item number

Processing Options for Call Detail/Summary

```
Defaults

      1. Enter a '1' to print the Item                    _____________
      Number.  If left blank, the
      Product Model will print.
      2. Enter the From date to use when                  _____________
      selecting calls.
      3. Enter the Thru date to use when                  _____________
      selecting calls.  If left blank,
      Today's date will be used.

Print

      1. Enter '1' to print the Call                      _____________
      Detail report.  If left blank, the
      Call Summary report will print.
```

Reviewing the Call Statistics by Assignee Report

From the Periodic Call Processing menu (G1723), choose Call Statistics by Assignee.

The Call Statistics by Assignee report provides you the ability to create reports that display information for the following types of closed calls:

- Calls by assignee
- Calls by queue

Processing Options for Call Statistics by Assignee

```
Defaults

      1. Enter the From date to use when                  _____________
      selecting calls.
      2. Enter the Thru date to use when                  _____________
      selecting calls.  If left blank,
      Today's date will be used.
      3. Enter Call Type for Handled                      _____________
      Live.
      4. Enter the closed Call Status.                    _____________
```

Reviewing the Call Statistics by Product Report

From the Periodic Call Processing menu (G1723), choose Call Statistics by Product.

The Call Statistics by Product report provides you the ability to create reports that display information for the following types of closed calls:

- Calls by product model
- Calls by environment

- Calls by equipment number
- Calls by item number
- Calls by queue

Processing Options for Call Statistics by Product

```
Defaults

      1. Enter the From date to use when          _____________
      selecting calls.
      2. Enter the Thru date to use when          _____________
      selecting calls.
      3. Enter Call Type for Handled              _____________
      Live.
      4. Enter the closed Call Status.            _____________
```

Reviewing the Call Duration Statistics by Products Report

From the Periodic Call Processing menu (G1723), choose Call Duration Statistics by Product.

The Call Duration Statistics by Product report provides you the ability to create reports that display information for the following types of closed calls:

- Calls by product model
- Calls by environment
- Calls by equipment number
- Calls by item number
- Calls by queue

Processing Options for Call Duration Statistics by Products

```
Defaults

      1. Enter the From date to used              _____________
      when selecting records.
      2. Enter the Thru date to use when          _____________
      selecting records.
      3. Enter Call Type for Handled              _____________
      Live.
      4. Enter the closed Call Status.            _____________
```

Installed Base Management

Installed Base Management

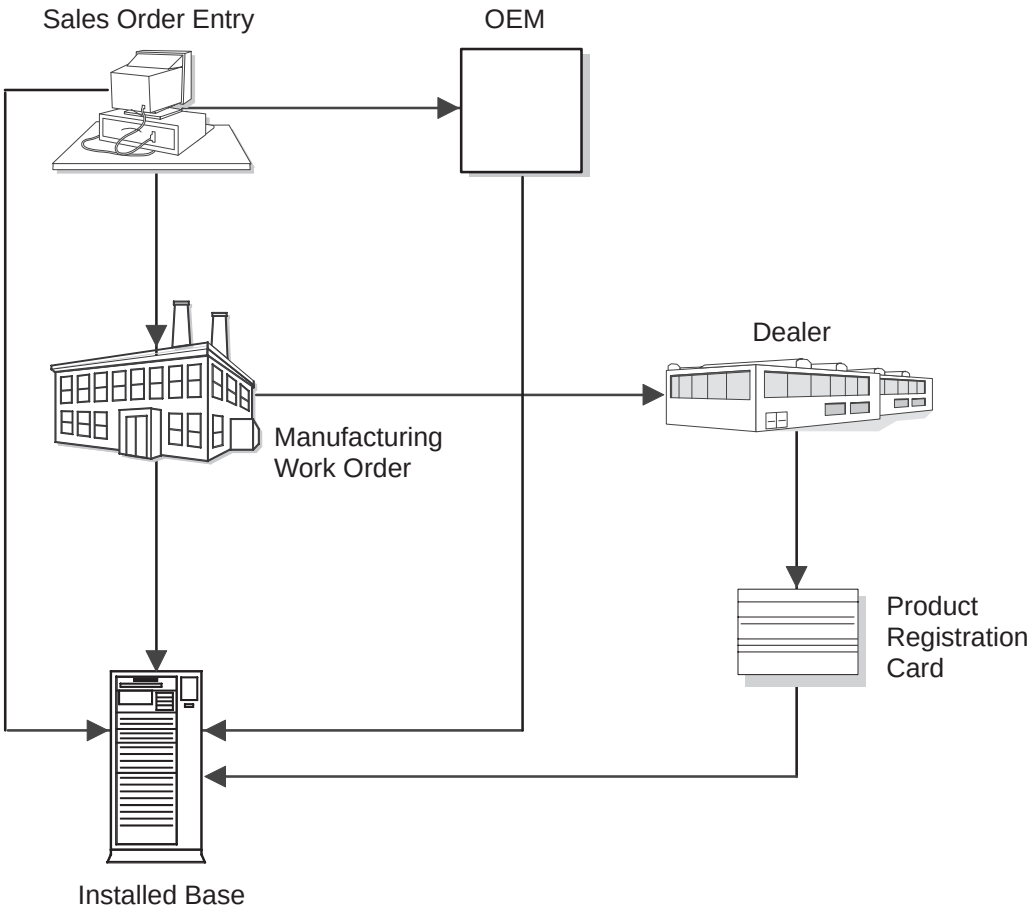
The Installed Base Management module provides you with the means to enter and manage product registrations and product master records. You use the Installed Base Management module to create and track the current and historical information for every product or piece of equipment that you manufacture or sell.

For example, you can capture information such as distribution dates, distribution channels, product registrations, product owners, and product locations. By capturing this information, you provide your consultants immediate access to the critical data that customers expect them to have. This data is also critical for supporting outbound direct marketing initiatives.

The Installed Base Management module also provides a database to track all contract and warranty registration information for sold or serviced products. When you add a product or piece of equipment, the system can create a base warranty in the Installed Base. The system uses a set of defaults that define the conditions of the warranty.

The primary source of information for the Installed Base is sales orders. Most Installed Base updates are created from information derived from sales orders.

The following graphic shows several ways in which sales orders provide information to create the Installed Base:



You can then update the Installed Base by any of the following methods:

- Using Global update

  Global update makes changes for multiple transactions.

- Using Install Base Revisions (P1702)
- Using Call Management
- Using Contract Management
- Using Service Order Management

  Install Base Revisions, Call Management, Contract Management, and Service Order Management make changes to single records in the system.

Installed Base Management consists of the following tasks:

- ❑ Setting up Installed Base records
- ❑ Creating Installed Base records
- ❑ Working with the Installed Base

- ❑ Scheduling maintenance for installed equipment
- ❑ Reviewing the Customer Reference report

Terms and Concepts

You should be familiar with the following terms and concepts related to Installed Base Management:

Installed equipment	Product or equipment items that are included in the Installed Base.
Installed Base	The comprehensive database of installed products. The Installed Base includes tables that identify products, the base warranty, and the point of origin, such as from a sales order.
Product	Any item or piece of equipment that you want to track.
Product family	A group of products that have common characteristics and that share classification criteria.
Customer number	The address book number of the customer that owns or leases installed equipment.
Site Number	The address book number of the site where a piece of equipment is located. The site number can be the same as the customer number, but might differ if the customer has multiple sites.
Base warranty	The warranty that is associated with the equipment. Base warranties are typically included in the purchase price of the equipment. Included in a base warranty is the service package and the length of time the product is covered.
Service type	A form of support offered to the client for post-sales maintenance of equipment. Examples of service types might include telephone support, on-site service, or repair and return service.
Contract coverage	The days of the week and hours of each day during which the service package is in effect. For example, the coverage term 5 X 8 refers to a contract that covers equipment five days a week, Monday through Friday, for eight hours each day.

Service package	The combinations of service type and contract coverage that specifies the service support to which the customer is contractually entitled.

Setting Up Installed Base Records

Before you can use certain features of the Installed Base Management module, you must set up information about the equipment that you want to track. For example, you need to define warranty characteristics for each piece of equipment that you want to track in your Installed Base.

Setting up Installed Base records consists of the following tasks:

- ❑ Setting up Installed Base constants
- ❑ Setting up base warranty defaults

If you own equipment that you lease to customers, you need to perform a variety of setup tasks associated with Equipment/Plant Maintenance. For more information, refer to the *Equipment/Plant Maintenance Guide*.

Before You Begin

- ❑ Set up general CSMS system information and system constants. See *Setting Up System Constants*.
- ❑ Whether you sell or lease equipment to a customer, you must set up equipment constants. See *Setting Up Fixed Asset Constants* in the *Fixed Assets Guide.*
- ❑ Set up the depreciation default and asset cost account. See *Setting Up Depreciation Default Values*.

You must have the depreciation default set for a valid asset cost account and a responsible business unit correctly or the set up will fail.

See Also

- *Setting Up User Defined Codes* for information about user defined codes for Installed Base Management
- *Setting Up Equipment* in the *Equipment/Plant Maintenance Guide* for more information about identification numbers, AAIs, and so on
- *Setting Up User Defined Codes* in the *Equipment/Plant Maintenance Guide* for more information about equipment category codes and codes associated with equipment information tracking

- *Setting Up PM Schedule Information* in the *Equipment/Plant Maintenance Guide* for more information about setting up standard maintenance procedures and rules that govern when maintenance is scheduled

Setting Up Installed Base Constants

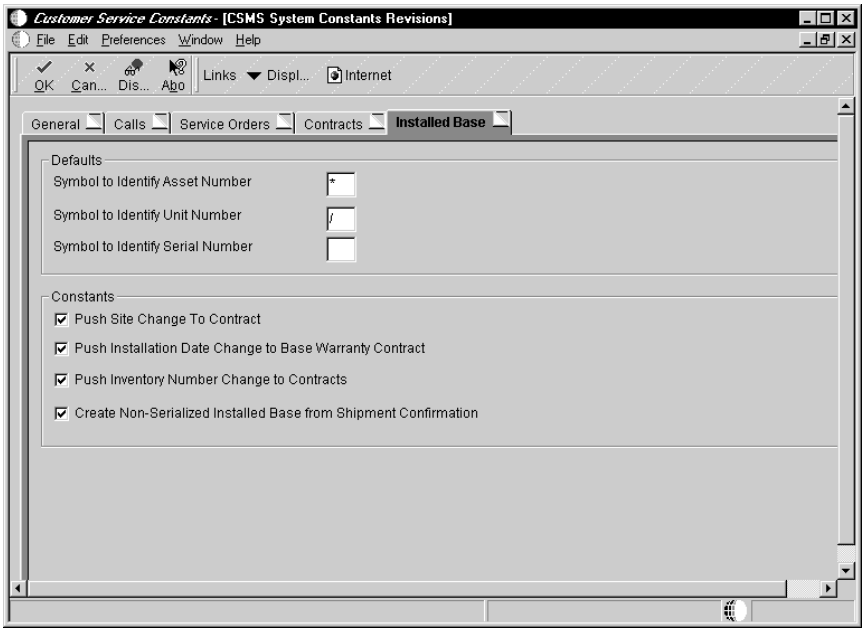
To define default information for the entire system, you set up system constants. Constants control the types of information that you track and the rules that the system uses to perform certain calculations. You can also define whether the system uses the asset, unit, or serial number as the default primary number that displays for the Installed Base item. The information you enter for the primary number overrides the primary number information stored in the company constants.

▶ To set up Installed Base constants

From the Customer Service Setup menu (G1740), choose Customer Service Constants.

On CSMS System Constants Revisions

1. Click the Installed Base tab.



2. Complete two of the following fields:
   - Symbol to Identify Asset Number
   - Symbol to Identify Unit Number
   - Symbol to Identify Serial Number

One of the above three fields must be left blank. J.D. Edwards strongly recommends that symbols are used as valid values instead of letters.

3. To update the site number on all contracts related to installed base record installation site changes, click the following option:

   - Push Site Change To Contract

   If site number has changed, that change is applied to all contracts for the item.

4. To update the start and end dates on base warranty contracts only related to installed base record installation date changes, click the following option:

   - Push Installation Date Change to Base Warranty Contract

   Date changes do not apply to billable contracts.

5. To update the inventory number on all contracts related to installed base record installation inventory number changes, click the following option:

   - Push Inventory Number Change to Contracts

6. To create a non-serialized installed base record when you run the Installed Base Update from Ship Confirm program, click the following option:

   - Create Non–Serialized Installed Base from Shipment Confirmation

   When you ship non-serialized products, shipment confirmation detects them and the system creates “serialized” numbers in the F4220 table if this constant is checked.

Setting Up Base Warranty Defaults

You must provide the system with information about the warranty you offer for each product or piece of equipment in your Installed Base, such as the length of time for which the warranty is valid and the type of service package provided by the warranty. You can set up default warranty information based on a number of variables. For example, you can set up base warranty information based on a product model and product family, and then modify the warranty, based on additional criteria such as the customer or country.

In addition, you must add a sequence of one or more rules for using variables, such as customer number, or branch/plant, to determine the default warranty values that apply to a specific Installed Base item.

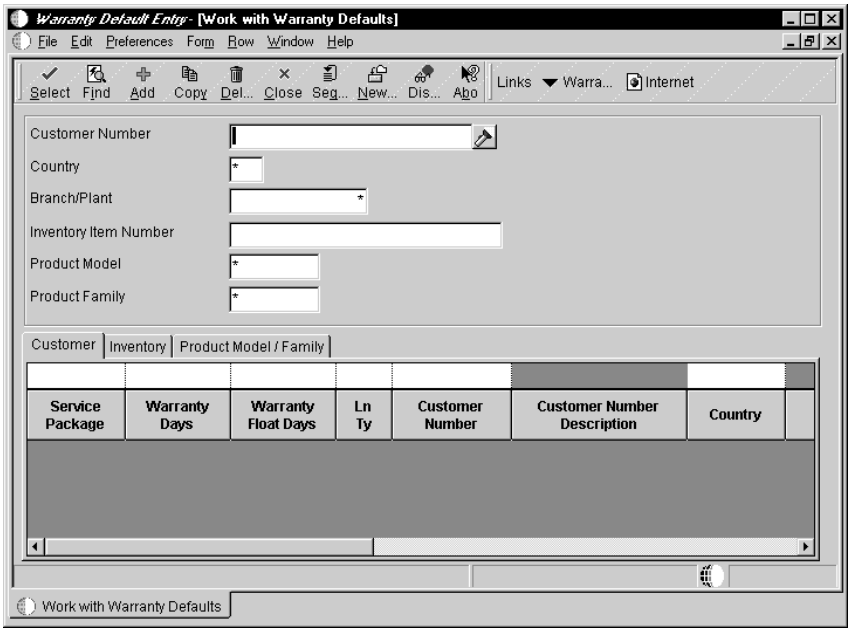
Setting up base warranty information consists of the following tasks:

- Setting up warranties
- Setting up warranty rules

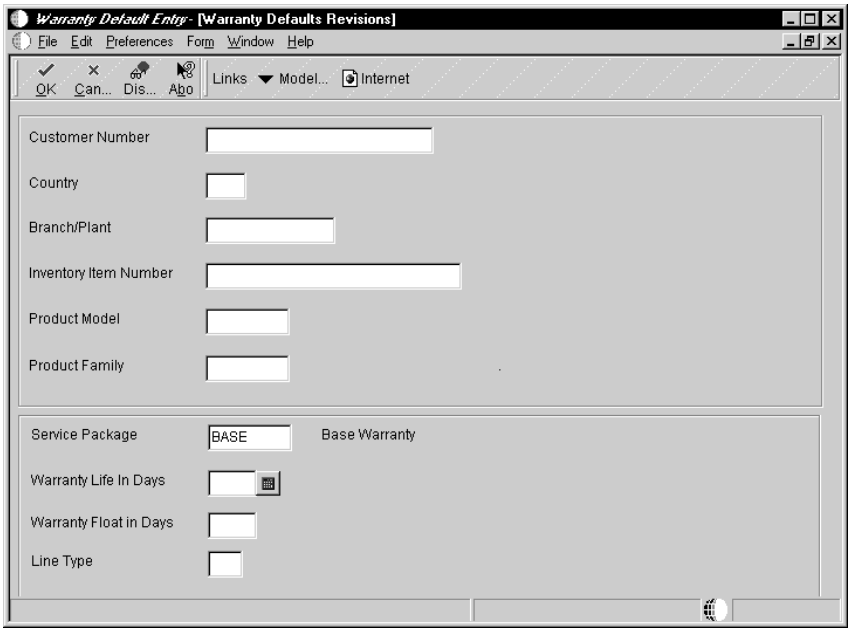
To set up warranties

From the Installed Base Setup menu (G1741), choose Warranty Default Entry.

On Work with Warranty Defaults



1. Click Add.



2. On Warranty Defaults Revisions, complete the following fields:

- Service Package
- Warranty Life In Days
- Line Type

  Line Type must be a CSMS line type that is identified as a base warranty line type.

3. Complete the following optional field:
   - Warranty Float in Days
4. To define the criteria for assigning a base warranty, complete any of the following optional fields and click OK:
   - Customer Number
   - Country
   - Branch/Plant
   - Inventory Item Number
   - Product Model
   - Product Family

   You can quickly search for a product family and its associated models by choosing Model/Family Search from the Form menu.

   Only service package and length of time differentiate base warranties.

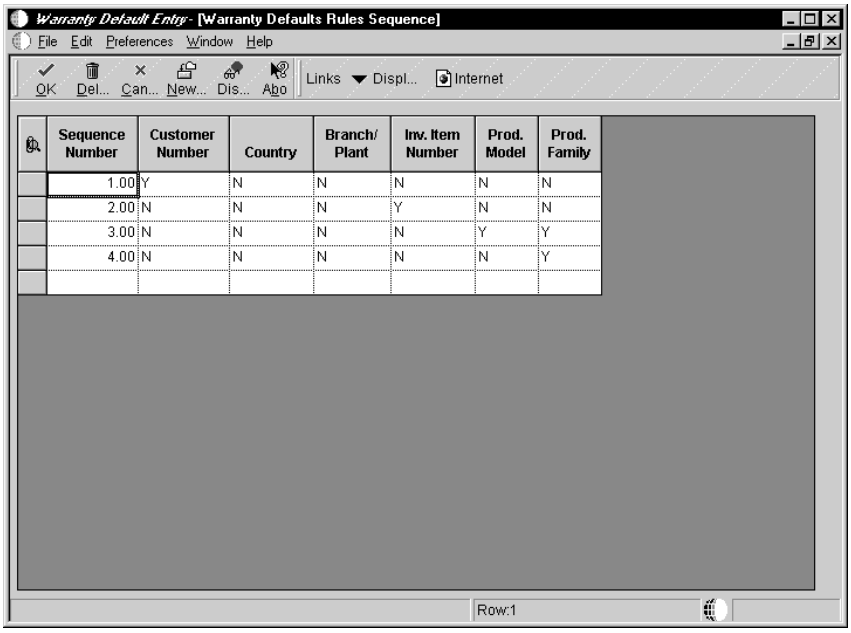
Field	Explanation
Warranty Life In Days	The number of days from date of sale or delivery until the warranty expires.
Warranty Float in Days	The number of days added to the duration of a base warranty to account for the sales cycle and delivery of a product. For example, for a product with a 90-day warranty and a 30-day warranty float, the warranty contract expires 120 days after the product is confirmed as shipped. If you update the installed base record to indicate the actual date that the end user received the product, the system disregards warranty float and indicates a 90-day warranty period that commences on the date of receipt.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.

To set up warranty rules

From the Installed Base Setup menu (G1741), choose Warranty Default Entry.

On Work with Warranty Defaults

1. From the Form menu, choose Warranty Rules Sequence.



2. On Warranty Defaults Rules Sequence, complete the following fields for each sequence number and click OK:

   - Sequence Number
   - Customer Number
   - Country
   - Branch/ Plant
   - Inv. Item Number
   - Prod Model
   - Prod Family

   J.D. Edwards recommends that you set up warranty rules from the most specific to the most general.

Field	Explanation
Sequence Number	A number that reorders a group of records on the form.

Creating Installed Base Records

When you create sales orders through the Sales Order Management system, the system can create Installed Base records in the Installed Base. For example, assume that your company manufactures computer printers. For a particular production run of printers, you enter a sales order to indicate a specific dealer as the owner of the printers. After a printer is sold by the dealer, and the dealer's customer returns the warranty registration card, you can update the owner information in the Installed Base record with the customer name provided on the warranty registration card.

Your business processes might not require that you use sales orders to create Installed Base records. You might need to enter information about a piece of equipment after its purchase by a third party. For example, assume that you manufacture and sell a mass quantity of cameras and you want to create an Installed Base record for each camera only after you have received the warranty registration card. The warranty registration card provides you with the information necessary to create the Installed Base record. It can also provide demographic and marketing information about the people purchasing your cameras.

You can create Installed Base records manually, for those products that are not processed through sales orders.

Creating Installed Base records consists of the following tasks:

- ❑ Creating a single Installed Base record
- ❑ Creating Installed Base records using batch processes
- ❑ Creating Installed Base records from fixed assets

Creating a Single Installed Base Record

You can use the Work with Installed Base form to create an Installed Base record for products that are not captured by the Installed Base updates.

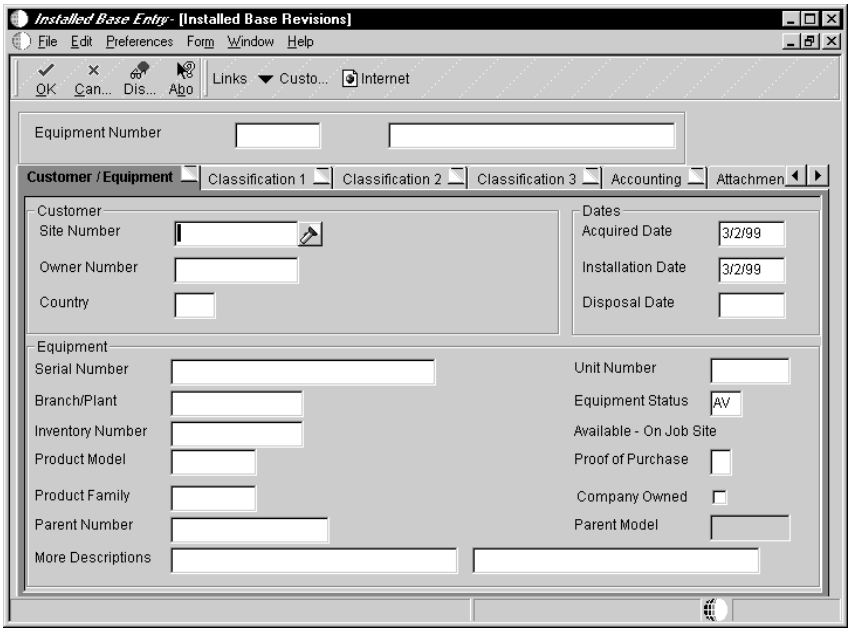
▶ To create a single Installed Base record

From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

On Work with Installed Base

1. Click Add.

   If you are revising an existing record, you might not be able revise certain fields on the form.



2. On Installed Base Revisions, complete the following fields:

   - Site Number
   - Owner Number
   - Serial Number
   - Inventory Number

     Inventory Number is a required field depending on processing options.

   - Acquired Date
   - Installation Date

   The date fields default to the system date. The system retrieves the description from the inventory item number.

3. Complete any of the following optional fields:

   - Equipment Status
   - Unit Number
   - Proof of Purchase

     If the Proof of Purchase field is blank, the Date field is enabled. If a non-blank field is entered, the dates are disabled. If you write a billable

contract for an install base item, the Proof of Purchase and date fields are protected.

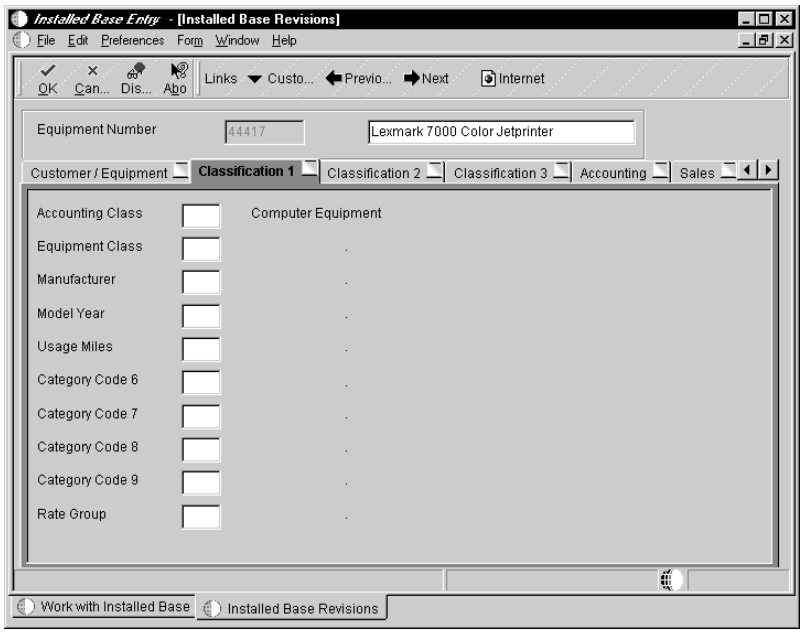
- Product Model
- Product Family
- Parent Number
- More Descriptions

4. To specify whether the piece of equipment is owned by the company, click the following option:

   - Company Owned

   When you click OK, the system validates that the serial number and product model combination is unique.

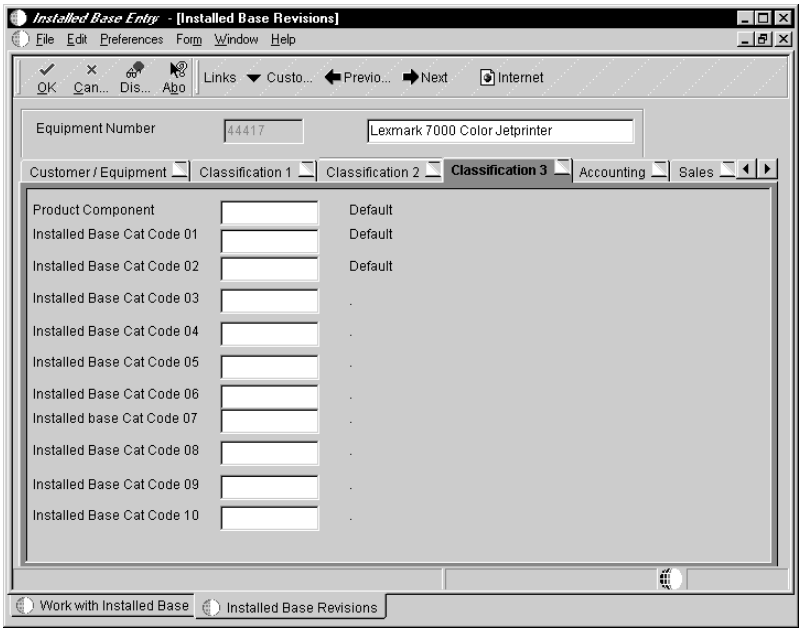
5. Click the Classification 1 tab.



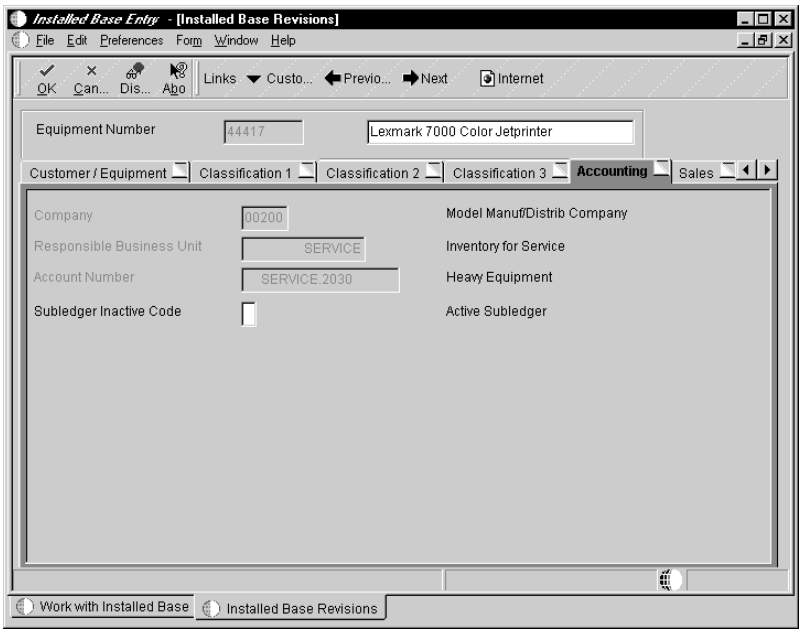
6. Complete any of the fixed asset category code fields as appropriate.

   You can access the remaining 13 equipment category code fields by clicking the Classification 2 tab.

7. Click the Classification 3 tab.



8. Complete the following optional field:
    - Product Component
9. Complete any of the Installed Base category code fields as appropriate.
10. Click the Accounting tab.



11. Complete the following required fields:

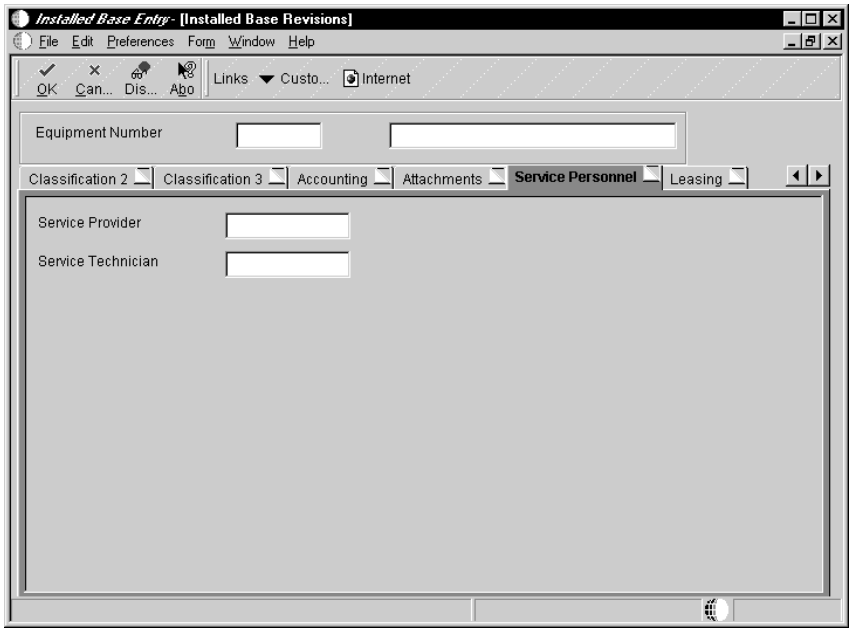
    - Company
    - Business Unit
    - Account Number

    These fields might already contain default values from processing options.

12. To prevent transactions from being applied to this record, complete the following field with a value other than blank:

    - Subledger Inactive Code

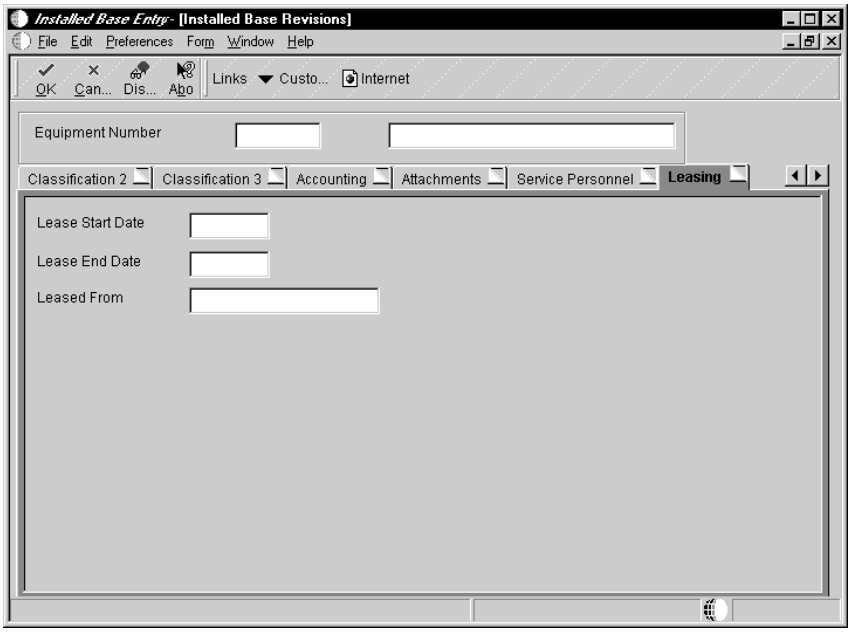
13. Click the Service Personnel tab.



14. Complete the following fields:

    - Service Provider
    - Service Technician

15. Click the Leasing tab.



16. Complete the following fields:
    - Lease Start Date
    - Lease End Date
    - Leased From
17. Click OK to create the record.

Field	Explanation
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Acquired Date	The date the asset was acquired. This is assumed to be the start depreciation date, but you may alter the start depreciation date. If you need to change this date, use the detail area of the Depreciation and Accounting Values form. If you are using the half–year convention, you must adjust the start depreciation date manually.
Installation Date	The date the contract for the asset was put into effect.
Equipment Status	A user defined code (12/ES) that identifies the equipment or disposal status of an asset, such as available, down, or disposed.

Field	Explanation
Unit Number	A 12-character alphanumeric code used as an alternate identification number for an asset. This number is not required, nor does the system assign a number if you leave the field blank when you add an asset. If you use this number, it must be unique. For equipment, this is typically the serial number.
Proof of Purchase	This flag specifies whether a piece of equipment is under warranty or not. blank No Warranty 1 Warranty . . . . . *Form-specific information* . . . . . A user defined code (17/PF) that indicates whether a customer has supplied a proof of purchase.
Company Owned	A flag that indicates if an equipment record is company owned.
Product Component	The components that make an equipment number or components associated with a customer site.
Company	A code that identifies a specific organization, fund, entity, and so on. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions. NOTE: You can use Company 00000 for default values, such as dates and automatic accounting instructions (AAIs). You cannot use Company 00000 for transaction entries.
Business Unit	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Document (Order No, Invoice, etc.)	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.

Field	Explanation
Order Type	A user defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. J.D. Edwards has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.) The following document types are defined by J.D. Edwards and should not be changed: P Accounts Payable documents R Accounts Receivable documents T Payroll documents I Inventory documents O Purchase Order Processing documents J General Accounting/Joint Interest Billing documents S Sales Order Processing documents
Order Company (Order Number)	A number that, along with order number and order type, uniquely identifies an order document (such as a purchase order, a contract, a sales order, and so on). If you use the Next Numbers by Company/Fiscal Year facility, the Automatic Next Numbers program (X0010) uses the order company to retrieve the correct next number for that company. If two or more order documents have the same order number and order type, the order company lets you locate the desired document. If you use the regular Next Numbers facility, the order company is not used to assign a next number. In this case, you probably would not use the order company to locate the document.
Manufacturer	A user defined code (system 12, type C3) that is used to classify assets into groups or families. You use the manufacturer category code to further define subclass codes. For example, an International Harvester, single-axle within the subclass for trucks.

Processing Options for Installed Base Revisions

```
Edits

1. Enter a '1' to require the entry of a
    Unit Number when adding an Equipment
    Record.

      Unit Number Required                    _____________

2. Enter a '1' to require the entry of a
    Serial Number when adding an
    Equipment Record.

      Serial Number Required                  _____________

3. Enter a '1' to require the entry of a
```

Inventory Item Number when adding an Equipment Record

Inventory Item Number Required _____

4. Enter a “1” to generate Base Warranty Contracts when adding an Installed Base item. “Blank” will not generate Base Warranty Contracts.

Base Warranty Contracts _____

5. Enter a “1” to use Acquired Date as the Base Warranty Contract Start Date. “Blank” will use Installation Date as the Base Warranty Contract Start Date.

Base Warranty Contract Start Date _____

6. Enter a “1” to require that Base Warranty Defaults exist when adding an Installed Base item.

Require Base Warranty _____

7. Enter a “1” to automatically display the Base Warranty Contracts after adding an Installed Base Item.

Display Base Warranty _____

8. Enter a “1” to automatically generate Mailing data when adding an Installed Base item. “Blank” will not create the Mailing data in the Installed Base Location Details table.

Create Mailing Data for I/B _____

Defaults

1. Company _____
2. Responsible Business Unit _____

Asset Cost Accounting Information

3. Cost Center _____
4. Account Object _____
5. Account Subsidiary _____

6. Enter a ’1’ to default the Cost Account Information from the Parent Asset when adding Children Assets.

Default Cost Account from Parent _____

7. Enter a ’1’ to add an Account Balances Record.

Account Balances Record _____

8. Beginning Equipment Status to be defaulted.

Equipment Status _____

Export

1. Enter the Transaction Type for the export transaction. If left blank, interoperability processing will not be performed. _____

2. Enter the Outbound Processor Version to call when performing interoperability processing. Default is 'XJDE0002'. _____

Versions

1. Enter the Version of the Work with Contracts (P1720) when the related option is used. Leave blank to call version ZJDE0001.

Work with Contracts Version _____

2. Enter the Version of the Scheduling Workbench (P48201) when the related option is used. Leave blank to call version ZJDE0002.

Scheduling Workbench Version _____

3. Enter the Version of the Status History (P1307) when the related option is used. Leave blank to call version ZJDE0002.

Status History Version _____

4. Enter the Version of the P & E Message Log (P1205) when the related option is used. Leave blank to call version ZJDE0002.

P & E Message Log Version _____

5. Enter the Version of the Equipment PM Schedule (P1207) when the related option is used. Leave blank to call version ZJDE0002.

Equipment PM Schedule Version _____

6. Enter the Version of the Cost Summary (P122101) when the related option is used. Leave blank to call version ZJDE0003.

Cost Summary Version _____

7. Enter the Version of the Bill of Material Inquiry (P30200) when the related option is used. Leave blank to call version ZJDE0001.

Bill of Material Inquiry _____

8. Enter the Version of the Quick Customer Add (P01015) when the related option is used. Leave blank to call version ZJDE0001.

   Quick Customer Add _____

9. Enter the Version of the Calls (P17500) when the related option is used. Leave blank to call version ZJDE0003.

   Calls _____

10. Enter the Version of the Depreciation Information (P1202) when the related option is used. Leave blank to call version ZJDE0001.

    Depreciation Information _____

11. Enter the Version of the Inventory Master (P4101B) when the related option is used. Leave blank to call version ZJDE0001.

    Inventory Master _____

12. Enter the Version of the Item Branch/Plant (P41026B) when the related option is used. Leave blank to call version ZJDE0001.

    Item Branch/Plant _____

13. Enter the Version of the Sales Order Detail (P4210) when the related option is used. Leave blank to call version ZJDE0001.

    Sales Order Detail _____

14. Enter the Version of the Manufacturing Work Order (P48013) when the related option is used. Leave blank to call version ZJDE0001.

    Manufacturing Work Order _____

15. Enter the Version of the Supplemental Data (P00092) when the related option is used. Leave blank to call version ZJDE0005.

    Supplemental Data _____

Data Selection

The Installed Base Update from Ship Confirm allows additional data selection criteria.

```
1.  Enter the “Last Status” of a Sales
   Order that is required to add an
   Installed Base item.

     Last Status Code                                  _____________

2.  Enter the Country code of Customers
   whose orders are to be added to
   Installed Base.

     Country                                           _____________
```

Creating Installed Base Records Using Batch Processes

Typically, Installed Base records are created as a result of running a batch process over records you create in the Sales Order Management system. By running these processes, the system creates records in the Installed Base.

Creating Installed Base records using batch processes includes the following tasks:

- ❑ Updating the install base from ship confirm
- ❑ Updating the install base from sales order detail

Updating the Install Base from Ship Confirm

From the Daily Installed Base Processing menu (G1711), choose Installed Base Update from Ship Confirm.

You can automatically update your Installed Base records directly from sales orders. When you run the Installed Base Update from Ship Confirm program, the system creates Installed Base records based on information from the Serial Number Warranty table (F4220).

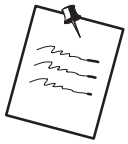
The system creates records in the following tables when you run this process:

- Asset Master table (F1201)
- Equipment Master Extension table (F1217)
- Installed Base Location History (F1731)
- Status History (F1307)
- Parent History (F1212)

Depending on how you have set up your processing options and whether you are creating a base warranty, the system also creates records in the Contract Detail table (F1721). Based on the sales contract, the system automatically generates warranty entitlement information for the product.

The system retrieves the product information based on the serial number. You must enter Y in the Serial Number Required field on the Item Master Revisions form to

retrieve sales order records and update the Installed Base using this process. Then at ship confirm, you must select serial numbers that fulfill the order. You can also retrieve records if the serial number required field is set to 6 for non-serialized, but only if CSMS constant is set up to non-serialized.



The system assigns base warranties to a customer number unless in CSMS constants the customer number for the base warranties field is filled with the Address Book number.

Updating the Install Base from Sales Order Detail

From the Daily Installed Base Processing menu (G1711), choose Installed Base Update for Non–Serialized.

When you run the Installed Base Update for Non-Serialized program, you can create warranties for non-serialized products. You only run this process when you have non-serialized products that you want to be included in your Installed Base.

The system selects records from the Sales Order Detail table (F4211) for products that are CSMS non-serialized. If the CSMS constant is checked, do not run the batch process. The system retrieves the data when you run the Installed Base Update from the Ship Confirm (R17021) batch process and creates a double record. If the CSMS constant is not checked, the system creates a non-serialized number when you run the Installed Base Update for Non-Serialized (R17023) batch process.

When you run this process, the system creates one install base record for the sales order line.

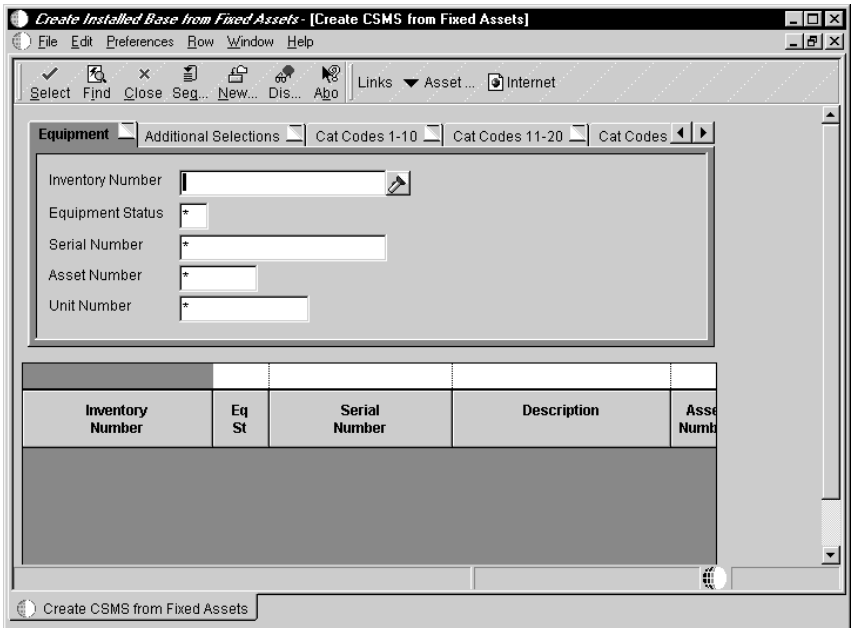
Creating Install Base Records From Fixed Assets

You can create an Installed Base record from an existing record in the Fixed Assets system database. Depending on the how you set the processing options, the system generates base warranty contract details.

▶ To create Installed Base records from Fixed Assets

From the Periodic Installed Base Processing menu (G1721), choose Create Installed Base from Fixed Assets.

On Create CSMS from Fixed Assets



1. Enter informaiton in the fields on the tabs to narrow the search criteria, and click Find.
2. Choose one or more records and choose Create CSMS from the Row menu.
3. On Installed Base Revisions, complete the following fields and click OK:
   - Site Number
   - Owner Number
   - Inventory Number
   - Serial Number
   - Product Model
   - Product Family
   - Acquired Date
   - Installation Date

Processing Options for Create CSMS from Fixed Assets

```
Edits

 1.  Enter a "1" t o generate Base
    Warranty Contracts when creating an
    Instaled Base item.  "Blank" will
    not generate Base Warranty
    Contracts.

      Base Warranty Contracts

 2.  Enter a "1" to use Acquired Date as
    the Base Warranty Contract Start
    Date.  "Blank" will use Installation
```

Date as the Base Warranty Contract Start Date.

Base Warranty Contract Start Date _____

3. Enter a "1" to automatically display the Base Warranty Contracts after creating an Installed Base item.

Display Base Warranty _____

Versions

1. Enter the version of the Installed Base Revisions (P1702) to be used when creating the Installed Base item. Leave blank to use version ZJDE0001.

Installed Base Revisions _____

2. Enter the version of the Installed Base Revisions (P1702) when the related option is used. Leave blank to call version ZJDE0001.

Installed Base Revisions _____

3. Enter the version of the Work with Contracts (P1720) to be used when Base Warranty Contracts are created. Leave blank to use version ZJDE0001.

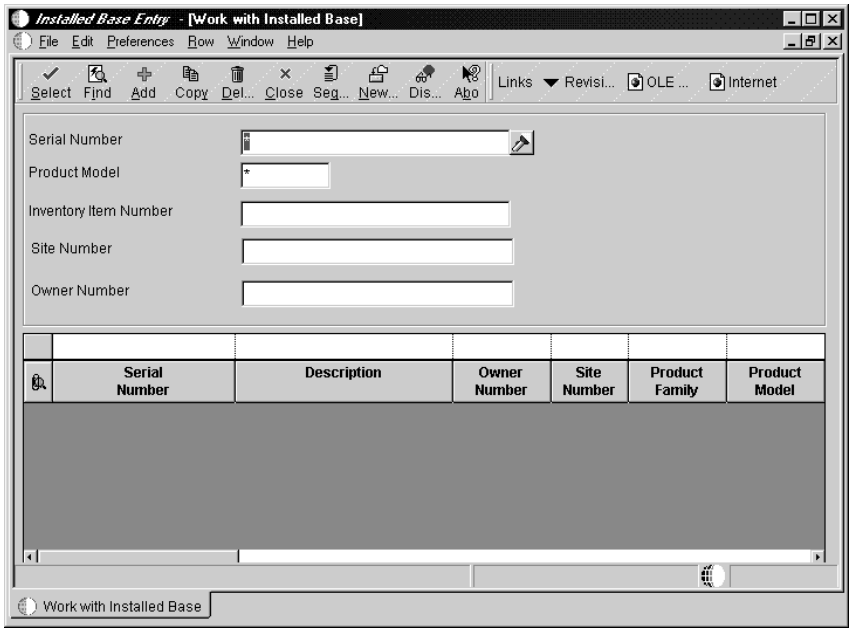
Contracts _____

Working with the Installed Base

Regardless of how you initially create the Installed Base record, you can review and update the information using a variety of features in Installed Base Management.

Working with the Installed Base consists of the following tasks:

- ❑ Searching for Installed Base records
- ❑ Updating the Install Base
- ❑ Revising owner and site history
- ❑ Working with parent and component information
- ❑ Working with Installed Base item status



Searching for Installed Base Records

Many of the day-to-day tasks that you perform with Installed Base Management require the ability to quickly locate specific records. To locate an Installed Base record or group of records, you can use a variety of search criteria. After you locate the records,

you can perform most tasks related to the Installed Base without accessing other menus or programs.

If you frequently search for similar records, you can use processing options to specify default values for the first 10 fixed assets category codes.

▶ To search for Installed Base records

From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

On Work with Installed Base

1. Complete any combination of the following fields:
   - Serial Number
   - Product Model
   - Inventory Item Number
   - Site Number
   - Owner Number
2. To further narrow your search, complete any combination of fields in the Query by Example row, and then click Find.

   The system displays all Installed Base records that match your search criteria.

Field	Explanation
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Inventory Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Site Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.

Processing Options for Work with Installed Base

```
Defaults

Enter the default for the Equipment
    Master Category Code selections.
    Blanks will select all.
```

1. Category Code 1 (Accounting Class) _____
2. Category Code 2 (Equipment Class) _____
3. Category Code 3 (Manufacturer) _____
4. Category Code 4 (Model Year) _____
5. Catgeory Code 5 (Usage Miles or Hours) _____
6. Category Code 6 _____
7. Category Code 7 _____
8. Category Code 8 _____
9. Category Code 9 _____
10. Rate Group _____

Versions

1. Enter the version of the Installed Base Revisions (P1702) when the related option is used. Leave blank to call version ZJDE0001.

   Installed Base Revisions Versions _____

2. Enter the version of the Scheduling Workbench (P48201) when the related option is used. Leave blank to call version ZJDE0002.

   Scheduling Workbench Version _____

3. Enter the version of the Status History (P1307) when the related option is used. Leave blank to call version ZJDE0002.

   Status History Version _____

4. Enter the version of the P and E Message Log (P1205) when the related option is used. Leave blank to call version ZJDE0002.

   Message Log Version _____

5. Enter the version of the Equipment PM Schedule (P1207) when the related option is used. Leave blank to call version ZJDE0002.

   Equipment PM Schedule Version _____

6. Enter the version of the Cost Summary (P122101) when the related option is used. Leave blank to call version ZJDE0003.

   Cost Summary Version _____

7. Enter the version of the Bill of Material Inquiry (P30200) when the related option is used. Leave blank to call version ZJDE0001.

   Bill of Material Inquiry _____

8. Enter the version of the Service Contracts (P1720) when the related option is used. Leave blank to call version ZJDE0001.

   Service Contracts _____

9. Enter the version of the Call History (P17500) when the related option is used. Leave blank to call version ZJDE0003.

   Call History _____

10. Enter the version of the Equipment Depreciation (P1202) when the related option is used. Leave blank to call version ZJDE0001.

    Equipment Depreciation _____

11. Enter the version of the Inventory Master (P4101B) when the related option is used. Leave blank to call version ZJDE0001.

    Inventory Master _____

12. Enter the version of the Supplemental Data (P00092) when the related option is used. Leave blank to call version ZJDE0005.

    Supplemental Data _____

Updating the Install Base

To make changes to multiple Installed Base records at one time, you can use the Installed Base Global Update program. For example, you might use this program to update your Installed Base records when you ship multiple items to one location A and four months later all of the items are transferred to location B, which is another company branch or location. When the records were initially entered, the items reflected location A as the site of the equipment. Due to the transfer of the equipment to location B, you need to update the information with the new site number to show location B as the location of the equipment.

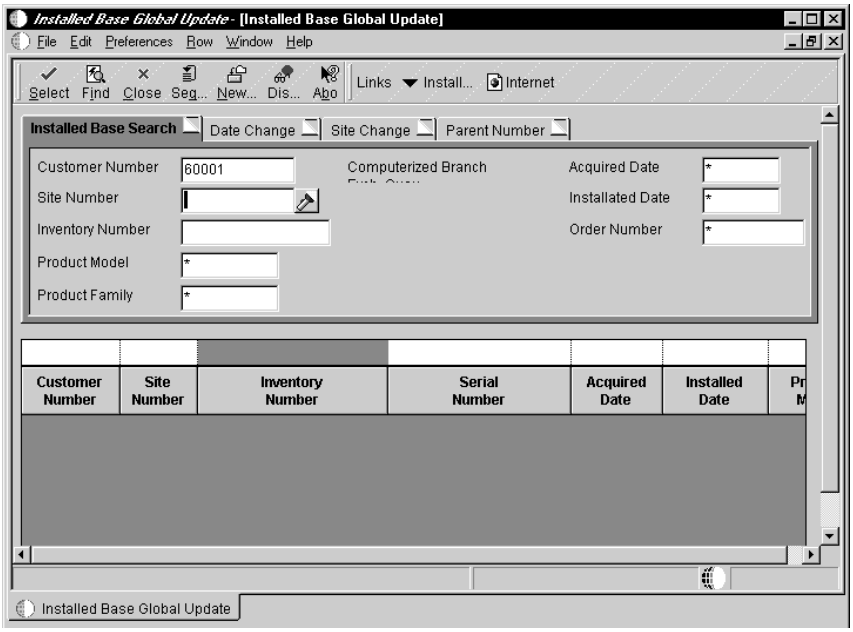
Before You Begin

❑ Set up Installed Base constants. See *Setting Up Installed Base Constants*.

▶ To update the Installed Base

From the Periodic Installed Base Processing menu (G1721), choose Installed Base Global Update.

On Installed Base Global Update



1. Complete the following field:
   - Customer Number
2. To limit the scope of your search, complete any of the following fields:
   - Site Number
   - Inventory Number
   - Product Family
   - Product Model
   - Acquired Date
   - Installed Date
   - Order Number
3. Click Find.
4. To make date changes, click the Date Change tab and complete the following fields:
   - Acquired Date
   - Installed Date
5. To indicate a location change for your equipment, click the Site Change tab and complete the following fields:
   - Site Number
   - Effective Date
   - Update Children

6. To change the parent serial number for your equipment, click the Parent Number tab and complete the following fields:
   - Parent Number
   - Effective Date
7. Choose all the records that you are changing.
8. From the Row menu, choose Update.

   The system processes the changes and displays the updated information.

Field	Explanation
Customer Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Site Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Inventory Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Acquired Date	The date the asset was acquired. This is assumed to be the start depreciation date, but you may alter the start depreciation date. If you need to change this date, use the detail area of the Depreciation and Accounting Values form. If you are using the half–year convention, you must adjust the start depreciation date manually.
Installed Date	The date the contract for the asset was put into effect.
Order Number	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.

Field	Explanation
Effective Date	The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to appear. The system uses this field depending on the program. For example, the date you enter in this field might indicate when a change of address becomes effective, or it could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, and so on.
Update Children	An option that identifies a processing flag for an event.
Parent Number	A value for an installed base item that can be either the equipment number, the unit number, or the serial number. The Fixed Assets Constants define what symbol is used to identify each of the three types of values.

Processing Options for Installed Base Global Update

```
Defaults

  1.  Enter a "1" to use the change to
    Acquired Date to update the Base
    Warranty Contract Start Date.
    "Blank" will use the change to
    Installed Date to update the Base
    Warranty Contract Start Date.

      Base Warranty Contract Start Date
```

Revising Owner and Site History

You can easily revise information about equipment owners or locations. This is especially useful if the equipment is often transferred or resold prior to warranty expiration. You can enter current location dates or dates that become effective in the future.

▶ To revise owner and site history

From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

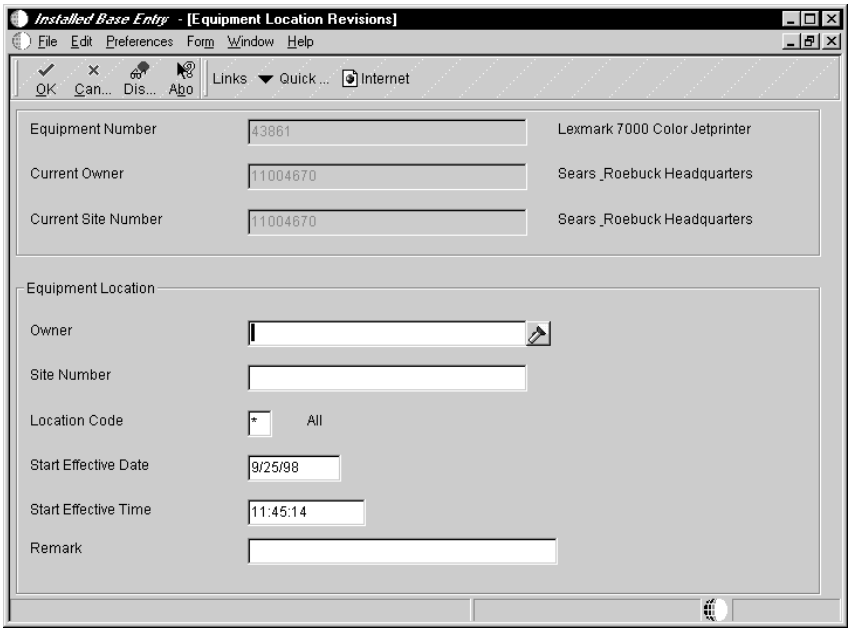
On Work with Installed Base

1. Complete the steps to locate a specific Installed Base record.

   See *Searching for Installed Base Records*.

   Alternately, if you know the equipment number of the Installed Base record, you can choose Installed Base Location Revisions directly from the Daily Installed Base Processing menu.

2. To revise current and historical owner and/or site location information, choose the record, choose Installed Base from the Row menu, and then choose Change Site.



The system displays the Equipment Location Revisions form. Current owner and site information appears in the upper portion of the form.

3. Complete the following fields to enter new owner and site information:
   - Owner
   - Site Number
4. If applicable, override the following fields:
   - Location Code
   - Start Effective Date
   - Start Effective Time
5. Complete the following optional field:
   - Remark
6. Click OK.

Field	Explanation
Location Code	A code that indicates the type of location record. You can enter the following valid values: C Current. Displays only the current location for an asset. H Historical. Displays all previous locations for an asset. P Planned or scheduled. Displays only the planned location dates for an asset. You enter planned locations for an asset in the Equipment/Plant Management system. * Displays all locations (current, planned, and historical) that meet your search criteria. The default value for this field is C. NOTE: You cannot change historical (type H) location records. The system automatically updates location records to type H when you change the location and start date of an asset.
Start Effective Date	The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to appear. The system uses this field depending on the program. For example, the date you enter in this field might indicate when a change of address becomes effective, or it could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, and so on.
Remark	A generic field that you use for a remark, description, name, or address.

Working With Parent and Component Information

You can establish a hierarchy of parent and component relationships among the equipment in your Installed Base. You can track up to 25 levels of component relationships for a particular piece of equipment. After you establish such an hierarchy, you can:

- Report on equipment costs and activity at the parent or component level
- Track all components that have been assigned to a parent, or the parents to which a specific component has been assigned.

Working with parent and component information consists of the following tasks:

❑ Reviewing and revising parent information

❑ Reviewing current equipment components

Reviewing and Revising Parent Information

If you track parent information for equipment components, you can easily review and revise parent information when component equipment moves from one parent to another. For example, assume that you warranty a drive train component for a parent piece of equipment. If the drive train component is exchanged for warranty service, you can indicate a new parent for the subsequently repaired drive train.

When you initially inquire on a parent piece of equipment, the system displays all of the parents to which a component has been assigned. You can toggle the view format to review a history of other components that have been assigned to the component upon which you inquired. If the history records are extensive, you can limit the information that displays according to specific dates.

After you review parent information for a component, you can access Asset Master Revisions to indicate a new parent for a component piece of equipment.

▶ To review and revise parent information

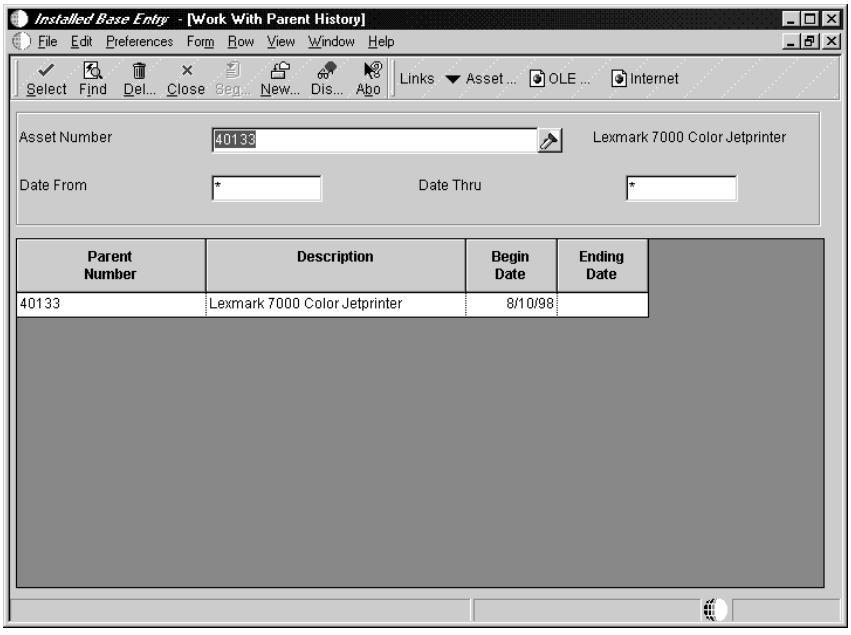
From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

On Work with Installed Base

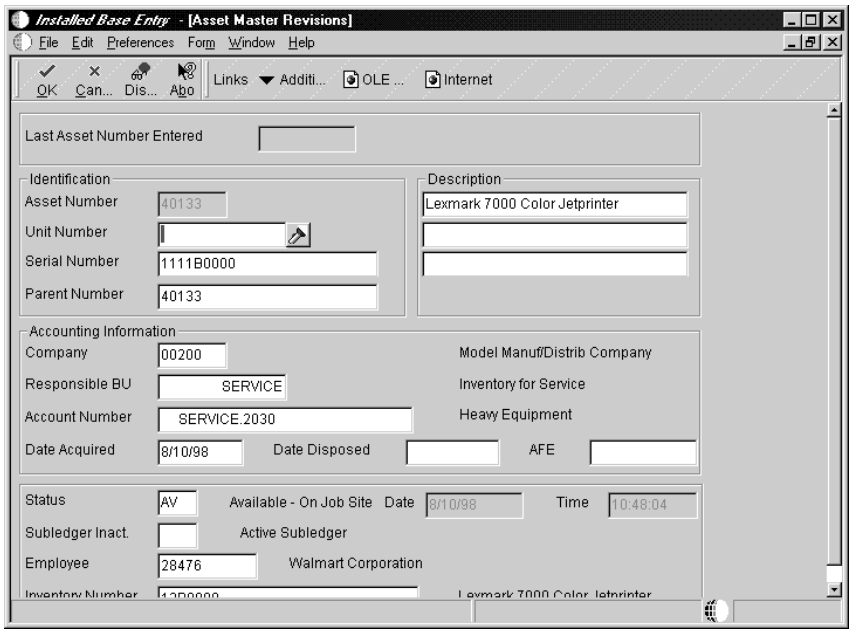
1. Complete the steps to locate a specific Installed Base record.

   See *Searching for Installed Base Records*.

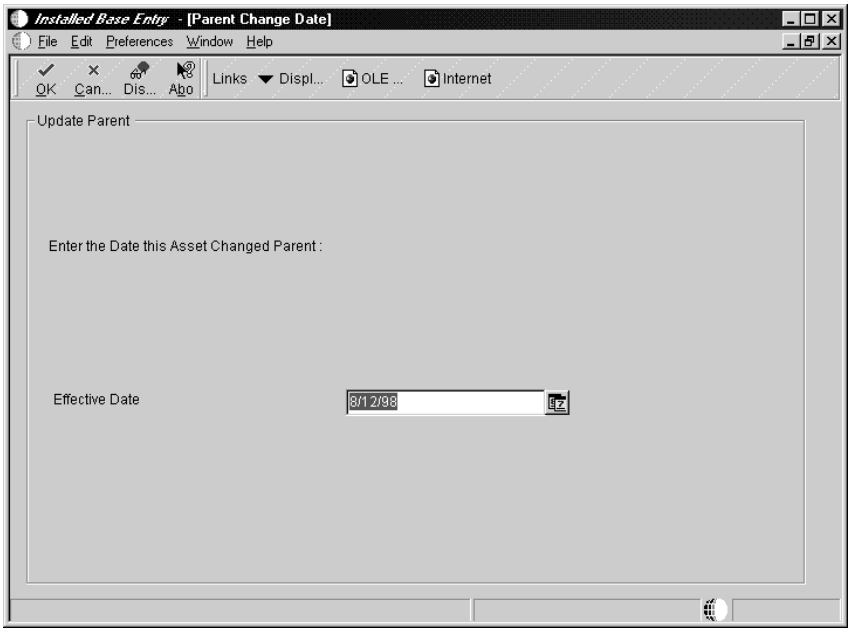
2. To review parent information, choose the record, choose Installed Base from the Row menu, and then choose Parent Information.



3. On Work With Parent History, choose either Parent Format or Component Format from the View menu.
4. Complete the following optional fields to limit the information that appears:
   - Date From
   - Date Thru
5. To revise the parent information for a component, choose the component record, and then choose Asset Master from the Row menu.



6. On Asset Master Revisions, complete the following field with the new parent number and then click OK:
   - Parent Number



7. On Parent Change Date, complete the following field and click OK:

   - Effective Date

   The system displays Work With Parent History. To review your changes, click Find.

Field	Explanation
Parent Number	A value for an installed base item that can be either the equipment number, the unit number, or the serial number. The Fixed Assets Constants define what symbol is used to identify each of the three types of values. . . . . . *Form-specific information* . . . . . . A number that identifies the immediate parent asset in a parent/component relationship. For example, a car phone and radar detector are components that belong to a car. If you leave this field blank, the system uses the asset's primary identification number. If you change the parent number, the system displays a window so you can enter the date on which you assigned the asset a new parent.
Effective Date	The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to appear. The system uses this field depending on the program. For example, the date you enter in this field might indicate when a change of address becomes effective, or it could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, and so on.

Reviewing Current Equipment Components

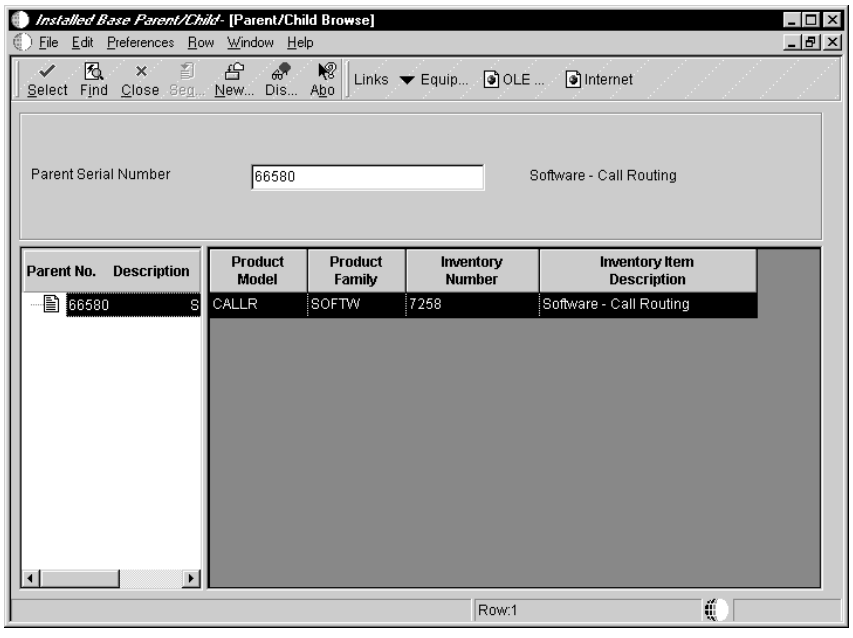
You can display up to 25 levels of component information for a selected piece of equipment. This is particularly useful to track the Installed Base for complex equipment assemblies such as a bridge crane. The system displays the components of a piece of equipment in a tree structure. You can expand the tree to reveal lower-level components and choose a component to work with. For example, after you choose a component, you can access the following forms:

Installed Base Revisions	You can revise information for the selected component, including its parent.
Work With Cost Summary	You can review costs associated with the selected component, either by cost account or repair code.
Work With Work Orders	You can review all of the service orders associated with the selected component.

▶ To review current equipment components

From the Daily Installed Base Processing menu (G1711), choose Installed Base Parent/Child.

On Parent/Child Browse



1. Complete the following field and click Find:

- Parent Equipment Number

The system displays the parent piece of equipment in the left pane.

2. To expand the tree and view all of the parent's next-level components, click the plus (+) sign in the left pane, under the Parent No. column.

   The tree expands to reveal the next level of the parent/component hierarchy. You can continue to expand the tree for each component that also serves as a parent of other components.

Processing Options for Installed Base Parent/Child

```
Process

 1.  Enter the primary product for this
    version.  Enter a '1' for Equipment
    and '2' for CSMS.

      Select Product                                _____________
Process

 1.  Enter the primary product for this
    version.  Enter a '1' for Equipment
    and '2' for CSMS.

      Select Product                                _____________
```

Working with Installed Base Item Status

You can review the history of an Installed Base item by the statuses that have been assigned to it, such as available, down, working, and standby. This is especially useful to maintain an audit history of operational statuses and to determine the amount of time that an Installed Base item has been idle due to downtime.

When you access Work With Status History, in addition to the statuses that have been assigned to an Installed Base item, you can also review:

- The ending time (if applicable) and beginning time for each status, as well as the associated dates
- The total hours associated with each occurrence of a particular status
- The lifetime meter reading at the time of the status change for any of the statistical accounts that you have defined, such as hours, fuel, or miles
- The cumulative hours for all occurrences of a particular status over the life of the equipment
- Remarks entered when you changed the status of the equipment

From Work with Status History, you can access Downtime Analysis, from which you can determine the mean or average time between product failures. This is especially useful when comparing actual product downtime with warranty expectations.

Processing options allow you to revise existing remarks for any status change, enter a new remark, or protect the remarks field from future revisions.

Working with status history consists of the following tasks:

- Reviewing status history
- Tracking mean time between failures for equipment

▶ To review status history

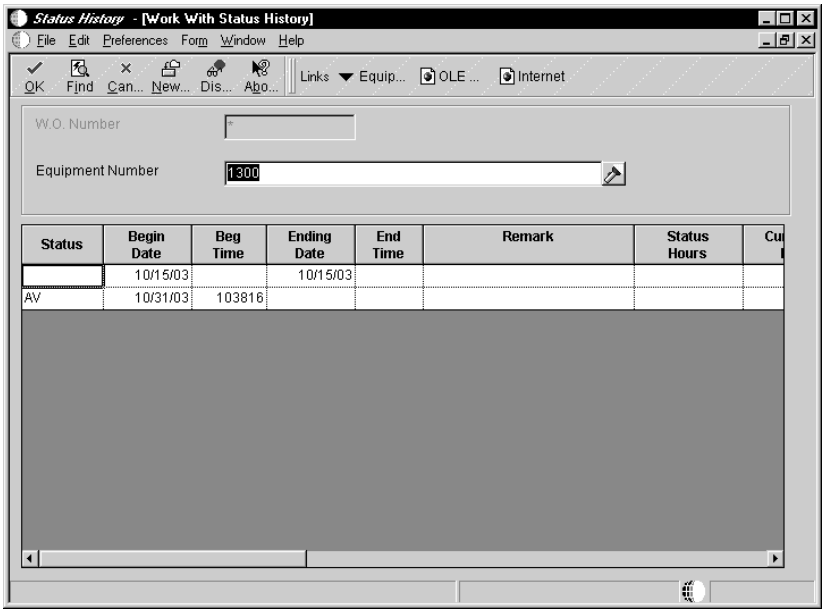
From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

On Work with Installed Base

1. Complete the steps to locate a specific Installed Base record.

   See *Searching for Installed Base Records*.

2. To review status history information, choose the record, choose Installed Base from the Row menu, and then choose Status History.



3. On Work With Status History, complete the following field and click Find:

   - Equipment Number

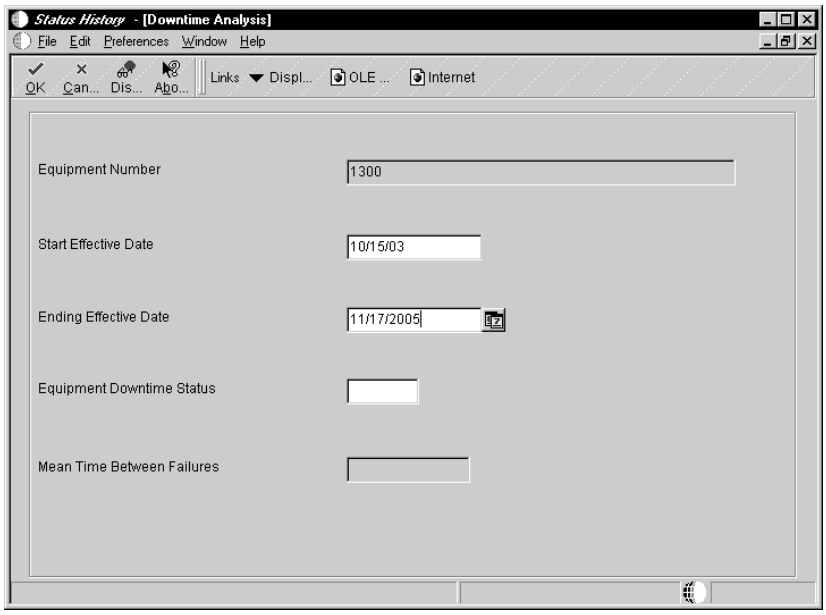
   A complete history of every status assigned to the Installed Base item appears.

To track mean time between failures for equipment

From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

On Work with Installed Base

1. Complete the steps to review status history.
2. On Work With Status History, choose Analysis from the Form menu.



3. On Downtime Analysis, complete the following fields and click OK:
   - Start Effective Date
   - Ending Effective Date
   - Equipment Downtime Status

   The mean time between failures appears for the product.

Processing Options for Status History

Process

1. Enter a ’1’ to protect the Remarks field. Enter a ’2’ to protect the Remarks field if it is not blank. Leave blank to allow modifications to the Remarks field.

   Protect Remarks _____

2. Enter the Work Day Calendar to use for the calculation of the number of days for Equipment Analysis.

   Work Day Calendar _____

3. Enter the primary product for this version. Enter a ’1’ for Equipment and ’2’ for CSMS.

   Select Product _____

Scheduling Maintenance for Installed Equipment

You can use the Preventive Maintenance features in the Equipment/Plant Management system to create preventive maintenance (PM) schedules and schedule maintenance for your installed product. For example, you can use PM schedules to schedule warranty service and routine maintenance tasks for each piece of equipment in your Installed Base. You can access the features necessary to create and track PM schedules directly from the Installed Base Revisions form, or from the Work With Installed Base form.

PM schedules allow you to define the type and frequency of each maintenance task for each product in your Installed Base. The preventive maintenance cycle refers to the sequence of events that make up a maintenance task, from its definition to its completion. Since most preventive maintenance tasks are commonly performed at service intervals, such as dates, miles, or cycles, the parts of the preventive maintenance cycle repeat, based on these intervals. In addition, PM schedules provide information about the last time that each maintenance task was performed.

For any maintenance task that you assign to a piece of equipment, you can attach a model work order to the PM schedule. The model work order provides standard instructions (routing instructions) and the parts list that is necessary to complete the maintenance task.

Before You Begin

❑ Set up the following user defined codes:

- Preventive maintenance service types (12/ST)
- Preventive maintenance status (12/MS)

See *Understanding User Defined Codes* in the *Equipment/Plant Maintenance Guide* for more information about these codes.

❑ Set up standard procedures for preventive maintenance

❑ Set up maintenance rules

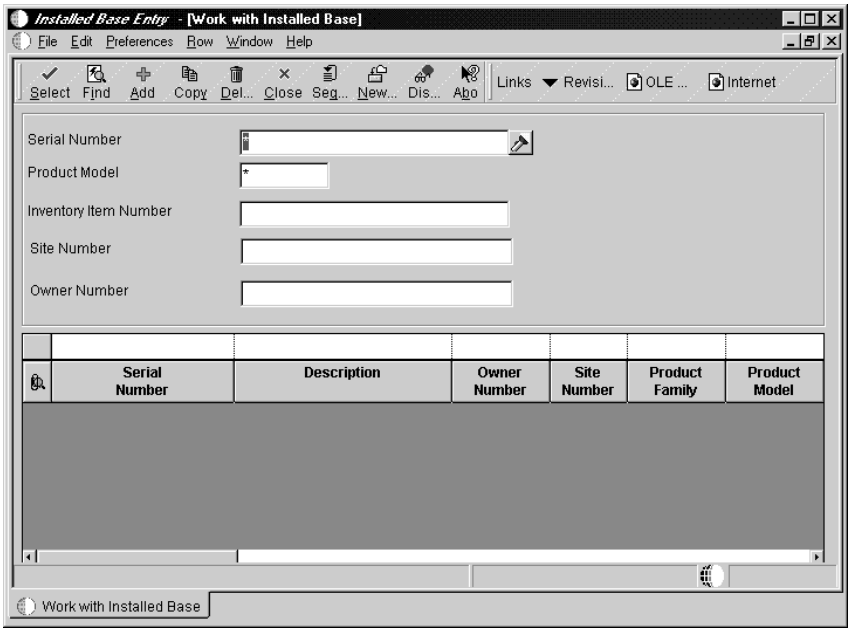
See Also

- *Setting Up PM Schedule Information* in the *Equipment/Plant Maintenance Guide*

To schedule maintenance for installed equipment

From the Daily Installed Base Processing menu (G1711), choose Installed Base Entry.

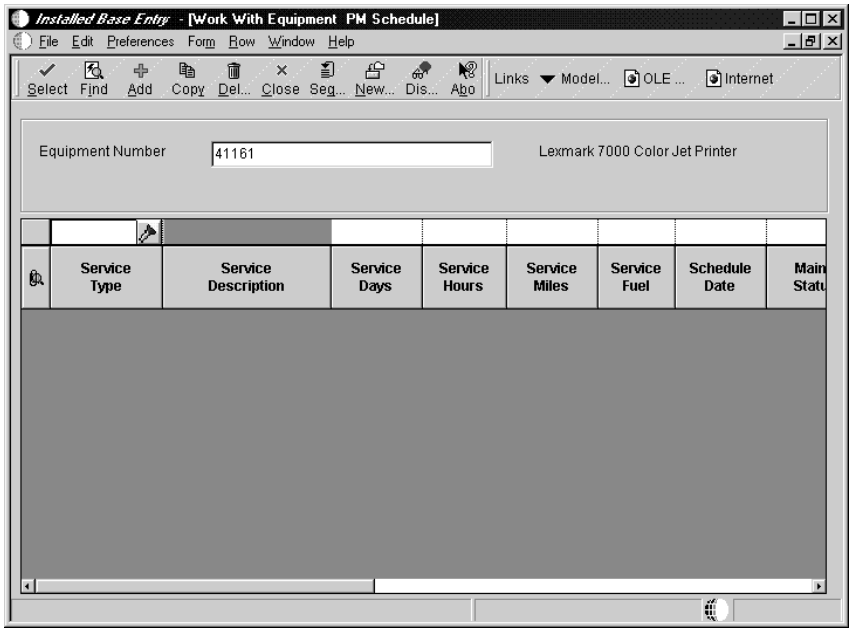
On Work with Installed Base



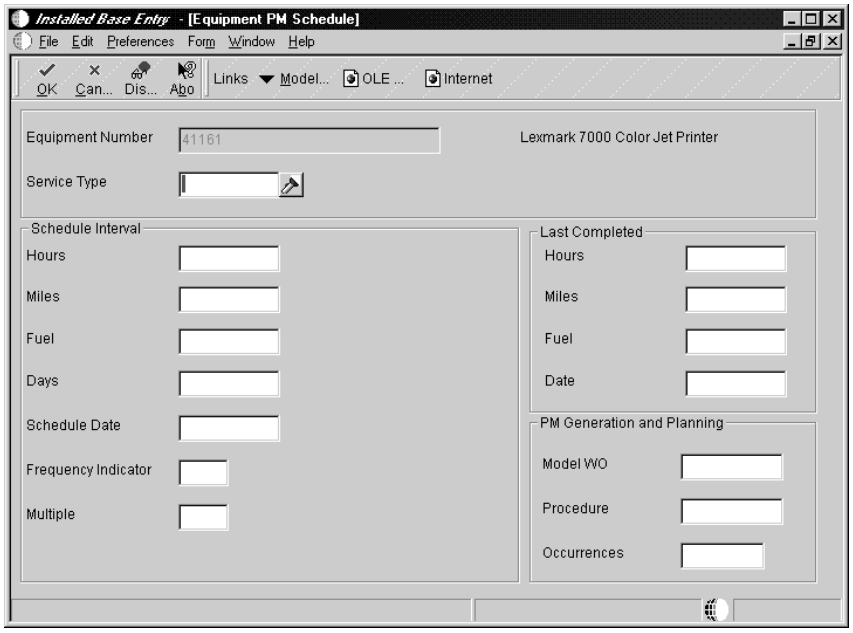
1. Complete the steps to locate a specific Installed Base record.

   See *Searching for Installed Base Records*.

2. Choose the record for which you want to schedule maintenance, choose Inventory, and then Maintenance from the Row menu.



3. On Work With Equipment PM Schedule, click Find to display all of the maintenance tasks that have been defined for the equipment.
4. To schedule maintenance for a new task, click Add.



5. On Equipment PM Schedule, complete the following field:
   - Service Type
6. For each service type that you enter, complete the following optional fields in the Schedule Interval portion of the form:
   - Schedule Date

- Frequency Indicator
- Multiple

7. For each service type for which you did not enter a schedule date, complete any of the following fields in the Schedule Interval portion of the form:

   - Hours
   - Miles
   - Fuel
   - Days

   You can enter a service interval based on days and schedule date. If you entered a value in the Frequency Indicator field, you cannot enter a service interval based on days.

   You can enter service types for unscheduled maintenance that do not have schedule dates or intervals associated with them. Service types for unscheduled maintenance tasks must, however, include a model work order number.

8. Complete the following PM generation and planning fields:

   - Occurrences

     Depending on how the processing options are set, you might not be able to manually enter a value in the Occurrences field.

   - Procedure

9. If you use model work orders, complete the following field:

   - Model WO

     If you enter a value in the Procedure field and a model work order number, the system displays a warning message indicating that the work order might have its own procedure that could conflict with the procedure that you entered.

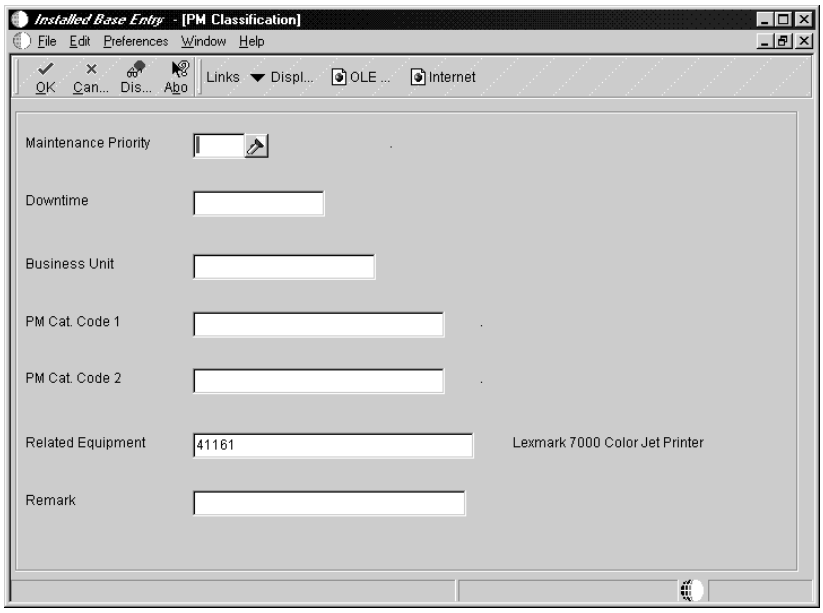
10. If the maintenance task for the piece of equipment has been performed but this is the first PM to be applied to the equipment, complete the following fields in the Last Completed portion of the form:

    - Hours
    - Miles
    - Fuel
    - Date

11. To add the record, click OK, and then click Cancel.

    The Work With Equipment PM Schedule form appears.

12. On Work With PM Schedule, click Find to display the record for the PM schedule you created.
13. Choose the record for the PM schedule you created and click Select.
14. On Equipment PM Schedule, choose PM Classification from the Form menu.



15. On PM Classification, complete the following optional fields and then click OK:
    - Maintenance Priority
    - Downtime
    - Business Unit
    - PM Cat. Code 1
    - PM Cat. Code 2
    - Related Equipment
    - Remark

Field	Explanation
Service Type	A user defined code (system 12, type ST) that describes the preventive maintenance service to be performed. Examples of codes include CLUTCH for adjust clutch, OIL for change oil, 10H for 10 hour service, and so forth.

Field	Explanation
Schedule Date	The date that you want to receive a reminder message about an asset. . . . . . *Form-specific information* . . . . . This is the future date on which the scheduled maintenance is due. You can enter a service interval based on the schedule date and service days. If you enter both a schedule date and service days, the system schedules the maintenance to come due, based on the schedule date that you indicate. Subsequent schedule dates for maintenance are calculated, based on the last completed date, in conjunction with the service days interval.
Frequency Indicator	When used in conjunction with Schedule Date, this field indicates the frequency at which the system schedules maintenance. When maintenance is completed, the system automatically schedules the next maintenance according to the value that you enter in this field. Valid values are: blank No frequency indicator 1 Same date each month 2 Last date each month 3 Same date each quarter 4 Same date each year 5 Same day each week 6 Semi–annually (same date at six month intervals)

Field	Explanation
Multiple	This code determines whether maintenance service types can be rescheduled and can come due again before the maintenance task for the originally scheduled service type has been completed. Valid codes are: blank One Cycle (default). Maintenance is not rescheduled until the original maintenance task has been completed. 1 Multiple Cycle with Multiple Work Orders. Once the service type has come due, it is automatically rescheduled so that it can come due again without completing the original maintenance. Multiple work orders can also accrue. 2 Multiple Cycle. The same as number1 above but only one work order will accrue. 3 Maintenance Loop. A system-generated code associated with maintenance loops. The Update PM Schedule program assigns the Maintenance Loop code to PM schedules generated through maintenance loops. These PM schedules are not repeated in the PM cycle. Maintenance tasks for all equipment indicated in the maintenance loop are performed under a single work order. 4 Warranty. A code that indicates that the equipment is under warranty. The system provides a warning on the following forms: • Work Order Entry • Work Order Inventory Issues • Purchase Request (when called from the Work Order Parts List) When a PM that includes warranty service types is completed, the system includes the warranty service in the PM history record, but does not reschedule the warranty service types.
Hours	The hours to be expended before you schedule maintenance. To determine if maintenance is due, the Update PM Schedule Status program uses this quantity and the threshold percent from the maintenance rules table. It calculates the total hours as the service hours plus the hours run as of the last date you performed a maintenance. It then compares this amount to the actual hours from the AA ledger for the AT00 automatic accounting instruction to determine if maintenance is due. NOTE: Hours is only an example of a statistical unit. You can define other statistical units appropriate to your organization within the AT00 automatic accounting instructions.

Field	Explanation
Occurrences	The estimated number of occurrences per year for the service type. The PM Projections program uses information from this field, in combination with the last completed date, to project future schedule requirements. You can use processing options to automatically calculate the estimated occurrences, based on one of the following: • One year of PM history • Two years of PM history • Inception-to-date PM history . . . . . *Form-specific information* . . . . . . If you use processing options to calculate the estimated occurrences, you cannot manually update this field.
Procedure	A list of valid codes for a specific user defined code list.
Model WO	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Hours	Number of hours at last maintenance.
Maintenance Priority	This field is used to indicate the relative priority that this maintenance has in relation to all other maintenance.
Downtime	This is the estimated duration of downtime for the piece of equipment in order to do the maintenance.
Business Unit	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table. . . . . . *Form-specific information* . . . . . . This is the planning group (business unit) normally associated with the service type.
PM Cat. Code 1	A User Defined Code (system 13, code P1) used to classify PM schedules.

Field	Explanation
Related Equipment	An identification code for an asset that you can enter in one of the following formats: 1 Asset number (a computer-assigned, 8-digit, numeric control number) 2 Unit number (a 12–character alphanumeric field) 3 Serial number (a 25-character alphanumeric field) Every asset has an asset number. You can use unit number and serial number to further identify assets as needed. If this is a data entry field, the first character you enter indicates whether you are entering the primary (default) format that is defined for your system, or one of the other two formats. A special character (such as / or *) in the first position of this field indicates which asset number format you are using. You assign special characters to asset number formats on the Fixed Assets system constants form. Note: This field appears only when reviewing a message on Message Log.

Related Tasks

Linking service types

For each piece of equipment in your Installed Base, you can link several related service types to a primary service type. When the primary service type is scheduled to be performed, the system checks to see if any linked service types are near the threshold percentage for maintenance. You define the threshold percentage, for example, 90 percent. If so, the applicable linked service types will be scheduled along with the primary service types. Linking service types reduces equipment downtime and the possibility of performing unnecessary maintenance.

For more information about linking service types, see *Linking Service Types* in the *Equipment/Plant Maintenance Guide.*

Processing Options for Equipment PM Schedule

Default

Enter a ’1’ to calculate the estimated occurrences based on one year of PM History, a ’2’ based on two years of PM History and a ’3’ based on inception-to-date PM History. Leave blank (default) to not calculate the occurrences.

1. Estimated Occurrences _____

Process

1. Enter the primary product for this version. Enter a ’1’ for Equipment and ’2’ for CSMS.

Select Product _____

Reviewing the Customer Reference Report

From the Daily Installed Base Processing menu (G1711), choose Customer Reference Report.

You can print and review a report that lists all of the equipment that you have installed at a customer's site or sites. In addition, the report provides mailing support for manufacturers in the event of product recalls or retrofit campaigns.

You use data selections such as state, postal code, model, and user defined codes to specify the information that you want to retrieve and print.

The system draws information for this report from the following tables:

- Asset Master (F1201)
- Equipment Master Extension (F1217)
- Address Book Master (F0101)

Service Contract Management

Service Contract Management

Service Contract Management provides you with a way to record and manage service contract agreements. It also allows you to configure multiple types of contracts to fit your company's needs.

A contract is a written agreement between a customer and a provider (contractor). The customer requests a service. The contractor bills the customer for the services provided under the contract. The agreement can be changed to include extra services. Service packages are used to define the services extended by your company to your customer as outlined in the contract.

The Service Contract Management module allows you to create and maintain multiple types of contracts including:

- Base warranty
- Extended warranty
- Maintenance agreement
- Blanket
- Coterminous
- Evergreen

You are also able to support the following pricing flexibility:

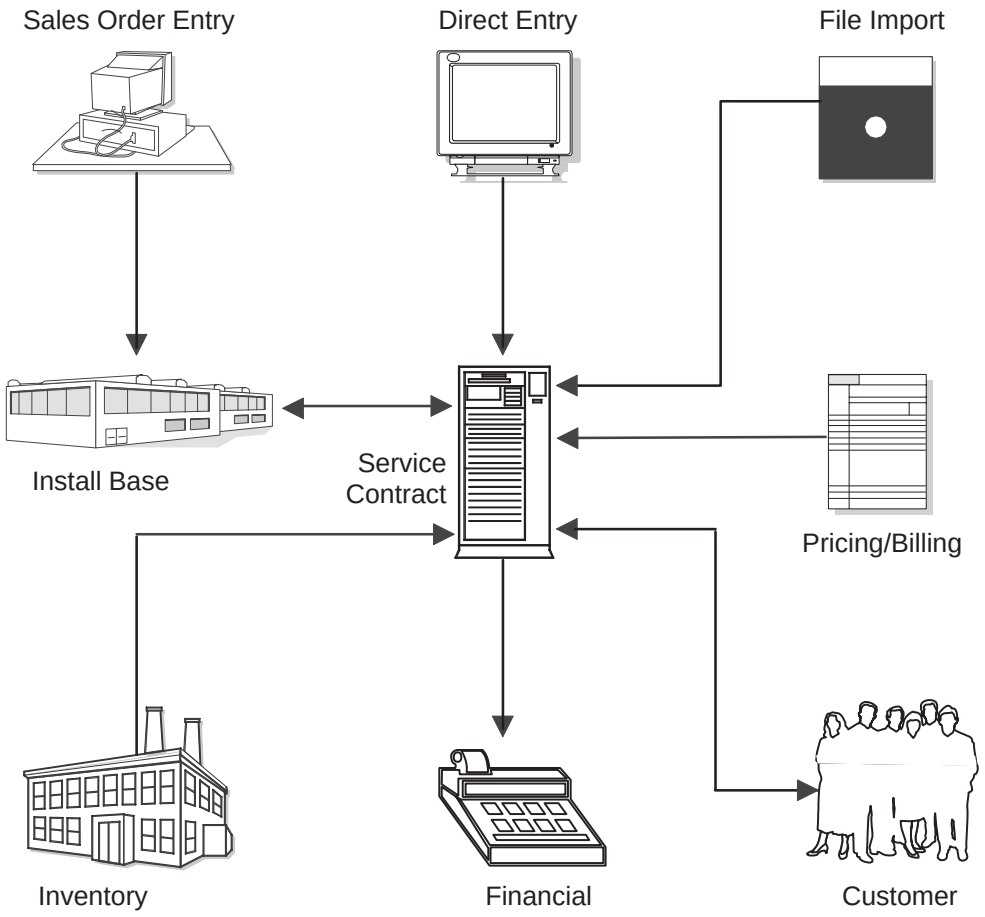
- Advanced pricing
- Discounts
- Price overrides

Service Contract Management includes the following:

- ❑ Setting up service contracts
- ❑ Managing service contracts
- ❑ Billing contracts
- ❑ Working with the amortization process
- ❑ Reviewing service contract reports

Service Contract Management Process

The following graphic shows the various interfaces to Service Contract Management:



Terms and Concepts

You should be familiar with the following terms and concepts related to Service Contract Management:

Contract	A written agreement between a customer and a provider (contractor).
Warranty	An assurance by the manufacturer or seller that the equipment will perform as specified for at least a specific period of time.
Base warranty	A warranty, associated with the equipment, typically included in the purchase price of the equipment.

Extended warranty	An optional warranty that can be purchased by the customer to cover the performance of the equipment beyond the terms of the base warranty.
Contract coverage	The days of the week and hours of the day. For example, the coverage term 5 X 8 refers to a contract that covers equipment five days a week, Monday through Friday, for eight hours each day.
Service type	The various services that you perform, for example, you can set up different codes to differentiate an on-site repair from an exchange.
Service package	The combination of service type and contract coverage that specifies the support to which the customer is contractually entitled.
Blanket contract	A contract that covers all items at a specified price. The pricing is usually by the contract, not by detail lines.
Coterminous contract	A contract that is canceled as soon as all of the detail lines have expired.
Evergreen contract	A contract that renews at a designated time, for example, annually. The contract is renewed at the adjusted price.
Preventive maintenance contract	A contract used when regularly-scheduled maintenance should be made for the equipment.
Amortization	A method of moving long-term revenue to short-term revenue, and then short-term revenue to recognized revenue. Long-term revenue is contracted for more than a 12 month period. Short-term revenue is contracted within a 12 month period. Recognized revenue is contracted from the beginning of the contract through the end of the amortization period.

Setting Up Service Contracts

Before you can use any of the features of Service Contract Management, you need to define the critical information that the system needs for processing. You also specify information that is used when you enter data throughout the system.

Setting up service contracts includes the following tasks:

- ❑ Setting up contracts constants
- ❑ Setting up customer service line types
- ❑ Setting up billing frequency
- ❑ Setting up tax rates
- ❑ Setting up daylight savings rules
- ❑ Entering contract coverage information
- ❑ Entering service type information
- ❑ Setting up cost type percentages
- ❑ Entering service package information
- ❑ Setting up entitlement dates
- ❑ Setting up contract duration ranges

You also need to set up user defined codes for service contract management. See *Setting Up User Defined Codes* for more information.

Setting Up Contracts Constants

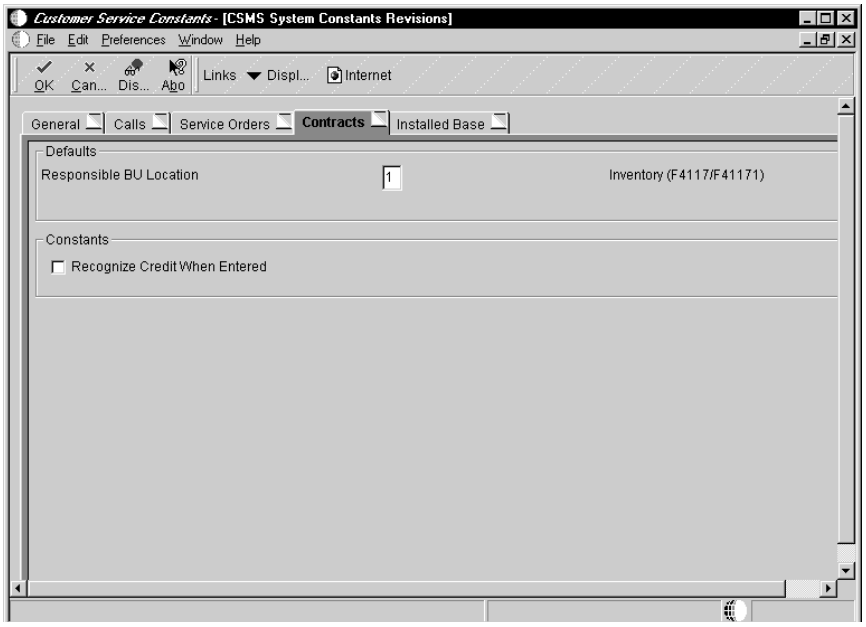
To define default information for the entire system, you set up system constants. Constants control the types of information that you track and the rules that the system uses to perform certain calculations.

To set up contracts constants

From the Customer Service Setup menu (G1740), choose Customer Service Constants.

On CSMS System Constants Revisions

1. Click the Contracts tab.



2. If applicable, make changes to the following field:

   - Responsible BU Location

   Service Contract Billing and Amortization use this value to locate the responsible Business Unit and to determine the Business Unit to which revenue will be booked.

3. To move the credit amount to recognized revenue, click the following option:

   - Recognize Credit When Entered

   If you turn this option off, the credit amount is recognized over the life of the contract.

Field	Explanation
Responsible BU Location	This field indicates from which program the system retrieves the Responsible Business Unit to use for billing contracts. Valid values are: 1 Inventory Item Number (F4117 and F41171) 2 Product Family/Model (F1790) 3 Equipment Number (F1217) 4 Customer Number (F0101) 5 CSMS Line Type (F1793) The default value is 1.

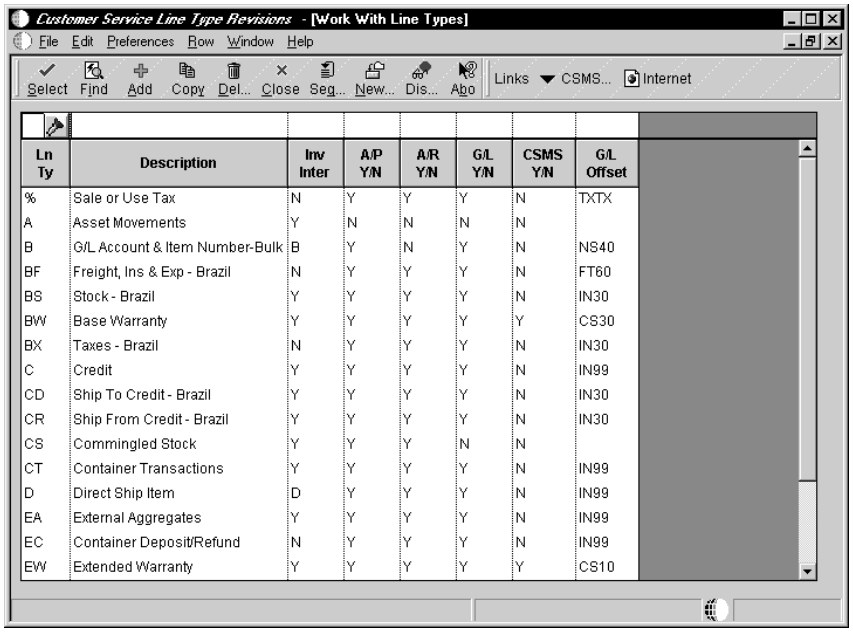
Setting Up Customer Service Line Types

Each contract you enter must contain details about the services included. For each service, you must enter a line of detail information that describes the contract. The system processes the detail line based on a line type. The line type for a detail line also determines the cycle through which the system processes the line.

▶ To set up customer service line types

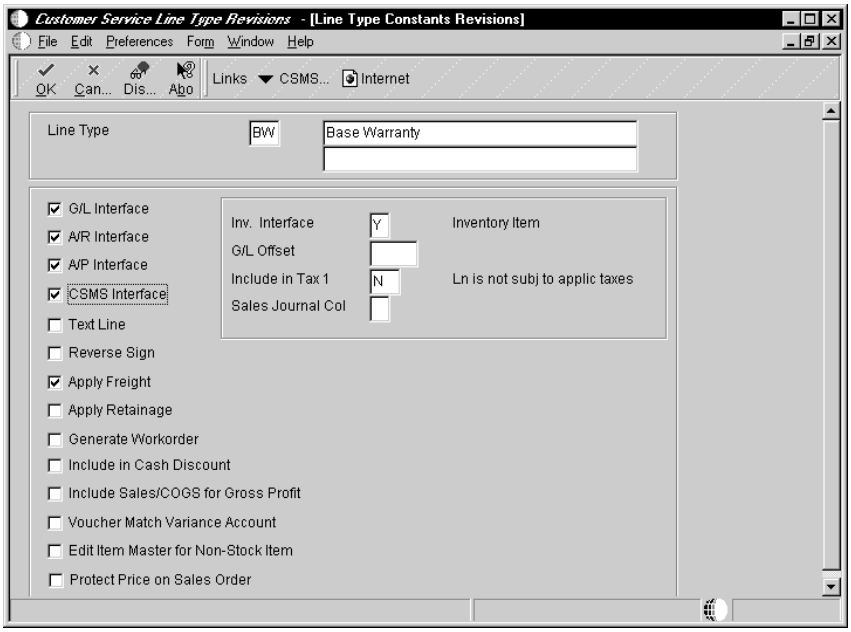
From the Service Contract Setup menu (G1744), choose Customer Service Line Type Revisions.

On Work With Line Types



Ln Ty	Description	Inv Inter	A/P Y/N	A/R Y/N	G/L Y/N	CSMS Y/N	G/L Offset
%	Sale or Use Tax	N	Y	Y	Y	N	TXTX
A	Asset Movements	Y	N	N	N	N	
B	G/L Account & Item Number-Bulk	B	Y	N	Y	N	NS40
BF	Freight, Ins & Exp - Brazil	N	Y	Y	Y	N	FT60
BS	Stock - Brazil	Y	Y	Y	Y	N	IN30
BW	Base Warranty	Y	Y	Y	Y	Y	CS30
BX	Taxes - Brazil	N	Y	Y	Y	N	IN30
C	Credit	Y	Y	Y	Y	N	IN99
CD	Ship To Credit - Brazil	Y	Y	Y	Y	N	IN30
CR	Ship From Credit - Brazil	Y	Y	Y	Y	N	IN30
CS	Commingled Stock	Y	Y	Y	N	N	
CT	Container Transactions	Y	Y	Y	Y	N	IN99
D	Direct Ship Item	D	Y	Y	Y	N	IN99
EA	External Aggregates	Y	Y	Y	Y	N	IN99
EC	Container Deposit/Refund	N	Y	Y	Y	N	IN99
EW	Extended Warranty	Y	Y	Y	Y	Y	CS10

1. Click Add.



2. On Line Type Constants Revisions, complete the following fields:

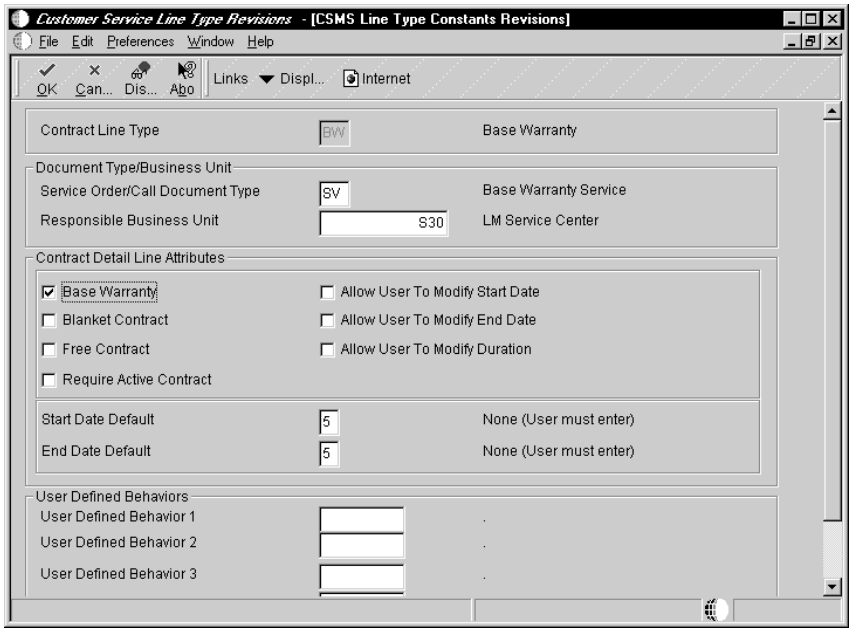
   - Line Type
   - Description – Line Type
   - G/L Offset

   The G/L Offset field is required, but the value entered is not used by the CSMS system.

3. To indicate that this line type interfaces with the CSMS system, complete the following field and click OK:

   - CSMS Interface

4. Choose CSMS Attributes from the Form menu.



5. On CSMS Line Type Constants Revisions, if a call or service order is entitled by a contract, then this document type allows the accounting of calls or service orders to vary by the type of contract covering the service:
   - Service Order/Call Document Type
6. If you have set up the system constants for Contracts to retrieve the Responsible Business Unit based on Line Type, then complete the following field:
   - Responsible Business Unit
7. Complete the following fields:
   - Base Warranty
   - Blanket Contract
   - Free Contract
   - Require Active Contract
   - Allow Modify Start Date
   - Allow Modify End Date
   - Allow Modify Duration
   - Start Date Default
   - End Date Default

Field	Explanation
Line Type	A code that controls how the system processes lines on a transaction. It controls the systems with which the transaction interfaces, such as General Ledger, Job Cost, Accounts Payable, Accounts Receivable, and Inventory Management. It also specifies the conditions under which a line prints on reports and is included in calculations. Codes include the following: S Stock item J Job cost N Nonstock item F Freight T Text information M Miscellaneous charges and credits W Work order
Description – Line Type	The first 30 characters of the description that identifies each defined line type. The system uses this description as the default description for all non-inventory line items you create through order entry.
G/L Offset	A user defined code (41/9) that identifies the G/L offset that system uses when it searches for the account to which it posts the transaction. If you do not want to specify a class code, you can enter **** (four asterisks) in this field. You can use automatic accounting instructions (AAIs) to predefine classes of automatic offset accounts for the Inventory, Procurement, and Sales Order Management systems. You might assign G/L class codes as follows: IN20 Direct Ship Orders IN60 Transfer Orders IN80 Stock Sales The system can generate accounting entries based upon a single transaction. For example, a single sale of a stock item can trigger the generation of accounting entries similar to the following: Sales–Stock (Debit) xxxxx.xx A/R Stock Sales (Credit) xxxxx.xx Posting Category: IN80 Stock Inventory (Debit) xxxxx.xx Stock COGS (Credit) xxxxx.xx The system uses the class code and the document type to find the AAI.
CSMS Interface	A code that indicates whether this order line appears on the second document in a series of four documents that relate to this order. For example, it might be necessary to include receiving information in a purchase order that provides instructions about the desired disposition of goods. Although this information is vital to the proper handling of the order, it should not appear on the purchase order that is delivered to the supplier.

Field	Explanation
Service Order/Call Document Type	A user defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. J.D. Edwards has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.) The following document types are defined by J.D. Edwards and should not be changed: P Accounts Payable documents R Accounts Receivable documents T Payroll documents I Inventory documents O Purchase Order Processing documents J General Accounting/Joint Interest Billing documents S Sales Order Processing documents
Responsible Business Unit	Identifies a separate entity within a business for which you wish to track costs, for example, a warehouse location, job, project, work center, or branch/plant. The business unit field is alphanumeric. You can assign a business unit to a voucher, invoice, fixed asset, and so forth, for responsibility reporting. The system provides reports of open A/P and A/R by business unit, for example, to track equipment by responsible department. Business Unit Security can prevent you from inquiring on business units for which you have no authority.
Base Warranty	The Yes or No Entry field is a common single character entry field for simple yes or no responses on prompt screens.
Blanket Contract	The Yes or No Entry field is a common single character entry field for simple yes or no responses on prompt screens.
Free Contract	Use this line type flag used to indicate that this is a free contract.
Require Active Contract	Use this line type flag used to indicate that the piece of equipment is required to have an active contract on it before a new contract can be added.
Allow Modify Start Date	Use this line type flag used to indicate that the contract detail line's Start Date can be modified once it has been entered.
Allow Modify End Date	Use this line type flag used to indicate that the contract detail line's End Date can be modified once it has been entered.
Allow Modify Duration	Use this line type flag used to indicate that the contract detail line's Billable and Non-Billable Duration can be modified once it has been entered.

Field	Explanation
Start Date Default	A hard-coded, user defined code (17/L1) that indicates from where the system retrieves the default value for the Contract Line Start Date field. Valid values are: 1 Last contracted end date (for equipment) + 1 The system finds the newest contract for this piece of equipment, adds one day to the detail end date to calculate the new start date. If the system does not find a contract for the piece of equipment (serial, unit) number, the system produces an error if the user cannot modify the start date. 2 Contract header start date The system enters the contract header start date as the default value. 3 Base Warranty Start Date The system enters the detail start date from the first active base warranty (line type) contract for this equipment as the default. If the system does not find an active base warranty contract for the piece of equipment (serial, unit) number, the system produces an error if the user cannot modify the start date. 4 System date The system enters the system date as the default value. 5 None The system does not enter a default value. The user is required to enter the detail start date.
End Date Default	A hard-coded, user defined code (17/L2) that indicates from where the system retrieves the default value for the Contract Line End Date field. Valid values are: 1 Contract Line Start Date field value + total duration (billable + nonbillable duration) Add the value from the Contract Line Start Date field to billable and nonbillable duration. 2 Contract header end date The system enters the contract header end date as the default value. 3 Base Warranty End Date The system enters the detail end date from the most recent active base warranty (line type) contract for this equipment as the default. If the system does not find an active base warranty contract for the piece of equipment (serial, unit) number, the system produces an error if the user cannot modify the end date. 4 System date The system enters the system date as the default value. 5 None The system does not enter a default value. The user is required to enter the detail end date.

See Also

- *Setting Up Order Line Types* in the *Procurement Guide* for more information about line types

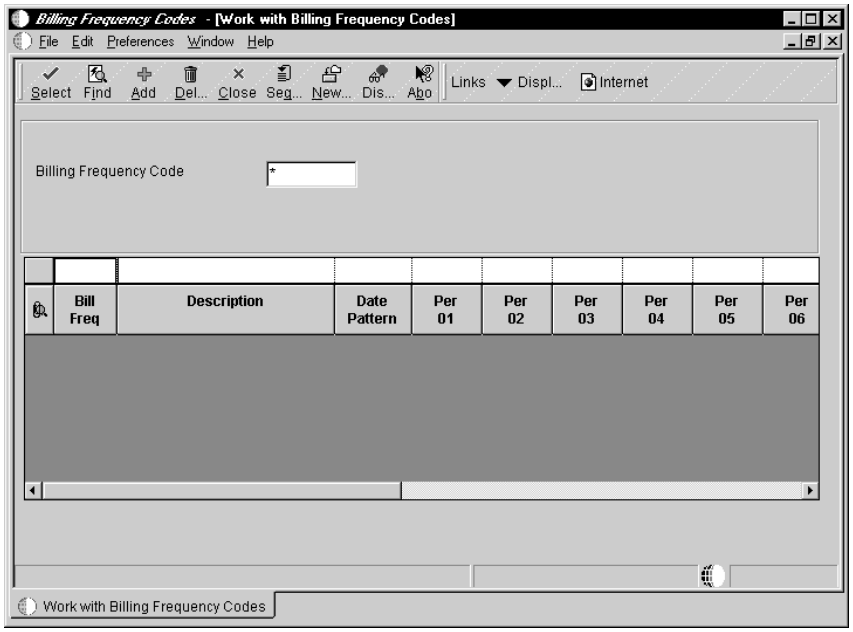
Setting Up Billing Frequency

The Service Contract Management module integrates with the Property Management system to set up billing frequencies. The system allows you to define the periods that you want to bill at a particular billing frequency.

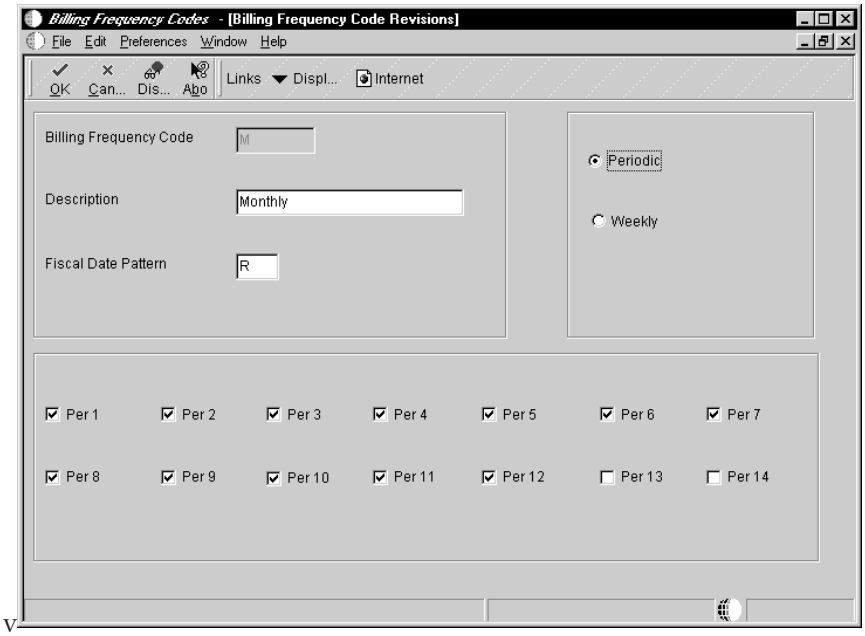
▶ To set up billing frequency

From the Service Contract Setup menu (G1744), choose Billing Frequency Codes.

On Work with Billing Frequency Codes



1. Click Add.



2. On Billing Frequency Code Revisions, enter the code you are using to define your billing cycle in the following field:
   - Billing Frequency Code
3. Enter a description of the billing cycle in the following field:
   - Description
4. Enter the code to define the date pattern in the following field:
   - Fiscal Date Pattern
5. To define a periodic pattern, choose the following option:
   - Periodic

   Contract Entry does not allow 52-period billing functionality.
6. You can choose periods 1 through 14 as applicable.

   When you choose periodic billing frequency, you can choose the periods in which you want to bill the customer.

Field	Explanation
Billing Frequency Code	A user defined code (system 15, type BC) that indicates the billing cycle.
Fiscal Date Pattern	A code that identifies date patterns. You can use one of 15 codes. You must set up special codes (letters A through N) for 4-4-5, 13 period accounting, or any other date pattern unique to your environment. An R, the default, identifies a regular calendar pattern.

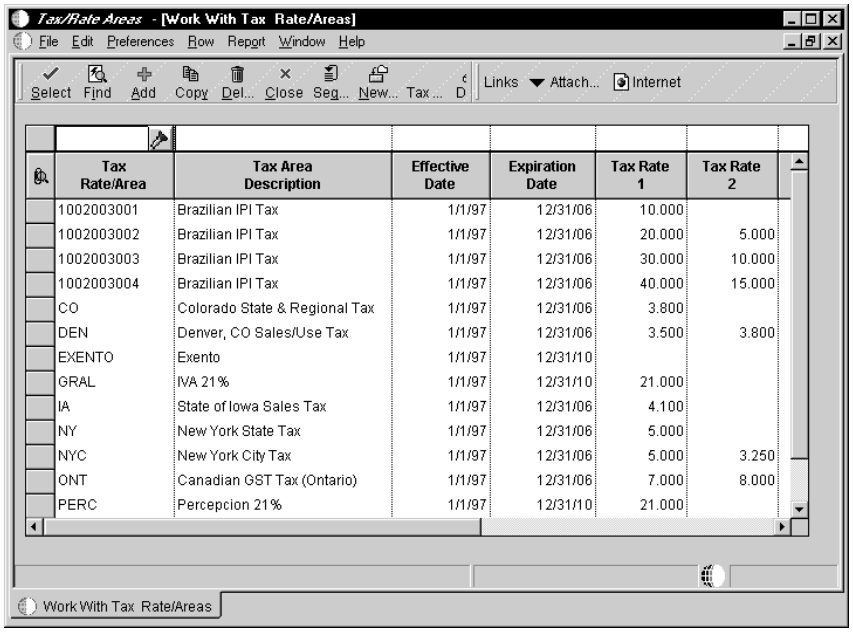
Setting Up Tax Rates

You set up tax rate areas to accurately calculate taxes for your customers based on their geographic locations. When you set up a tax rate area, you can apply the tax code to your customer's master record. You can run a report to review all of the tax areas that have been set up and applied to a customer's record.

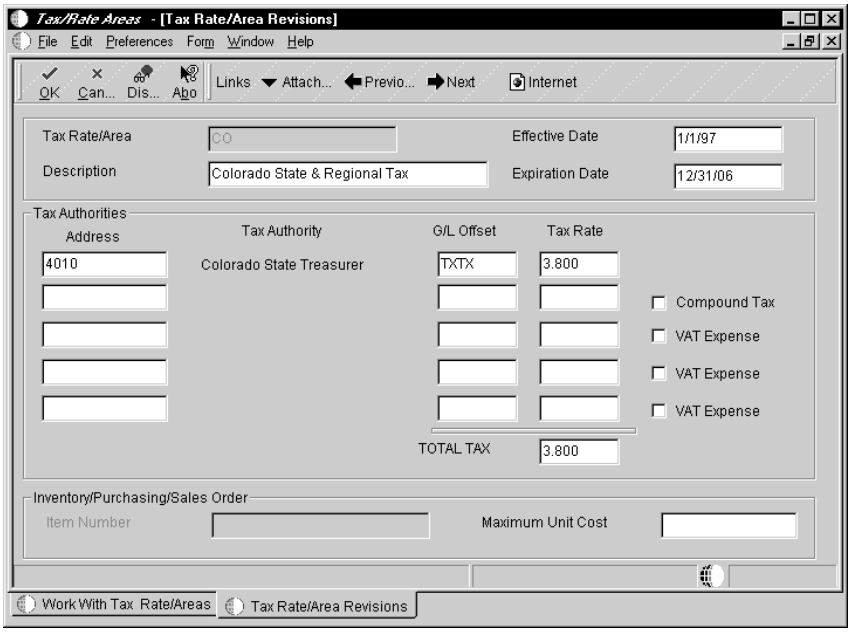
▶ To set up tax rates

From the Service Contract Setup menu (G1744), choose Tax/Rate Areas.

On Work With Tax Rate/Areas



1. Click Add.



2. On Tax Rate/Area Revisions, enter the code to calculate taxes for your geographic area in the following field:
   - Tax Rate/Area
3. Enter the description for the tax area in the following field:
   - Description
4. Enter effective dates in the following fields:
   - Effective Date
   - Expiration Date
5. Enter the address number of the tax authority for your area in the following field:
   - Address

   You can enter up to five tax authorities.
6. To indicate the tax account for general ledger entries, complete the following field:
   - G/L Offset
7. Enter the percentage for the tax rate in your area in the following field:
   - Tax Rate
8. For Canadian companies, choose the following option to indicate tax on a tax:
   - Compound Tax
9. For Canadian companies, click the following option to indicate that a tax is not recoverable:

- VAT Expense

10. For inventory and sales order information, complete the following fields:
    - Item Number
    - Maximum Unit Cost
11. To run the tax report, choose Tax Area Report from the Report menu.
12. On Work with Batch Versions, choose the version that you want to print and click Select.

Field	Explanation
Tax Rate/Area	A code that identifies a tax or geographic area that has common tax rates and tax distribution. The tax rate/area must be defined to include the tax authorities (for example, state, county, city, rapid transit district, or province), and their rates. To be valid, a code must be set up in the Tax Rate/Area table (F4008). Typically, U.S. sales and use taxes require multiple tax authorities per tax rate/area, whereas value-added tax (VAT) requires only one simple rate. The system uses this code to properly calculate the tax amount.
Description	Text that names or describes the tax rate/area. You can use this 30-character field, for example, to identify a zip code for a tax area or to partially describe the geographic area.
Effective Date	The date on which a transaction, text message, contract, obligation, or preference becomes effective.
Expiration Date	The date that this item ceases to be in effect.
Address	The address book number of a tax authority that has jurisdiction in the tax area. This is an authority to whom you pay and report sales, use, or VAT taxes. Examples include states, counties, cities, transportation districts, provinces, and so on. You can have up to five tax authorities for a single tax area. . . . . . *Form-specific information* . . . . . . For Canada, the GST tax authority must be on the first line. PST tax authorities can be on lines 2 through 5. If a GST input credit is applicable, the authorities on lines 3 through 5 can identify the GST percentage not eligible for input credits.

Field	Explanation
G/L Offset	A code that indicates how to locate the tax account for general ledger entries. This field points to automatic accounting instructions (AAIs) that, in turn, point to the tax account. Examples are: PTxxxx — for A/P (VAT only) RTxxxx — for A/R (VAT only) GTxxxx — for G/L (VAT only) 4320 — for Sales Orders 4400 and 4410 — for Purchase Orders Only PTxxxx, RTxxxx, and GTxxxx are valid for VAT and Canadian GST. For sales taxes, the Accounts Payable and Accounts Receivable systems ignore the values in this field. For the General Accounting system, VAT journal entries require values in this field. For sales taxes, the Sales Order Management and Purchase Order Management systems require values in this field. For use and Canadian PST, this field is ignored. At this time, however, the system only uses the first G/L offset.
Tax Rate	A number that identifies the tax rate for a tax authority that has jurisdiction in the tax area. Tax rates must be expressed as a percentage and not as the decimal equivalent. For example, type 7 percent as 7. The value appears as 7.000.
Compound Tax	A code in WorldSoftware, or an option in OneWorld software, that indicates whether the tax rate for the tax authority is calculated pre-GST (taxable amount plus any GST for a previous tax authority) or calculated as a tax on a tax. Valid values for WorldSoftware are: Y Tax on a tax. Indicates that the tax is calculated after GST has been added to the product value. The taxable amount plus any GST calculated for a previous tax authority is added to calculate the basis for this authority. N Not tax on a tax. Indicates that the tax is calculated against the value of the product. The taxable amount is the basis for this authority. NOTE: This field is used in Canada. It is valid only with tax explanation codes that begin with the letters B and C. For OneWorld software: • If this option is turned on, it indicates tax on a tax. • If this option is turned off, it indicates no tax on a tax. . . . . . *Form-specific information* . . . . . . This code is available only for the second tax authority (line 2 in the list on this form) and must identify a non-GST tax authority.

Field	Explanation
VAT Expense	A code in WorldSoftware, or an option in OneWorld software, that identifies the percentage of the VAT (GST) amount that is not eligible for input credits. Valid values for WorldSoftware are: R Not recoverable. The tax is an expense and is not a receivable. Blank Recoverable. The tax is a receivable. This is the default. NOTE: This field is used in Canada. It is valid only with tax explanation codes that begin with the letters C, B, and V. For OneWorld software: • If this option is turned on, tax is not recoverable. • If this option is turned off (default), tax is recoverable. . . . . . *Form-specific information* . . . . . . This code is available only for the third, fourth, fifth tax authorities (lines 3 through 5).
Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Maximum Unit Cost	Number that identifies the maximum amount that an item can be taxed. If the unit cost of an item is more than the amount you specify in this field, the maximum unit cost becomes taxable. NOTE: Only sales order and purchase order processing use this field. Tax laws in Tennessee (in the U.S.) have this requirement.

Processing Options for Tax Rates Options

```
Item#/MaxCost


      Enter 1 to show these fields OR 0                    _____________
      to hide them:

Validation


      Enter 1 to validate item numbers                     _____________
      OR 0 to not validate:
```

Setting Up Daylight Savings Rules

Set up daylight savings rules to define when to convert to the daylight savings rule. You can use the following criteria to define this:

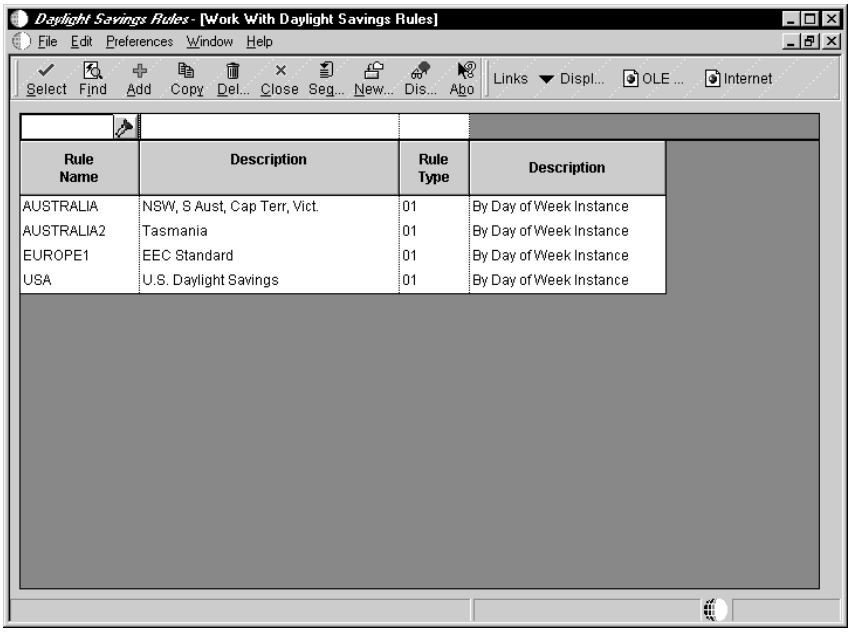
- Month
- Day of the week
- Hour

Calculations are based on the daylight savings rule setup used in conjunction with the time zone.

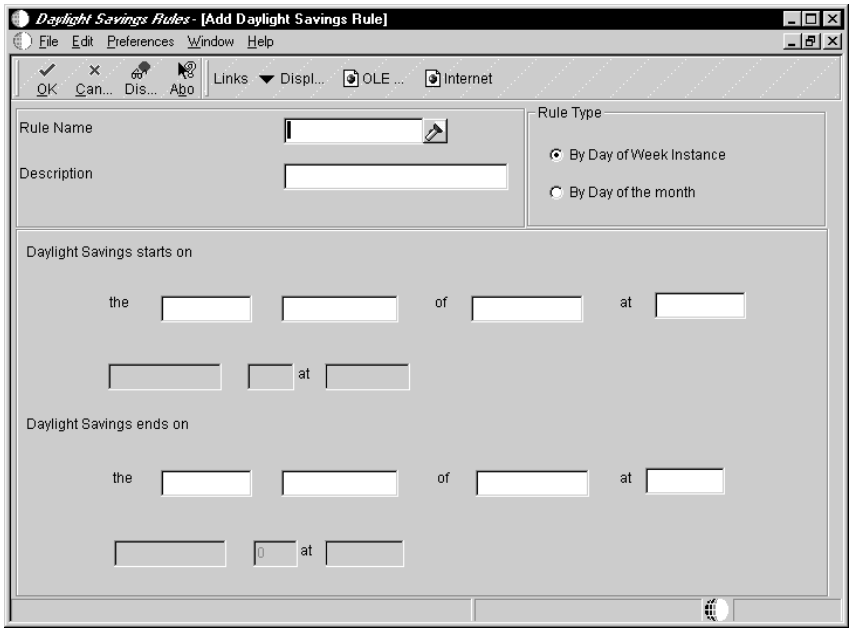
▶ To set up daylight savings rules

From the Service Contract Setup menu (G1744), choose Daylight Savings Rules.

On Work With Daylight Savings Rules



1. Click Add.



2. On Add Daylight Savings Rule, complete the following fields:
   - Rule Name
   - Description
3. Click one of the following options under the Rule Type heading:
   - By Day of Week Instance
   - By Day of the month
4. Define the start and end dates of your daylight savings rule:
   - Daylight Savings starts on
   - Daylight Savings ends on

Field	Explanation
Rule Name	Unique name identifying a daylight savings rule. Daylight savings rules to adjust time for a geographic and political locale.
Description	A description, remark, name, or address.
By Day of Week Instance	A code that indicates the method that is used to determine a daylight savings rule. By Day of Week Instance indicates that daylight savings will start and stop on a certain day of the week for a certain month, such as the first Sunday of April to the first Sunday of October By Day and Month indicates that daylight savings will start and stop on a certain day of a certain month, such as April 3 to October 10

Field	Explanation
By Day of the month	A code that indicates the method that is used to determine a daylight savings rule. By Day of Week Instance indicates that daylight savings will start and stop on a certain day of the week for a certain month, such as the first Sunday of April to the first Sunday of October By Day and Month indicates that daylight savings will start and stop on a certain day of a certain month, such as April 3 to October 10

Entering Contract Coverage Information

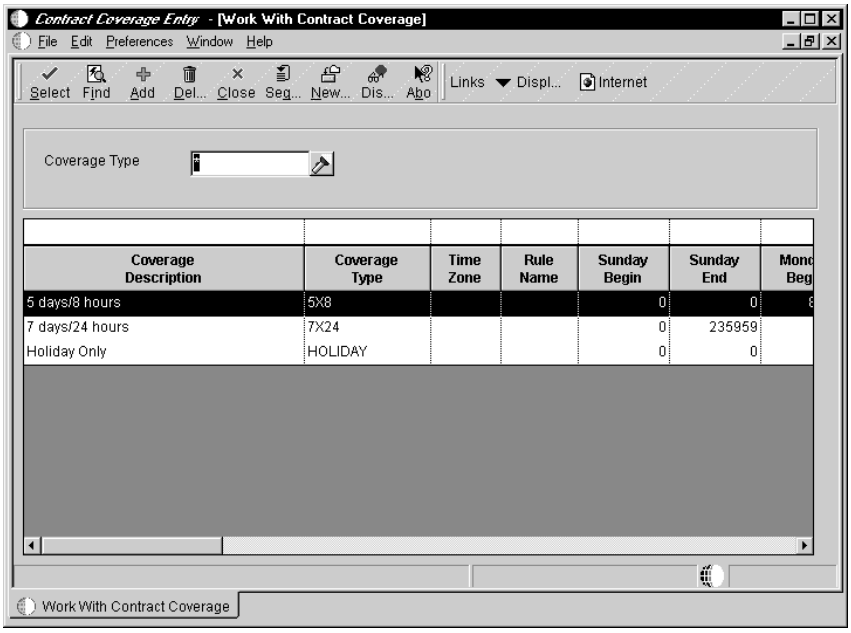
Contract coverage information allows you to define the days of the week and hours of each day. For example, the coverage term 5 x 8 refers to a contract that covers equipment five days a week, Monday through Friday, for eight hours each day.

You can use contract coverage information in conjunction with the Work Day Calendar to create contracts that show the days that the contract covers. For example, you might set up contracts that conver only Monday through Friday and do not cover weekends or holidays.

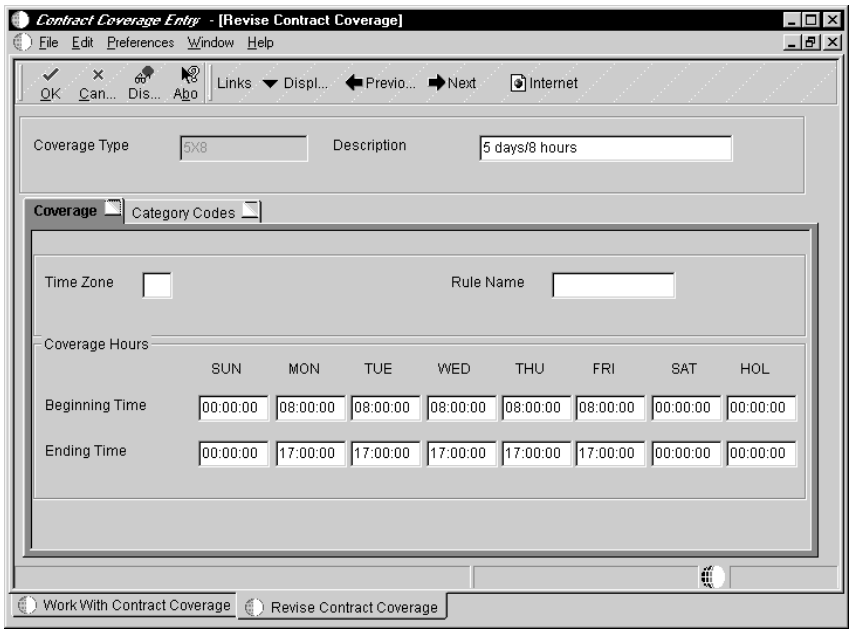
▶ To enter contract coverage information

From the Service Contract Setup menu (G1744), choose Contract Coverage Entry.

On Work With Contract Coverage



1. Click Add.



2. On Revise Contract Coverage, complete the following fields:
   - Coverage Type
   - Description
   - Time Zone
   - Rule Name

   If you leave the Time Zone field blank, the system uses the customer's time zone from their address book record to calculate the commitment date and time for the contract.

3. By weekday, enter the hours that the coverage includes in the following fields:
   - Beginning Time
   - Ending Time

Field	Explanation
Coverage Type	This defines the types of contract coverage.
Description	A user defined name or remark.
Time Zone	Choose the time zone for which you want to view the date and time.
Rule Name	Unique name identifying a daylight savings rule. Daylight savings rules to adjust time for a geographic and political locale.

Processing Options for Contract Coverage Entry

```
Defaults

      Default Coverage Start Time Monday                _____________
      through Friday
      Default Coverage End Time Monday                  _____________
      through Friday
      Default Coverage Start Time                       _____________
      Saturday, Sunday, and Holidays
      Default Coverage End Time                         _____________
      Saturday, Sunday, and Holidays
      Time Zone                                         _____________
```

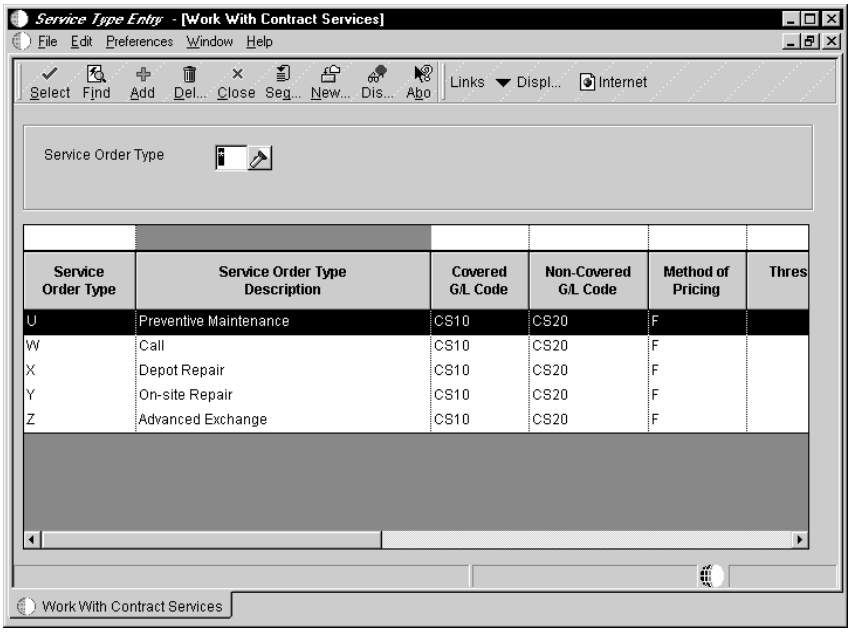
Entering Service Type Information

To charge customers for your services, you need to set up service types. Service types allow you to define the various services that you perform, for example, you can set up different codes to differentiate an on-site repair from an exchange. You can choose a default pricing method (T&M or flat rate).

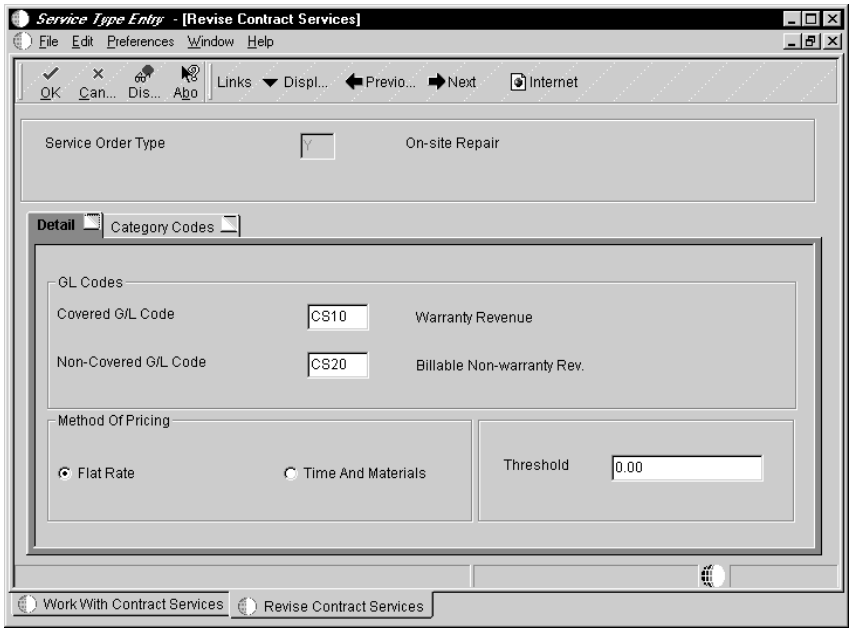
▶ To enter service type information

From the Service Contract Setup menu (G1744), choose Service Type Entry.

On Work With Contract Services



1. Click Add.



2. On Revise Contract Services, complete the following fields:

   - Service Order Type
   - Covered G/L Code
   - Non–Covered G/L Code

   The Covered G/L Code and Non-Covered G/L Code fields are used by Service Order Management and Call Management for recording billing or costs for this type of service. This allows your accounting to direct covered or non-covered costs and revenue to different accounts.

3. Choose one of the following pricing methods:

   - Flat Rate
   - Method of Pricing

4. To calculate the commit time covered by the contract to respond to your customer, enter an hourly amount for your commit time in the following field:

   - Threshold

   For example, your covered day is set up from eight until five, and you set up your threshold at two hours. If you receive a call at four, the call is received within the two hour threshold of the end of the covered day and completion of the call for that day is not required, since your work day ends in an hour. The commitment time then starts to calculate the response time at the beginning of the next covered day.

Field	Explanation
Service Order Type	A user defined code (00/TY) that indicates the type classification of a work order or engineering change order. You can use work order type as a selection criteria for work order approvals.
Covered G/L Code	A user defined code (41/9) that identifies the G/L Offset to use when the system is searching for the account to which it will post the covered portion (by warranty or contract) of the accounting transaction. If you do not want to specify a G/L Offset, you can enter four asterisks (****) in this field or you can leave this field blank. If you leave this field blank, the system uses the G/L Offset from Inventory.
Non–Covered G/L Code	A user defined code (41/9) that identifies the G/L Offset to use when the system is searching for the account to which it will post the non-covered portion of the accounting transaction. If you do not want to specify a G/L Offset, you can enter **** (four asterisks) in this field or you can leave this field blank. If you leave the field blank, the system uses the G/L Offset from Inventory.
Flat Rate	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.

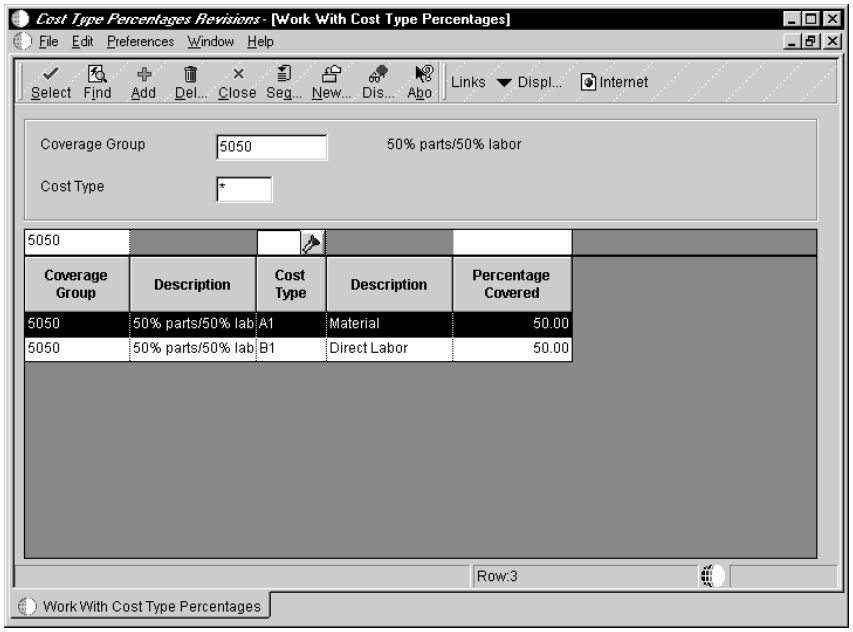
Setting Up Cost Type Percentages

You set up the cost type percentage table to define the percent covered for each cost type within a coverage group. This entire coverage group can then be attached to a service package. It is used when billing and costing is done for service orders and calls that are entitled to service under a contract. When you perform billing and costing for service orders and calls, the system retrieves the percentage covered from this table based on the coverage group covering the service and the type of item (parts, labor, freight, etc.) that you are billing or costing. If a coverage group is not specified for a service package but the service is covered under a contract, the system treats the call or service order as 100% covered.

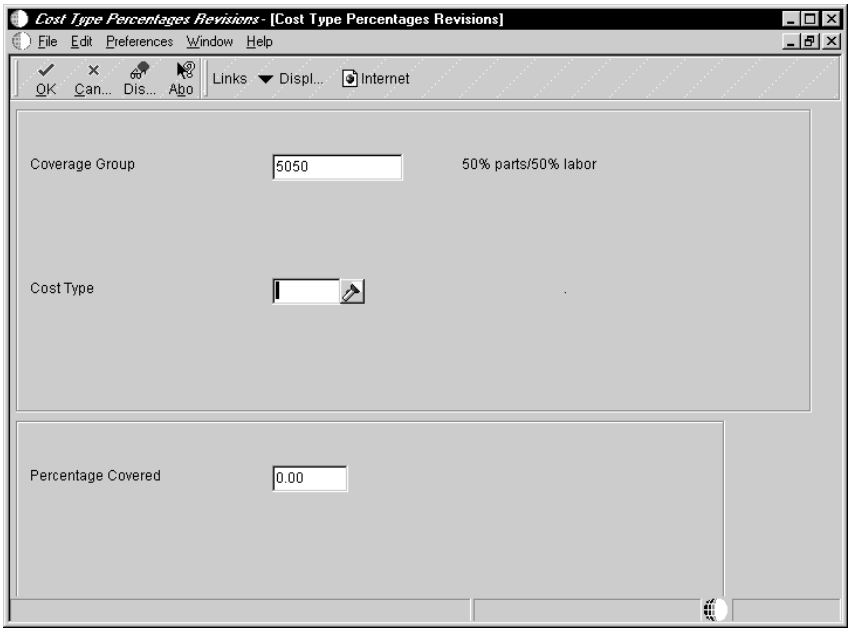
To set up cost type percentages

From the Service Contract Setup menu (G1744), choose Cost Type Percentages Revisions.

On Work With Cost Type Percentages



1. Click Add.



2. On Cost Type Percentages Revisions, complete the following fields:
   - Coverage Group
   - Cost Type

     The service order connects this to the coverage group.

   - Percentage Covered

Field	Explanation
Coverage Group	A user-defined code that specifies the Coverage Group. The Coverage Group consists of unlimited cost codes and the percentage covered for each cost code.
Cost Type	A code that designates each element of cost for an item. An example of the coding structure is as follows: A1 Purchased raw material B1 Direct labor routing rollup B2 Setup labor routing rollup C1 Variable burden routing rollup C2 Fixed burden routing rollup Dx Usually used for outside operation routing rollup Xx Usually used for extra add-ons, such as electricity and water The optional add-on computations usually operate with the type Xx extra add-ons. This cost structure allows you to use an unlimited number of cost components to calculate alternative cost rollups. The system then associates these cost components with one of six user defined summary cost buckets.
Percentage Covered	The percentage covered under warranty or contract. This is used to calculate the amount to bill or the amount to cost for the line item being processed on the service order or call.

Entering Service Package Information

You enter service package information to define the services extended by your company to your customer as outlined in the contract. Within the service package, you can specify the following:

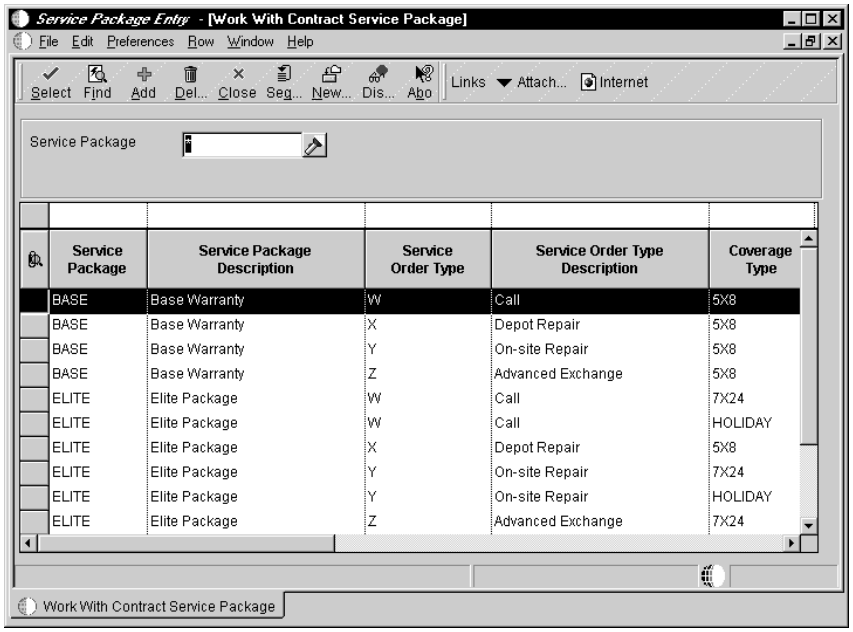
- Type of service, for example, on-site repair, exchange, repair and return, support, and installation of the product
- Contract coverage support, for example, eight hours a day Monday through Friday or 24 hours a day seven days a week (to indicate a 24-hour day, enter 00:00:00 through 23:59:59)
- Turnaround repair times

For each service package you set up, you can have multiple coverage packages and multiple service type packages.

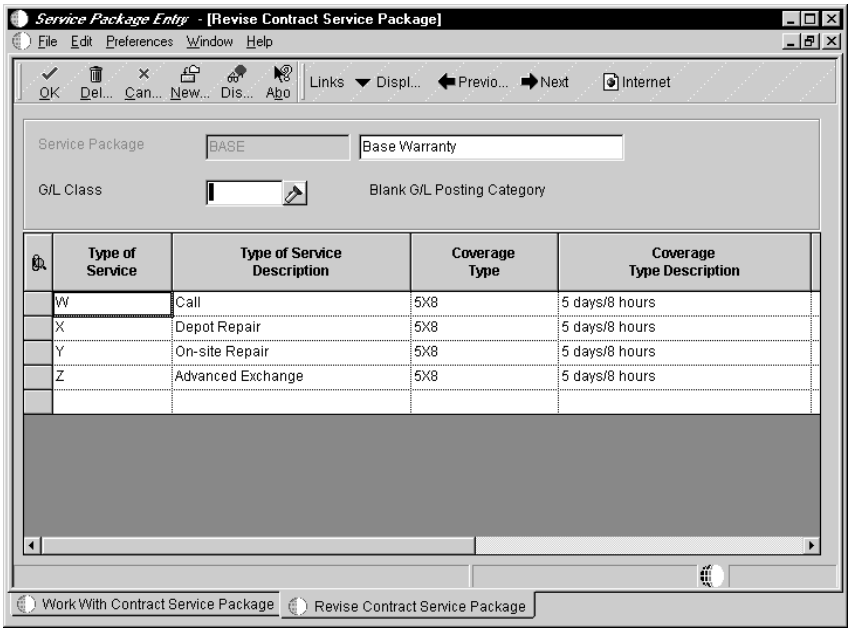
▶ To enter service package information

From the Service Contract Setup menu (G1744), choose Service Package Entry.

On Work With Contract Service Package



1. Click Add.



2. On Revise Contract Service Package, complete the following fields:
   - Service Package
   - Description
   - Type of Service
   - Type of Service Description
   - Coverage Type
   - Coverage Type Description
   - Response Time

   The system adds the value in the Response Time field to the start time and date to create the commit time. The commit time is the time, displayed in hours and minutes, that you are required to respond to the customer.

   The commit date and time overrides any date and time the Call Management system may have calculated.

3. To define coverage at greater than 0% but less than 100%, complete the following field:
   - Coverage Group
4. To base the G/L class on the service package, complete the following field:
   - G/L Class¿

   If this field is left blank, the system uses the G/L code from the Inventory Item Number when billing contracts. This is only used when billing contracts.

Field	Explanation
Description	A user defined name or remark.
Type of Service	A user defined name or remark.
Coverage Type	This defines the types of contract coverage.
Response Time	The guaranteed time in which service will be completed when a provider logs a Help Desk call or service work order as provided by a service contract. This unit of time is directly related to a Service Type in the Service Contracts Services table (F1725). The response time is entered in hours.
Coverage Group	A user-defined code that specifies the Coverage Group. The Coverage Group consists of unlimited cost codes and the percentage covered for each cost code.
G/L Class	A user defined code (41/9) that identifies the G/L offset that system uses when it searches for the account to which it posts the transaction. If you do not want to specify a class code, you can enter **** (four asterisks) in this field. You can use automatic accounting instructions (AAIs) to predefine classes of automatic offset accounts for the Inventory, Procurement, and Sales Order Management systems. You might assign G/L class codes as follows: IN20 Direct Ship Orders IN60 Transfer Orders IN80 Stock Sales The system can generate accounting entries based upon a single transaction. For example, a single sale of a stock item can trigger the generation of accounting entries similar to the following: Sales–Stock (Debit) xxxxx.xx A/R Stock Sales (Credit) xxxxx.xx Posting Category: IN80 Stock Inventory (Debit) xxxxx.xx Stock COGS (Credit) xxxxx.xx The system uses the class code and the document type to find the AAI.

Setting Up Entitlement Dates

You set up entitlement dates to specify the date to begin verifying for each transaction if something is entitled. Any transactions prior to that date are assumed to be entitled.

You can enter and update entitlement dates for a combination of the following:

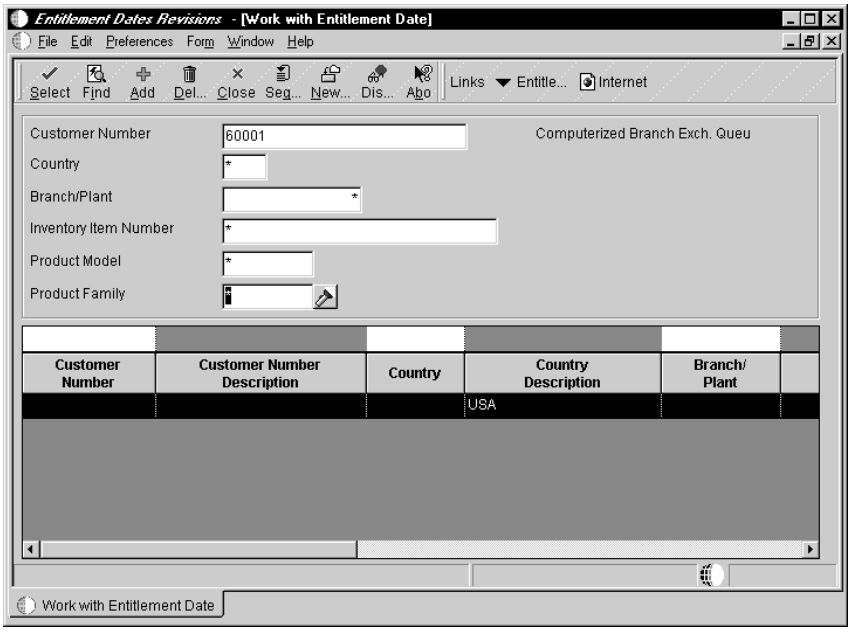
- Product family
- Product model
- Inventory item number

- Branch/Plant
- Customer number
- Country

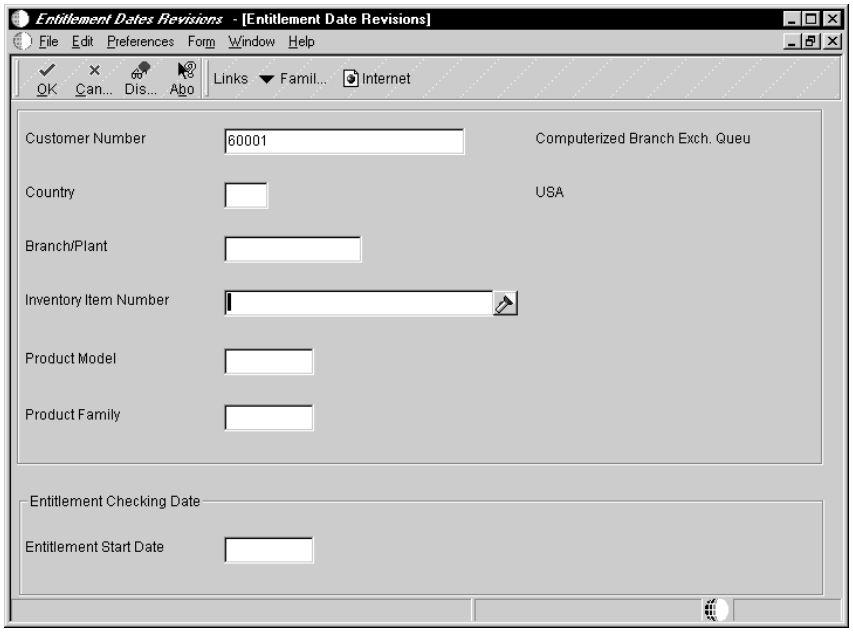
To set up entitlement dates

From the Service Contract Setup menu (G1744), choose Entitlement Date Revisions.

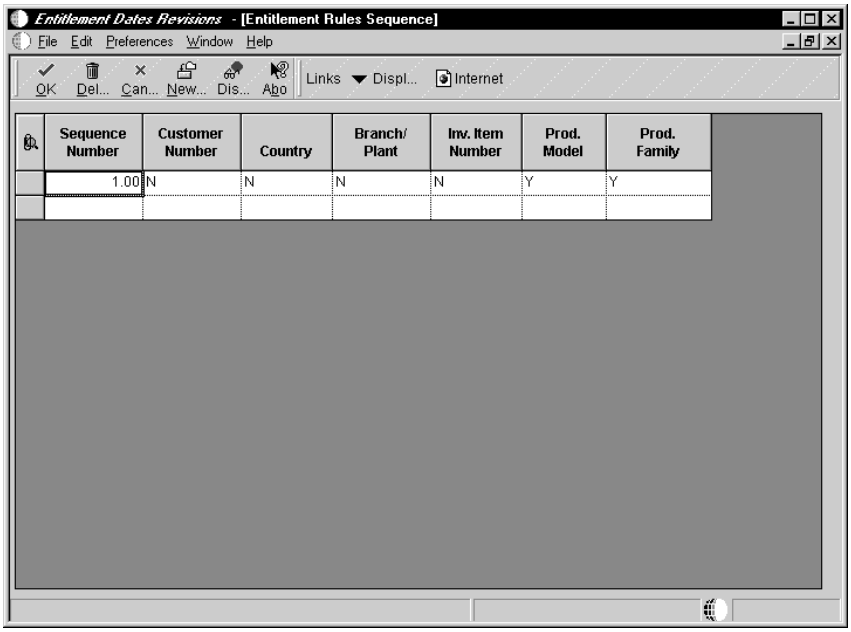
On Work With Entitlement Date



1. Click Add.



2. On Entitlement Date Revisions, complete the following fields:
   - Customer Number
   - Country
   - Branch/Plant
   - Inventory Item Number
   - Product Model
   - Product Family
   - Entitlement Start Date
3. The system searches for a date based on rules you specify. To review or revise these rules, from Work With Entitlement Date, choose Entitlement Rules from the Form menu.



4. On Entitlement Rules Sequence, define the order that the system will use to search for a date. The system uses a hierarchical search method, from most specific to most general. To include or exclude fields in the hierarchical search, complete the following fields with a Y or N:

   - Sequence Number
   - Customer Number
   - Country
   - Branch/ Plant
   - Inv. Item Number
   - Prod Model
   - Prod Family

Field	Explanation
Customer Number	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Country	A user defined code (00/CN) that identifies a country. The country code has no effect on currency conversion. The Address Book system uses the country code for data selection and address formatting.

Field	Explanation
Branch/Plant	A code that represents a high-level business unit. Use this code to refer to a branch or plant that might have departments or jobs, which represent lower-level business units, subordinate to it. For example: • Branch/Plant (MMCU) • Dept A (MCU) • Dept B (MCU) • Job 123 (MCU) Business unit security is based on the higher-level business unit.
Inventory Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Entitlement Start Date	The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to appear. The system uses this field depending on the program. For example, the date you enter in this field might indicate when a change of address becomes effective, or it could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, and so on.
Sequence Number	A number that reorders a group of records on the form.

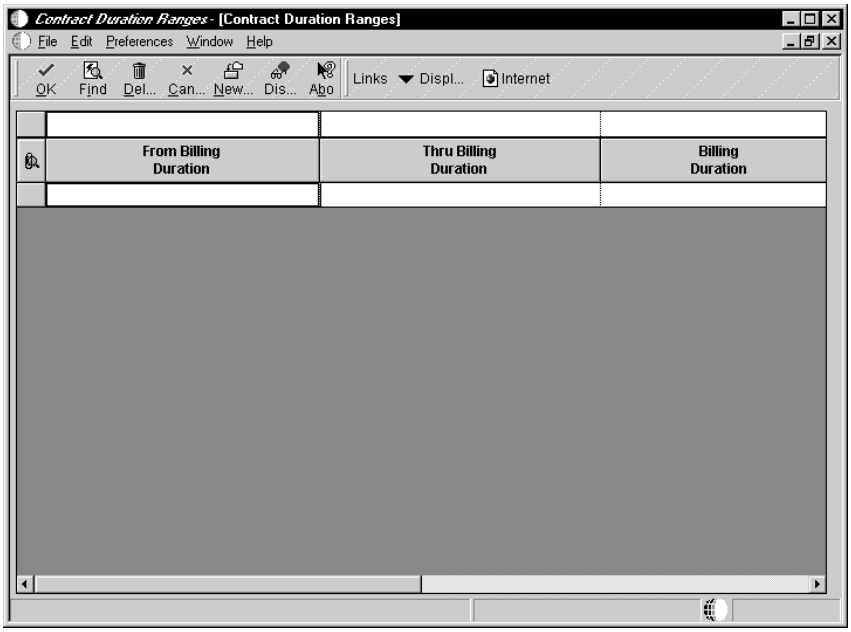
Setting Up Contract Duration Ranges

When you set up contract duration ranges, you attach duration ranges to your contract so that you can enable advanced pricing. Use duration ranges to prorate a contract. For example, you set up prices in advanced pricing using 12 (for 12 months) for a duration. You then set up a billing duration range from 1 to 12. If a 6 month contract is entered, the system prices the contract based on the 12 month duration you set up, by dividing the contract by 12 and then multiplying the contract by 6.

▶ To set up contract duration ranges

From the Service Contract Setup menu (G1744), choose Contract Duration Ranges.

On Contract Duration Ranges



Complete the following fields:

- From Billing Duration
- Thru Billing Duration
- Billing Duration

Field	Explanation
From Billing Duration	The From Billing Duration when specifying a billing duration range in the Contract Billing Duration Range table.
Thru Billing Duration	The Thru Billing Duration when specifying a billing duration range in the Contract Billing Duration Range table.
Billing Duration	The billing duration to be used by Advanced Pricing when specifying a billing duration range in the Contract Billing Duration Range table.

See Also

- *Appendix A – Setting Up Advanced Pricing for CSMS*

Managing Service Contracts

Manage service contracts to allow your company to create and track service contracts for your customers. You can make changes to a contract if the terms of the contract change or the service package changes as long as the contract hasn't been billed. You can also track contract dates and specify the lead times necessary to prepare renewal letters and contracts.

Managing a service contract includes the following tasks:

- ❑ Entering service contracts
- ❑ Defining the Entitlement Rules Sequence
- ❑ Reviewing Entitlement Information
- ❑ Canceling contract information
- ❑ Crediting contract detail lines
- ❑ Creating contract prepayment transactions

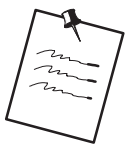
Entering Service Contracts

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

When you enter a service contract, you are accessing the starting point of the contract programs. When you enter service contracts, you can enter detail information about the contract such as service packages, item numbers, and billing information.

You can create a contract using the following methods:

- Direct entry
- From Installed Base Management
- By copying an existing contract
- By renewing an existing contract



There is a version number associated with each contract, and when you renew a contract, you can create a new version of the same contract rather than creating a new contract.

Entering service contract information includes the following tasks:

- Entering basic service contract information
- Entering equipment data
- Entering customer data
- Entering contract dates
- Entering category codes
- Entering pricing data
- Entering billing data

Before You Begin

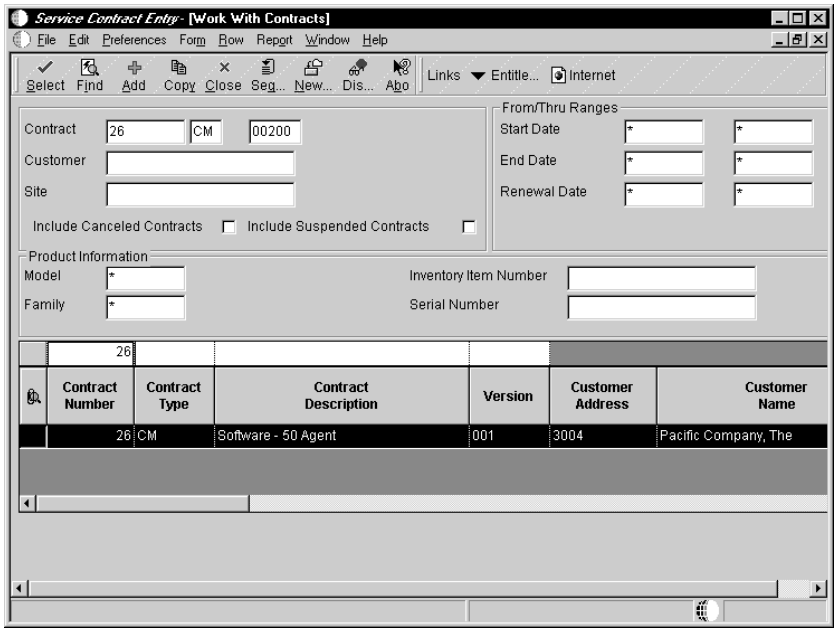
❑ Create an address book record for customers for whom you want to create a contract. From Address Book Revision, choose CSMS from the Form menu and click Customer Information. Complete the Customer Information Revisions form. The system creates an extension table (F1797) to the address book that stores additional CSMS address book information.

❑ Add Accounts Receivable information to the customer record. From Address Book Revision, choose A/R from the Form menu and complete the Customer Master Revision form. See *Creating Customer Records* in the *Accounts Receivable Guide*.

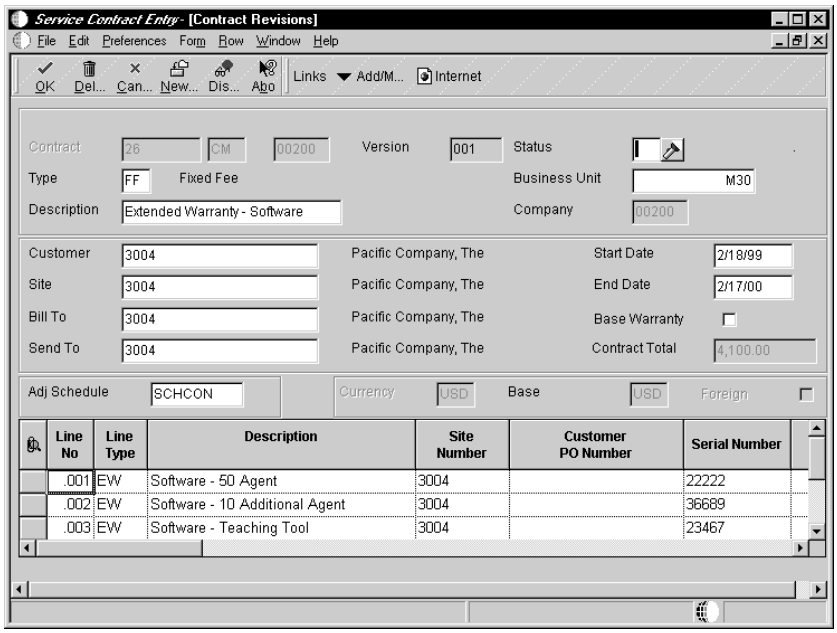
❑ To price contracts, set up advanced pricing information. See *Schedules and Adjustments* in the *Advanced Pricing Guide*.

▶ To enter basic service contract information

On Work With Contracts



1. Click Add.



2. On Contract Revisions, review the value in the following field and override if necessary:

   - Contract

   The system uses next numbers to enter a default contract number in this field.

3. Complete the following fields:

   - Type

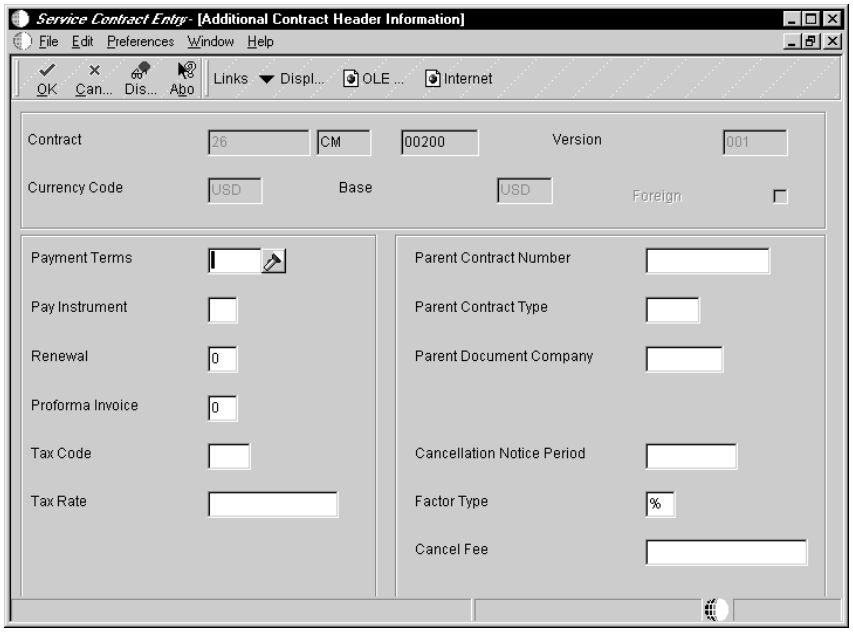
- Business Unit

The default values for the Order Type, Company and Status fields are set in the processing options.

4. Enter a description of the contract in the following field:
   - Description
5. Enter customer information in the following fields:
   - Customer
   - Site
   - Bill To
   - Send To
6. Enter the dates of the contract in the following fields:
   - Contract Start Date
   - Contract Line End Date
7. To include the base warranty under this contract when running the Installed Base Update from Ship Confirm program, click the following option:
   - Base Warranty

   Only one contract per customer can have the base warranty option turned on.
8. Review the value in the following field and override if necessary:
   - Currency

   The value for this field defaults from the customer information in Accounts Receivable.
9. From the Form menu, choose Additional Info.



10. On Additional Contract Header Information, complete the following fields and click OK, if applicable:

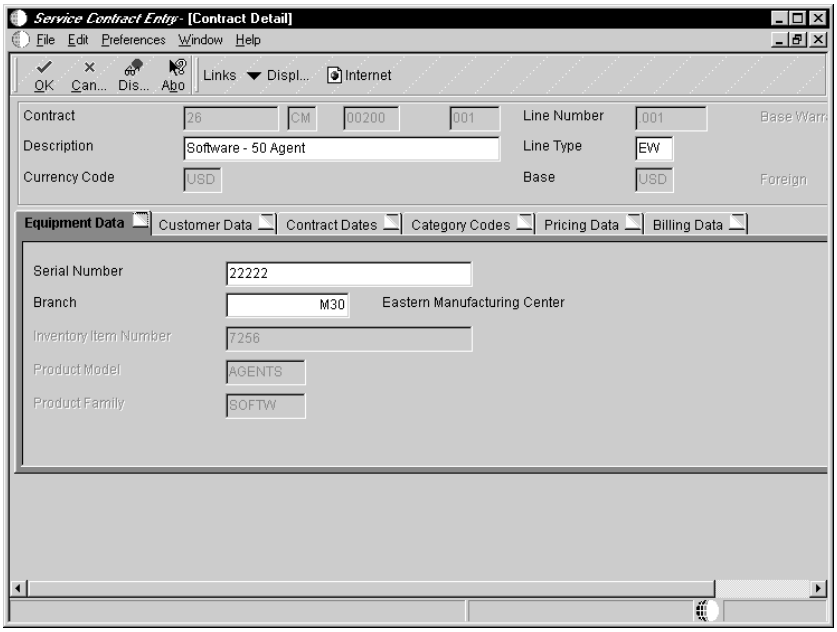
    - Payment Terms
    - Pay Instrument

      If this contract is being prepaid, enter a value in this field to indicate the type of prepayment.

    - Renewal
    - Proforma Invoice
    - Tax Code
    - Tax Rate
    - Parent Contract Number
    - Parent Contract Type
    - Parent Document Company
    - Cancellation Notice Period
    - Factor Type
    - Cancel Fee

11. To enter detail information associated with this contract, choose the contract, and then choose Contract Detail from the Row menu.

    You can enter contract information in the detail grid area on Contract Revisions or within the tabs on the Contract Detail form.

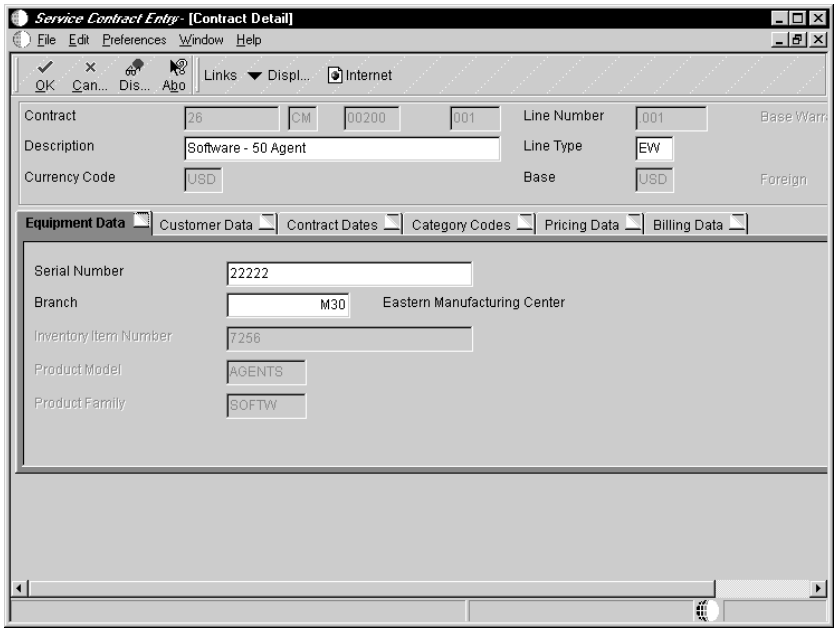


12. On Contract Detail, complete the following field:
    - Line Type
13. After you enter information on the Contract Detail form, complete additional information on the following tabs:
    - Equipment Data
    - Customer Data
    - Contract Dates
    - Category Codes
    - Pricing Data
    - Billing Data
14. Click OK.

▶ To enter equipment data information

After you enter basic service contract information, enter equipment data.

1. Click the Equipment Data tab.



2. Complete the following field:

   - Equipment Number

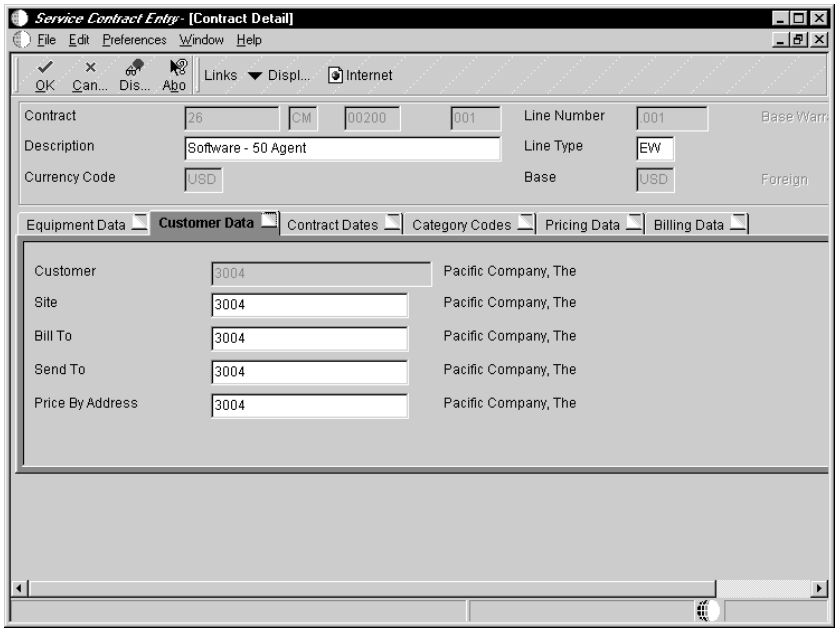
   The system enters the values for the Branch and Inventory Item Number fields based on the equipment number.

   The system enters the values for the Product Model and Product Family based on the equipment number or based on the Inventory Item Number and Branch.

▶ To enter customer data information

After you complete information on the Equipment Data tab, enter customer data.

1. Click the Customer Data tab.



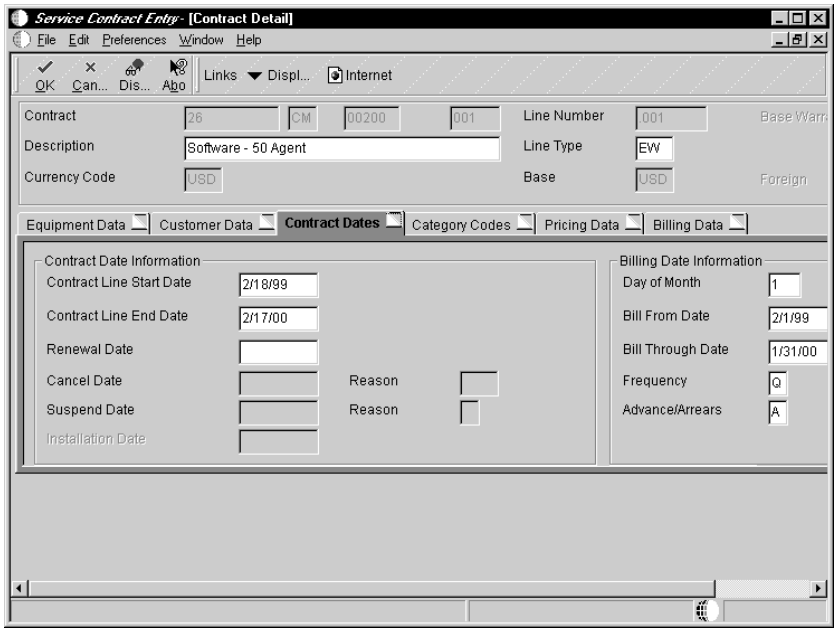
2. Complete the following fields:
   - Site
   - Bill To
   - Send To
   - Price By Address

   Price by Address is used for advanced pricing from the Address Book number. You can override it on the Customer Data tab form.

▶ To enter contract dates information

After you complete information on the Customer Data tab, enter contracts dates.

1. Click the Contract Dates tab.



2. Complete the following fields:

   - Contract Line Start Date
   - Contract Line End Date
   - Renewal Date

   If the contract has been cancelled or suspended, the system displays the cancel or suspend date. The system retrieves the suspend date from the Suspend Contract form. See also *Canceling and Suspending Contract Information*

   The Installation Date field is disabled if the Proof of Purchase field is populated in the Installed Base. The system updates the installed base date and warranty based on the value you enter in the Installation Date field.

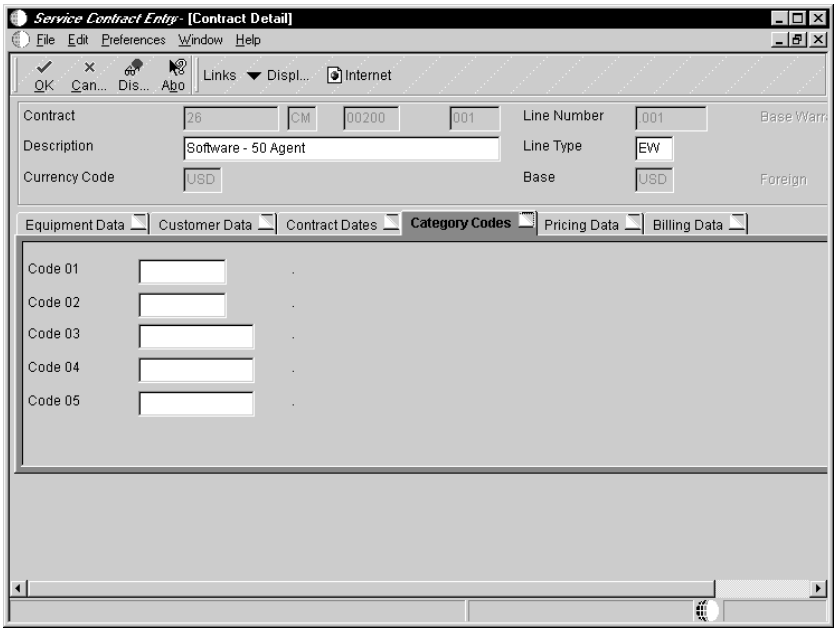
3. Under the Billing Date Information heading, complete the following fields:

   - Day of Month
   - Bill From Date
   - Bill Through Date
   - Frequency

   The Day of Month and Advance/Arrears fields are only used for data selection. Use the Bill From Date and Bill Through Date fields for period and frequency. If the values in the Bill From Date and Bill Through Date fields are in the same period and year, it is a one time billing. If it is not a one time billing, you must enter a value in the Frequency field. The system then calculates a recurring billing amount.

To enter category codes information

1. To enter category code information, click the Category Codes tab.

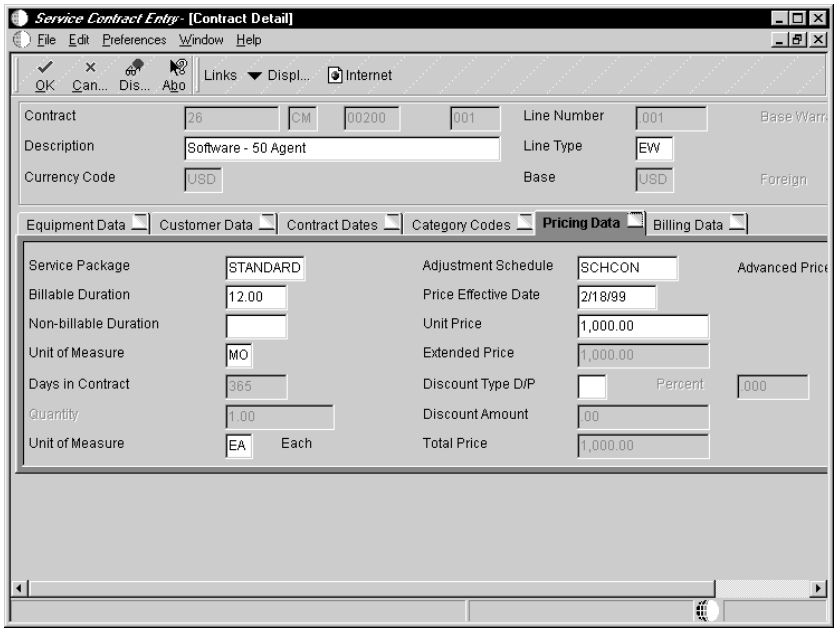


2. If necessary, complete the following fields:
   - Code 01
   - Code 02
   - Code 03
   - Code 04
   - Code 05

To enter pricing data information

After you complete information on the Contract Dates tab, enter pricing data.

1. Click the Pricing Data tab.



2. To enter pricing information for the contract, complete the following fields:
   - Service Package
   - Quantity

   The system enters 1 as the default value in the Quantity field.

3. If contract is billable complete the following field:
   - Billable Duration

   The system calculates the value for the Days In Contract field. The system retrieves the value for the Unit of Measure field from Inventory, but you can override it if necessary. Advanced Pricing unit of measure must match the adjustment detail.

4. To choose an adjustment schedule, complete the following field:
   - Adjustment Schedule

   The system retrieves the value for Adjustment Schedule field from customer information. If you are using advanced pricing, you can override the adjustment schedule.

5. Click the following option if you are using advanced pricing:
   - Advanced Price
6. Complete the following fields:
   - Price Effective Date
   - Unit Price

You cannot enter a value in the Unit Price field in conjunction with advanced pricing.

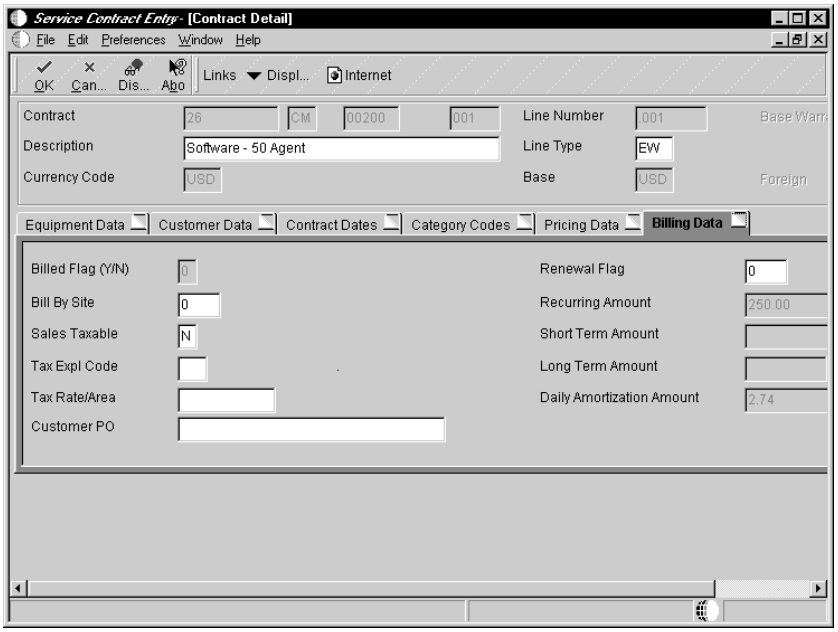
- Discount Type D/P

  The field determines if the system uses discount percent or amount.

To enter billing data information

After you enter pricing data information, enter billing data.

1. Click the Billing Data tab.



   The Billed Flag field is updated only by the Contract Workfile Generation program.

2. Complete the following fields:

   - Bill By Site
   - Sales Taxable
   - Tax Expl Code
   - Tax Rate/Area

     The system retrieves tax area information from the customer address book record as the default.

   - Customer PO

Customer PO text is informational. You can modify it after the contract is billed.

- Renewal Flag

The system uses the value from the Renewal Flag field for data selection in the contract renewal program.

The system calculates and enters the value in the Recurring Amount field when you are billing for a specified amount over a period of time, instead of one-time billing.

The system calculates the value for the Daily Amortization Line Total divided by the contract number of days.

Field	Explanation
Contract	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Status	A 2-character code that you can use to track the status of a contract. The system edits the contract status against user defined codes (52/CS).
Type	A user defined code (system 51, type CT) that identifies the type of contract.
Start Date	The date you actually start work on the contract.
End Date	The date you actually completed work on the contract.
Currency	A code that indicates the originating currency code of the transaction.

Field	Explanation
Payment Terms	A code that specifies the terms of payment, including the percentage of discount available if the invoice is paid within a certain amount of time. A blank code indicates the most frequently used payment term. You define the specifications for each type of payment term on the Payment Terms Revisions form. For WorldSoftware, the following are examples of valid values: Blank Net 15 1 1/10 net 30 2 2/10 net 30 N Net 30 P Fixed day of 25th Z Net 90 This code prints on customer invoices. For OneWorld software, the following are examples of valid values: blank Net 30 days (default) 001 1/10 net 30 002 Net 30 days (override) 003 Prox days 1/10 004 Due at first of month 005 50/50 split payments 006 Due upon receipt
Pay Instrument	The user defined code (00/PY) that specifies how payments are made by the customer. For example: C Check D Draft T Electronic funds transfer
Proforma Invoice	For WorldSoftware, this is a user defined, alphanumeric code that identifies different versions of the same invoice layout. For example, you might use the codes D and F to distinguish draft invoice layouts from final invoice layouts. For OneWorld, this is a code that identifies the currency for invoice amounts. The valid values are: Blank Monetary amounts are based on the Currency Mode (CRRM). This is the default. D Monetary amounts appear in the domestic currency. F Monetary amounts appear in the foreign currency.
Tax Code	A user defined code (system 00/type EX) that controls how a tax is assessed and distributed to the general ledger revenue and expense accounts. Do not confuse this with the taxable, non-taxable code. A single invoice can have both taxable and non-taxable items. The entire invoice, however, must have one tax explanation code.

Field	Explanation
Tax Rate	A code that identifies a tax or geographic area that has common tax rates and tax distribution. The tax rate/area must be defined to include the tax authorities (for example, state, county, city, rapid transit district, or province), and their rates. To be valid, a code must be set up in the Tax Rate/Area table (F4008). Typically, U.S. sales and use taxes require multiple tax authorities per tax rate/area, whereas value-added tax (VAT) requires only one simple rate. The system uses this code to properly calculate the tax amount.
Parent Contract Number	A code that identifies the parent contract to which this particular contract is associated.
Parent Contract Type	The parent contract type to which this particular contract is attached.
Parent Document Company	Parent Contract Document Company.
Cancellation Notice Period	The cancellation period associated with a contract.
Factor Type	A code that indicates whether the factor value is a multiplier (%) or an additional/deductible cash amount ($) when applied to an order's price.
Cancel Fee	The fee billed to a customer when cancelling a contract.
Equipment Number	An identification code for an asset that you can enter in one of the following formats: 1 Asset number (a computer-assigned, 8-digit, numeric control number) 2 Unit number (a 12–character alphanumeric field) 3 Serial number (a 25-character alphanumeric field) Every asset has an asset number. You can use unit number and serial number to further identify assets as needed. If this is a data entry field, the first character you enter indicates whether you are entering the primary (default) format that is defined for your system, or one of the other two formats. A special character (such as / or *) in the first position of this field indicates which asset number format you are using. You assign special characters to asset number formats on the Fixed Assets system constants form. Note: This field appears only when reviewing a message on Message Log.
Contract Line Start Date	The date you actually start work on the contract.
Contract Line End Date	The date you actually completed work on the contract.
Renewal Date	A date prior to the contract end date that allows the end user to prepare a renewal notice prior to the contract end date.
Suspend Date	The date when a recurring order is no longer to be processed.

Field	Explanation
Service Package	A combination of service order type and coverage type used to define service support to which the customer is contractually entitled. A service package also contains response time and coverage group.
Billable Duration	The billing duration associated with a contract.
Quantity	The quantity of something that is identified by a unit of measure. For example, it can be the number of barrels, boxes, cubic yards, gallons, hours, and so on.
Advanced Price	Use 0 or N to specify that advance pricing was not used to price. Use 1 or Y to specify advance pricing was used.

Related Tasks

Renewing a contract

From the Periodic Service Contract Processing menu (G1724), choose Service Contract Renewal.

When you run the Contract Renewal program, the system generates a report identifying contracts that are expiring soon that require renewal contracts and letters. You can setup your processing options to include markup by percentage, select the pricing to use for your renewal, and to set the lead time for contract expiration.

The Contract Renewal program uses mailmerge functionality to generate renewal letters and contracts.

Copying a contract

If you want to copy a contract that you are working with, you can choose Copy Row from the Row menu and delete any lines that do not apply.

Processing Options for Service Contract Entry

```
Defaults

      Enter Default Contract Document          _____________
      Type:
      Enter Default Key Company:               _____________

Versions

      1.  Enter the Version of P1721 to        _____________
      call for contract copy or add.  If
      blank, ZJDE0001 will be used.
      2.  Enter the Version for Contract       _____________
      Print (R1733).  If blank, XJDE0001
      will be used.
```

To enter service contracts in the system, you must choose processing options for those contracts. The processing option is found on the Interactive Versions form. The program number for the following processing option is P1721.

Processing Options for Processing Options for P1721

Defaults

1. Default Contract Document Type _____
2. Default Contract Key Company _____
3. On copy, Enter '1' to create a new contract number, Enter '2' to keep the original contract number and advance the version number _____
4. Default Contract Line Type _____
5. Line Increment _____
6. Contract Status _____
7. Default Contract Description _____
   1 = Inventory Item Number 2 = Line Type Description 3 = Product Model 4 = Product Family If blank, the header desciption will be defaulted to the detail line.
8. Duration Unit of Measure _____

Process

Enter Customer and Site Action Codes:

1. Enter a '1' to prompt the user to change the Customer Number associated with the Installed Base if inconsistent with the customer number referenced on contracts. Enter a '2' to automatically update Installed Base. Leave blank to provide no editing against Installed Base. _____
2. Enter a '1' to prompt the user to change the Site Number associated with the Installed Bse if inconsistent with the site number referenced on contracts. Enter a '2' to automatically update Installed Base. Leave blank to provide no editing against Installed Base. _____
3. Enter 1 to check for the Asset (Equipment/Unit/Serial) Number being on another contract detail line. If blank, no checking will take place. _____

and old Site value. (PROMPT actions will result in P1704 being displayed on customer or site change.) If Customer Action = 2 and Site Action = 0 then Push new Customer number and old Site number to the Equipment History (The user will not be prompted for PUSH activities.) If Customer Action = 0 and Site Action

= 1 then PROMPT with new Site number and old Customer number. If Customer Action = 1 and Site Action = 1 then PROMPT with new Customer and Site numbers. If Customer Action = 2 and Site Action = 1 then PROMPT with new Customer and Site number. If Customer Action = 0 and Site Action = 2 then PUSH new Site number and old Customer number. If Customer Action = 1 and Site Action = 2 then PROMPT with new Customer and Site numbers. If Customer Action = 2 and Site Action = 2 then PUSH new Site and Customer numbers.

4. Enter the Subledger Default for credit processing. being on another contract detail line. If blank, no checking will take place. _____

Edits

1. Enter 1 to allow multiple quantities for a serialized item. _____

Line Type Rule

1. Unit of Measure for Days _____
2. Unit of Measure for Months _____
3. Unit of Measure for Years _____

Prepayment

1. Prepayment Processing _____

Blank = Prepayment files will not be updated and the form exit to the Prepayment Window will be protected. '1' = Prepayment files will be updated and Prepayment Window will be activated.

2. Process Authorization _____

Blank = Authorization will not be processed. '1' = Authorization will be processed in batch or subsystem mode, based on the version.

3. Process Settlement _____

Blank = Settlement will not be processed. '1' = Settlement will be processed interactively. '2' = Settlement will be processin batch or subsystem mode, based on the version.

4. Authorize Prepayment Transaction version. _____
5. Settle Prepayment Transaction version. _____

Defining the Entitlement Rules Sequence

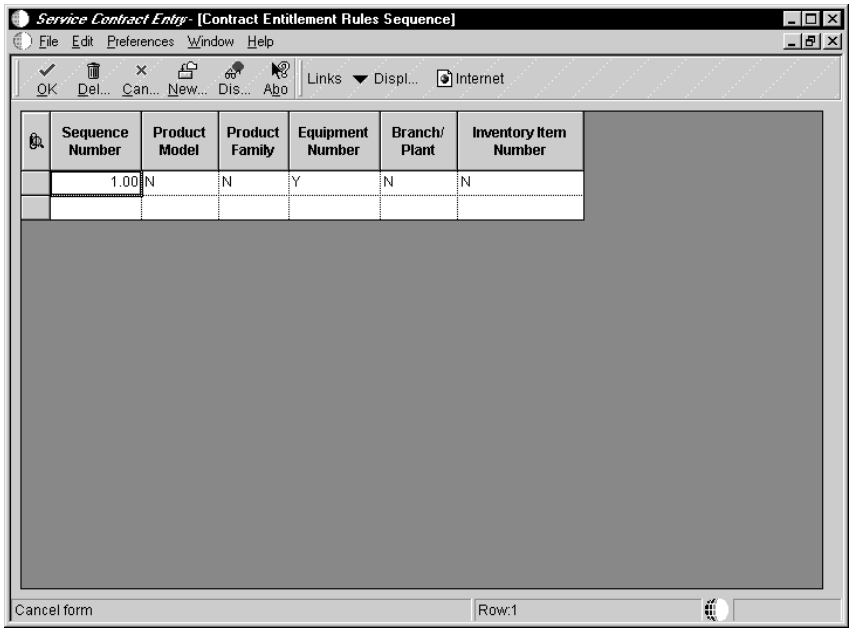
The entitlement rules sequence defines priorities when you assign entitlement rules to contract detail lines. The hierarchy determines the order the system uses to search for a match between the contract and the entitlement rules. Set up the hierarchy from specific to general. For performance reasons, J.D. Edwards recommends you set up only necessary sequences.

▶ To define the entitlement rules sequence

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

On Work with Contracts

1. From the Form menu, choose Entitlement Rules.



2. On Contract Entitlement Rules Sequence, enter Y or N in the following fields:
   - Product Model
   - Product Family
   - Equipment Number
   - Branch/ Plant
   - Inventory Item Number

Reviewing Entitlement Information

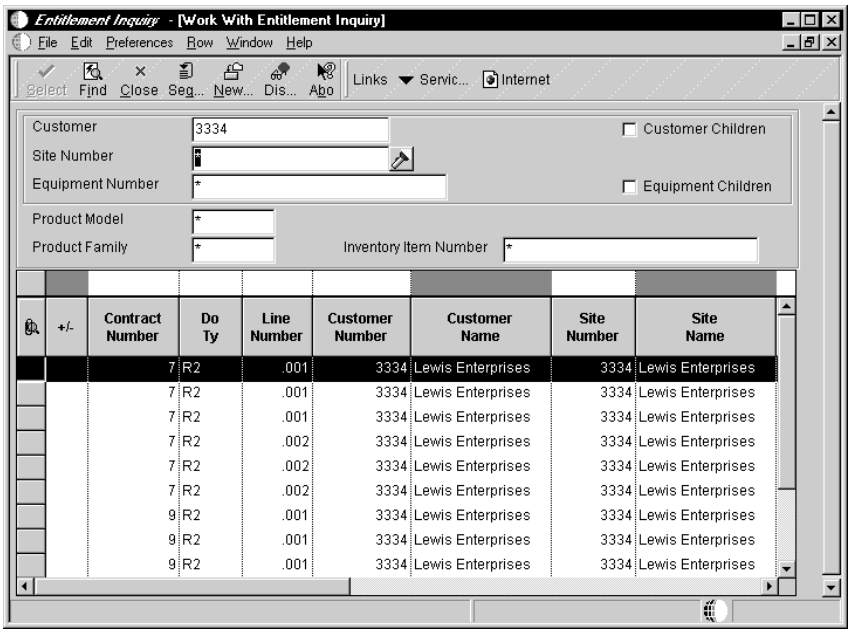
You can review entitlement information and make any changes necessary when entitlement details for the contract change. The system allows you to review entitlement information by customer number, item number, and serial number.

You can use this form to review the customer's entitlement and exit to the service package the customer has purchased. For example, if a customer purchases a computer from you in conjunction with the service package that has the most benefits, the customer might be entitled to having a repair person visit the site as opposed to sending the computer to you for repair.

▶ To review entitlement information

From the Daily Service Contract Processing menu (G1714), choose Entitlement Inquiry.

On Work With Entitlement Inquiry



1. Complete any or all of the following fields and click Find:
   - Customer
   - Site Number
   - Equipment Number
2. To further limit your search, complete the following fields:
   - Product Model

- Product Family
- Inventory Item Number

3. To display customer or equipment children information, click one of the following options:

   - Customer Children
   - Equipment Children

   If you enter the Entitlement Inquiry form from Service Order Management or Call Management, the Customer Children and Equipment Children fields are disabled.

Field	Explanation
Customer	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Equipment Number	An identification code for an asset that you can enter in one of the following formats: 1 Asset number (a computer-assigned, 8-digit, numeric control number) 2 Unit number (a 12–character alphanumeric field) 3 Serial number (a 25-character alphanumeric field) Every asset has an asset number. You can use unit number and serial number to further identify assets as needed. If this is a data entry field, the first character you enter indicates whether you are entering the primary (default) format that is defined for your system, or one of the other two formats. A special character (such as / or *) in the first position of this field indicates which asset number format you are using. You assign special characters to asset number formats on the Fixed Assets system constants form. Note: This field appears only when reviewing a message on Message Log.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Inventory Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.

Canceling and Suspending Contract Information

You might need to cancel a contract or an individual detail line if you set it up incorrectly or if the customer no longer wants to cover an item that is under contract.

Canceling contract information includes the following tasks:

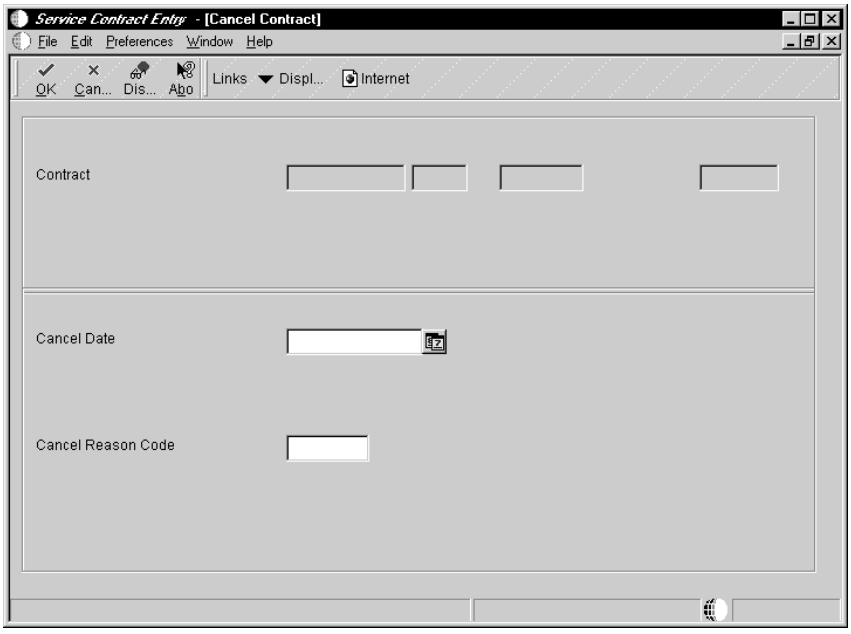
- Canceling and suspending contracts
- Canceling and suspending contract detail lines

▶ To cancel and suspend contracts

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

On Work with Contracts

1. Locate the contract you want to cancel.
2. Choose the contract and click Select.
3. On Contract Revisions, choose Cancel Contract from the Form menu.



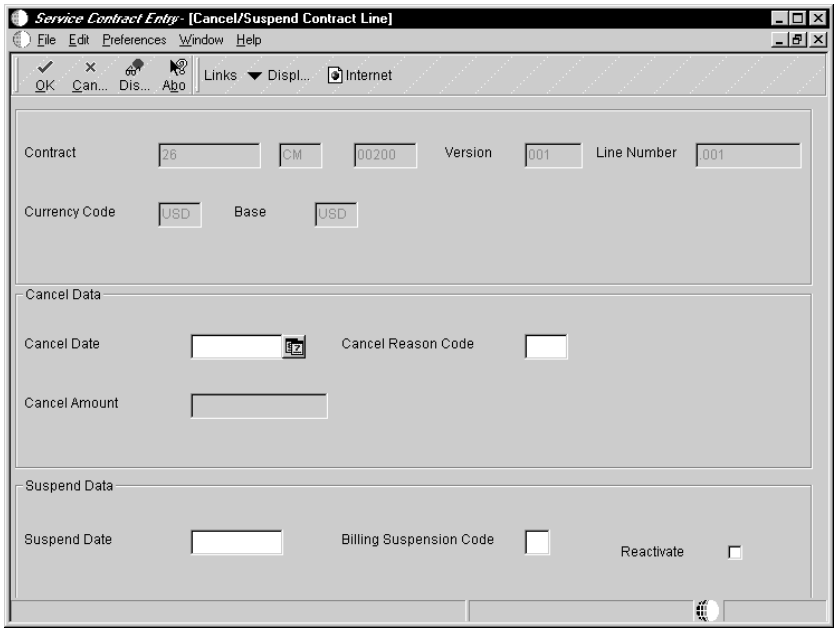
4. On Cancel Contract, complete the following fields:
   - Cancel Date
   - Cancel Reason Code

Field	Explanation
Cancel Date	The date that the order should be canceled if the goods have not been sent to the customer or the goods have not been received from the supplier. This is a memo-only field and does not cause the system to perform any type of automatic processing.
Cancel Reason Code	A user defined code for defining reasons a contract was cancelled.

▶ To cancel and suspend contract detail lines

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

1. Locate the contract that you are changing.
2. Choose the contract and click Select.
3. On Contract Revisions, choose the detail line from the grid that you are canceling or suspending.
4. Choose Cancel/Suspend from the Row menu.



5. On Cancel/Suspend Contract Line, complete the following fields to cancel a contract detail line:
   - Cancel Date
   - Cancel Reason Code
6. To suspend a contract detail line, complete the following fields:

- Suspend Date
- Billing Suspension Code

The system calculates any amount that has been paid that should be credited as the result of a canceled contract detail line. The system also assigns a fee, either a percentage or flat dollar amount, to a contract detail line if it is canceled before the cancel period.

Field	Explanation
Suspend Date	The date when a recurring order is no longer to be processed.
Billing Suspension Code	The Billing Rule Flag attaches to each pay item on a contract. The flag indicates: blank Add billing records to the Invoice Summary Work file (F4822) and bill the appropriate amounts. 1 Add billing records to the work file but do not bill any amounts. 2 Do not create billing records for the work file. 3 Add billing records to the work file and ignore any Not to Exceed Limits. Note: This field works with the NTE field. The flag determines how the system handles a situation where the NTE has been exceeded.

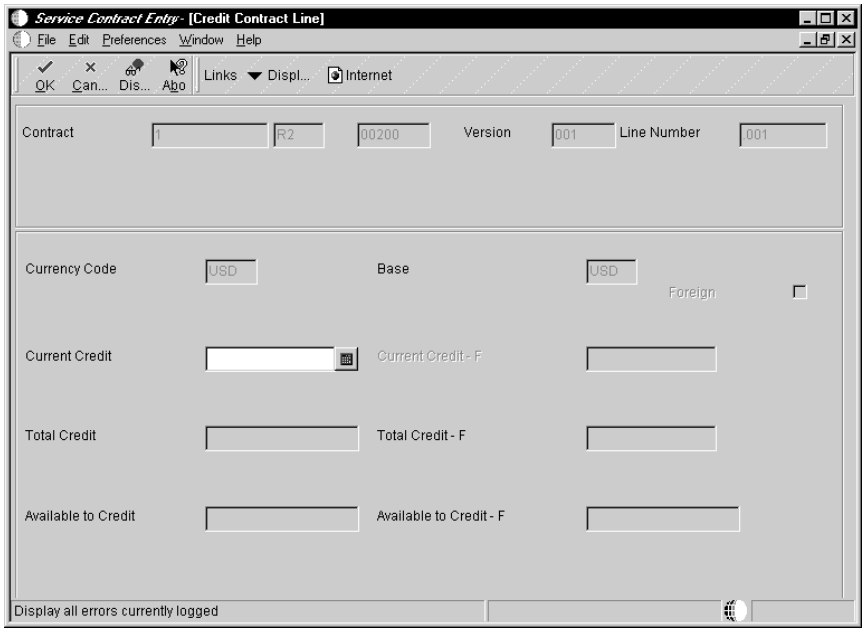
Crediting Contract Detail Lines

You might need to credit a detail line on a contract or reverse a charge.

▶ To credit contract detail lines

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

1. Locate the contract that you are changing.
2. Choose the contract and click Select.
3. On Contract Revisions, choose the detail line that you want to credit.
4. From the Row menu, choose Credit Line.



5. On Credit Contract Line, complete the following fields:
   - Current Credit

   The credit amount must be equal or less than the billed amount.

6. Click OK.

Creating Contract Prepayment Transactions

To track your customer's payments that are made up-front, you can use prepayment processing. Customers can prepay by using cash, check, or credit card. If a customer has already paid for a service contract, the invoice reflects that it the contract has been prepaid.

Only one type of payment is allowed per contract. The prepayment must also be set up as a one time billing, the bill from and through dates must be in the same period and year.

Before You Begin

❑ Set up the payment instrument user defined code (00/PY). See *Setting Up User Defined Codes for CSMS*.

❑ Set the prepayment processing option on P1721 to prepay.

To create prepayment transactions

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

On Work With Contracts

1. Locate the contract that you are changing.
2. Choose the contract and click Select.
3. From the Form menu, choose Additional Info.
4. On Additional Contract Header Information, change the value in the following field to indicate that this is a prepayment:

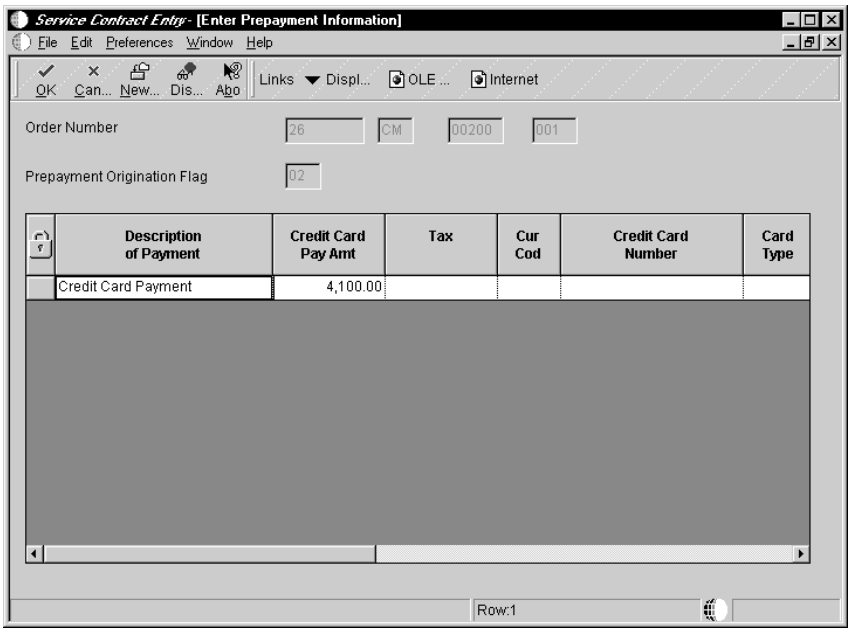
   - Pay Instrument

   The value must equal 11 (cash), 12 (check), or 13 (credit card).

5. Click OK.

You cannot make this change if the contract has already been billed.

6. On Contract Revisions, choose Prepayments from the Form menu.



7. On Enter Prepayment Information, review and update the appropriate information.

8. Click OK.

Depending on your processing option setup, the system authorizes and/or settles transactions after you create prepayments.

See Also

- *Appendix C – Working with Prepayments*

Billing Contracts

The typical billing process includes accumulating contracts to bill, creating and printing invoices, and recording journal entries for income and receivables.

Invoices are based on billable contracts. The first step in the billing process is to accumulate billable contracts. When you run CSMS Workfile Generation, the system gathers the contracts eligible for billing from the Contract Detail table (F1721), and creates Service Billing Workfile records (F4812).

Billing contracts includes the following tasks:

- ❑ Setting up automatic accounting instructions to bill contracts
- ❑ Generating the contract workfile
- ❑ Reviewing contract billing information

Before You Begin

- ❑ Set up manufacturing AAIs.

See Also

- *Appendix B – Billing for CSMS* for related tasks

Setting Up Automatic Accounting Instructions to Bill Contracts

To bill contracts, you must identify information about your account structure and specific account values to process business transactions properly. You define your account structure and specific account values by using automatic accounting instructions (AAIs). The system stores the AAI values in the Automatic Accounting Instructions table (F40905). Whenever a program performs an accounting function, it accesses the Automatic Accounting Instructions table.

Distribution AAIs define the rules by which the Customer Service Management System and the general ledger interact. Accounting AAIs define the rules by which the CSMS and the Accounts Receivable system interact. When you define AAIs, you establish how the system processes transactions for various programs.

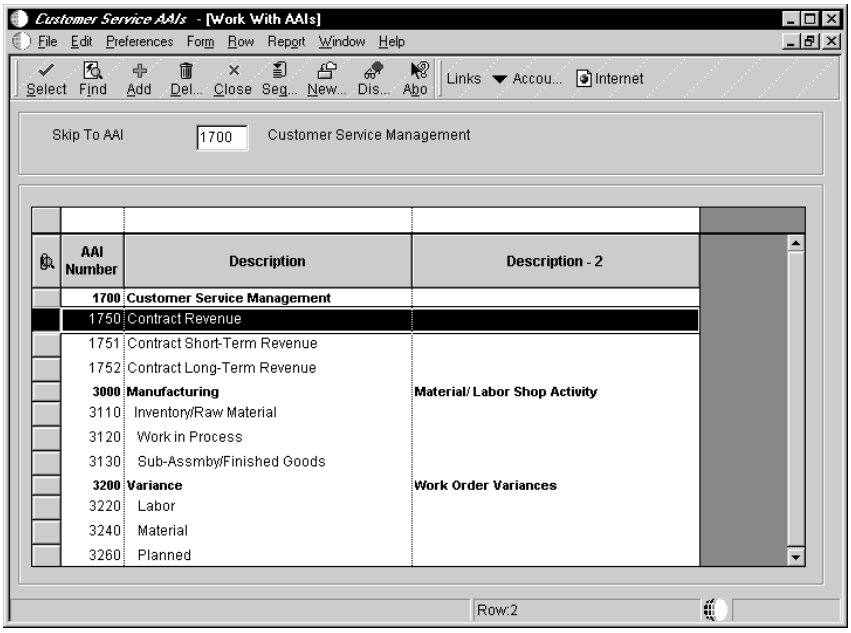
Contract-related distribution AAIs consist of the following:

- 1750 – Contract Revenue
- 1751 – Contract Short-Term Revenue
- 1752 – Contract Long-Term Revenue
- 1753 – Contract Cancel Fees

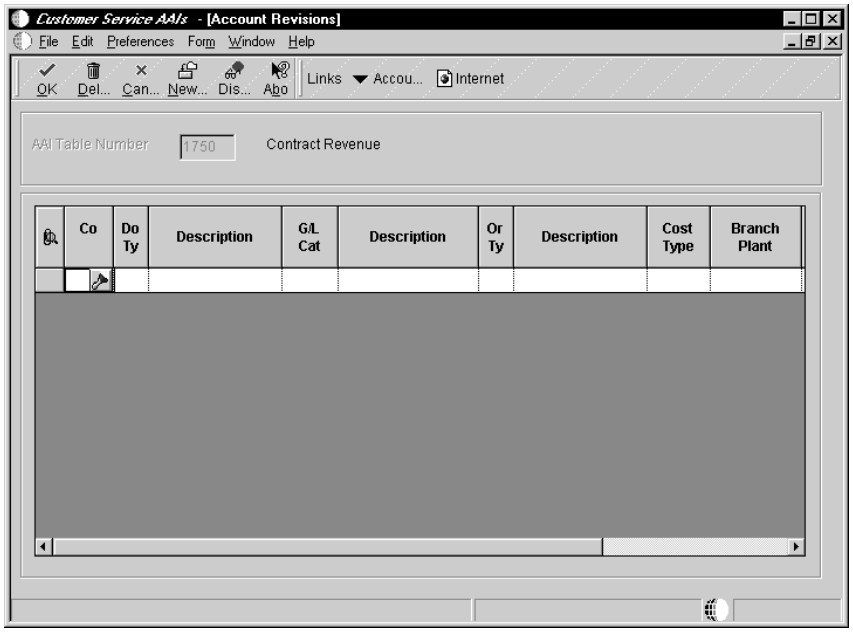
▶ To set up automatic accounting instructions to bill contracts

From the Customer Service Setup menu (G1740), choose Customer Service AAIs.

On Work With AAIs



1. Choose the row which contains the AAI table you want to set up.
2. From the Row menu, choose Details.



3. On Account Revisions, on the first open line, complete the following fields and click OK:

   - Co
   - Do Ty
   - Description
   - G/L Cat
   - Branch Plant
   - Obj Acct
   - Sub

   When you run the CSMS Billing Generation program, the system always overrides the business unit in the Branch/Plant field with the business unit retrieved from the Responsible Business Unit Location field on CSMS Constants for Contracts.

Field	Explanation
Co	A code that identifies a specific organization, fund, entity, and so on. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions. NOTE: You can use Company 00000 for default values, such as dates and automatic accounting instructions (AAIs). You cannot use Company 00000 for transaction entries.

Field	Explanation
Do Ty	A user defined code (00/DT) that identifies the origin and purpose of the transaction. J.D. Edwards reserves several prefixes for document types, such as vouchers, invoices, receipts, and timesheets. The reserved document type prefixes for codes are: P Accounts payable documents R Accounts receivable documents T Time and Pay documents I Inventory conversion issues O Ordering document types The system creates offsetting entries as appropriate for these document types when you post batches.
Description	A user defined name or remark.
G/L Cat	A user defined code (41/9) that identifies the G/L offset that system uses when it searches for the account to which it posts the transaction. If you do not want to specify a class code, you can enter **** (four asterisks) in this field. You can use automatic accounting instructions (AAIs) to predefine classes of automatic offset accounts for the Inventory, Procurement, and Sales Order Management systems. You might assign G/L class codes as follows: IN20 Direct Ship Orders IN60 Transfer Orders IN80 Stock Sales The system can generate accounting entries based upon a single transaction. For example, a single sale of a stock item can trigger the generation of accounting entries similar to the following: Sales–Stock (Debit) xxxxx.xx A/R Stock Sales (Credit) xxxxx.xx Posting Category: IN80 Stock Inventory (Debit) xxxxx.xx Stock COGS (Credit) xxxxx.xx The system uses the class code and the document type to find the AAI.

Field	Explanation
Branch Plant	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table. . . . . . *Form-specific information* . . . . . . If you leave this field blank, the system uses the business unit that you entered on the work order, in the Charge to Cost Center field.
Obj Acct	The object account portion of a general ledger account. The term "object account" refers to the division of the Cost Code (for example, labor, materials, and equipment) into subcategories (for example, dividing labor into regular time, premium time, and burden). If you are using a flexible chart of accounts and the object account is set to 6 digits, J.D. Edwards recommends that you use all 6 digits. For example, entering 000456 is not the same as entering 456, because if you enter 456, the system will enter three blank spaces to fill a 6-digit object.
Sub	A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account. . . . . . *Form-specific information* . . . . . . If you leave this field blank, the system uses the value you entered on the work order in the Cost Code field.

Processing Options for Distribution AAIs

```
Defaults

      AAI Table Number                                  _____________
      Enter a '1' if the cost type field                _____________
      should be available to
      Distribution AAI tables listed
      below:  4122, 4124, 4220, 4240 and
      4310.
```

Generating the Contract Workfile

From the Periodic Service Contract Processing menu (G1724), choose Service Contract Workfile Generation.

When you run the CSMS Contract Workfile generation program, the system processes records in the CSMS Contract Detail table (F1721) and creates billing records in the Service Billing Workfile (F4812).

The system gathers records based on processing options, user data selections, company, fiscal date patterns, and the billing frequencies and dates from the Contract Detail table (F1721). When you run the generation program in final mode the system creates records in the Service Billing Workfile. Then the Service Billing system creates workfile transactions that are the basis for the Accounts Receivable system and the General Accounting system. To bill and invoice a contract detail line, you must run the generation program in final mode. The system calculates taxes during CSMS Contract Workfile Generation.

When you have billed a contract detail line in final mode, you cannot change it.

See Also

- If you are using Vertex, see *Appendix D – Vertex Quantum for Sales and Use Tax*

Processing Options for Contract Workfile Generation

Defaults

1. Enter the date to bill through. If left blank or an invalid date is entered, the program will not run. _____

2. Enter a '1' to do catch-up billing. If left blank, catch-up billing will not be done. _____

3. Enter the appropriate value from below to determine what to default into the Subledger field. _____
'blank' = No Default
1 = Contract Number
2 = Customer Number
3 = Site Number
4 = Short Item Number
Number
3 = Site Number
4 = Short Item Number

4. Enter the appropriate value from below to determine which address book number will be displayed on the report. _____
'blank' = Customer Number
1 = Site Number 2 = Bill To Number
2 = Bill To Number

Process

1. Enter a '1' to run in final mode. Final mode will update all records. If left blank, no records will be updated. _____

2. Enter a '1' to write errors to a report. If left blank, errors will be written to the Work Center. _____

Vertex

These processing options only pertain if Vertex's Quantum Sales and Use Tax Software (3rd party tax software) has been implemented.

1. Enter the appropriate value from below to determine how to tax CSMS Service Contracts. If left blank, "SERVIC" will default. _____
"LEASE" = Lease Tax "PURCH" = Purchase Tax "RENTAL" = Rental Tax "SALE" = Sales Tax
"SERVIC" = Service Tax
"SALE" = Sales Tax
"SERVIC" = Service Tax

Reviewing Contract Billing Information

You can review billing information for your contracts by running in proof mode and looking at the edit report. After you run proof and final mode, you review billing information in two ways:

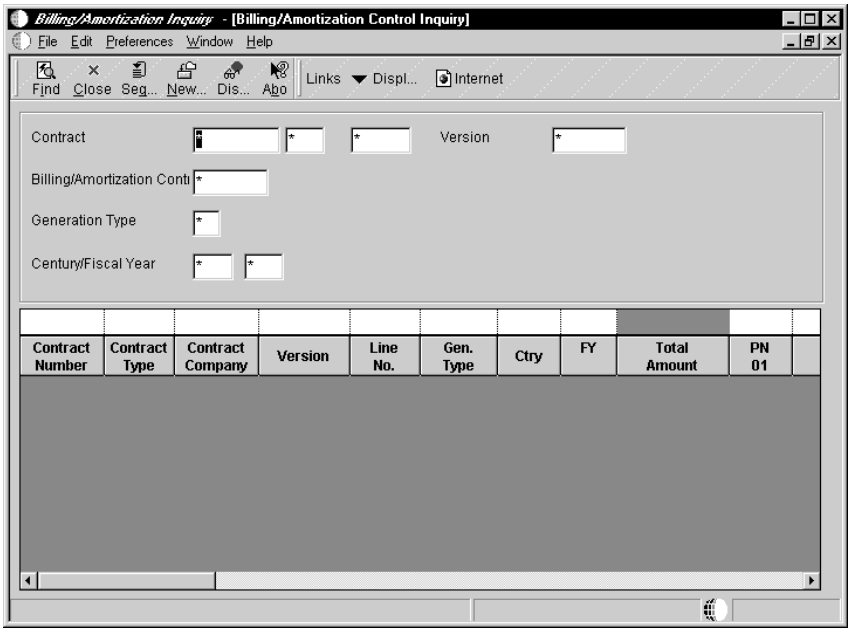
- Billing/Amortization Control Inquiry
- Work with Billing Details form

You cannot changes records after you have run the Contract Workfile Generation program in final mode. The system updates CSMS Contract Detail table to reflect billed records. If the records are not processed through the Service Billing program, the accounts receivable records will not match the CSMS records.

▶ To review contract billing information

From the Periodic Service Contract Processing menu (G1724), choose Billing/Amortization Inquiry.

On Billing/Amortization Control Inquiry



1. Complete the following field and click Find:
   - Contract
2. Review the following fields:
   - Contract Type
   - Contract Company

- Version
- Line No.
- Gen Type
- Ctry
- FY
- Total

Field	Explanation
Contract	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Contract Type	A user defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. J.D. Edwards has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.) The following document types are defined by J.D. Edwards and should not be changed: P Accounts Payable documents R Accounts Receivable documents T Payroll documents I Inventory documents O Purchase Order Processing documents J General Accounting/Joint Interest Billing documents S Sales Order Processing documents
Contract Company	A number that, along with order number and order type, uniquely identifies an order document (such as a purchase order, a contract, a sales order, and so on). If you use the Next Numbers by Company/Fiscal Year facility, the Automatic Next Numbers program (X0010) uses the order company to retrieve the correct next number for that company. If two or more order documents have the same order number and order type, the order company lets you locate the desired document. If you use the regular Next Numbers facility, the order company is not used to assign a next number. In this case, you probably would not use the order company to locate the document.
Version	The change number of the contract. The change order number of the base contract is always initialized to 000. Each time you enter a change order for a contract, the system automatically increases the change order number by one. For example, the base contract is the change order number 000, the first change order is 001, the second is 002, and so on.

Field	Explanation
Line No.	A number that identifies multiple occurrences, such as line numbers on a purchase order or other document. Generally, the system assigns this number, but in some cases you can override it.
Gen Type	A code that identifies the type of billing transaction. Examples: 1 Recurring Billings 2 Expense Participation 3 Sales Overage 4 Escalation 5 A/R Fees and Interest 6 Estimated Expense Participation 7 Manual Invoice
Ctry	The calendar century associated with the year. This is the first two digits of the year. For example, 19 indicates any year beginning with 19 (1998, 1999), 20 indicates any year beginning with 20 (2000, 2001), and so on.
FY	A number that identifies the fiscal year. Generally, you can either enter a number in this field or leave it blank to indicate the current fiscal year (as defined on the Company Numbers and Names form). Specify the year at the end of the first period rather than the year at the end of the fiscal period. For example, a fiscal year begins October 1, 1998 and ends September 30, 1999. The end of the first period is October 31, 1998. Specify the year 98 rather than 99.
Total	Amount billed for Property Management period 01.

Working with the Amortization Process

Amortization allows you to manage revenue by moving long-term revenue to short-term revenue, and then to earned or recognized revenue. This system only amortizes billed revenue.

When billing, the system moves the entire billed amount to long-term revenue. When you use amortization, the system moves anything from today's date plus twelve months to short term revenue. The system moves anything from the beginning of the contract through the end of the amortization period to recognized revenue.

Working with amortization includes the following tasks:

- ❑ Generating the amortization workfile
- ❑ Reviewing amortization records

Before You Begin

- ❑ Verify that you have purchased and installed the following systems. You must have installed these systems to be able to use amortization for service contracts:
  - The General Accounting, Accounts Receivable, and Accounts Payable systems
  - The Address Book system
  - The Service Billing system
- ❑ Set up fiscal date patterns. See *Setting Up Fiscal Date Patterns* in the *General Accounting Guide*.
- ❑ Set up company information. See *Setting Up Companies* in the *General Accounting Guide*.
- ❑ Set up manufacturing AAIs information.

Generating the Amortization Workfile

From the Periodic Service Contract Processing menu (G1724), choose Service Contract Amortization Generation.

Use the Amortization Generation program to amortize revenue for service contracts. You can run the program in proof or final mode, but the system only updates affected tables when you run it in final mode.

The program performs the following functions:

- Moves long-term to short-term revenue, if applicable
- Moves short-term to recognized revenue, if applicable

When you run the amortization generation, the system retrieves records from the Contract Detail table (F1721) based on the dates you define. For each contract detail line processed, the system verifies that the long-term and short-term amounts are current based on the start and end dates, and the Amortization Date in the processing option plus one year. For contract detail lines that fall within the dates specified, the system verifies that the detail lines have been amortized using the Billing/Amortization Control Master (F1794). The system creates records in the Account Ledger table (F0911) and updates the Billing/Amortization Control Master table whenever a contract detail line has been amortized for a given time period.

Processing Options for Amortization Workfile Generation

```
Process

      1. Proof or Final Mode                          _____________
       Blank = Proof
       1        = Final
      2. Fiscal Period – Amortize                     _____________
      Through
      3. Fiscal Year – Amortize Through               _____________
      4. Subledger Default                            _____________
       Blank = not populated
       1        = Contract Number
       2        = Customer Number
       3        = Site Number
       4        = Item Number

Print

      1. Work Center Or Report                        _____________
       Blank = Errors to Work Center
       1        = Errors on Report
      2. Address Number                               _____________
       Blank = Customer Number
       1        = Site Number
       2        = Bill To Number

Versions

      1. G/L Post Version                             _____________
```

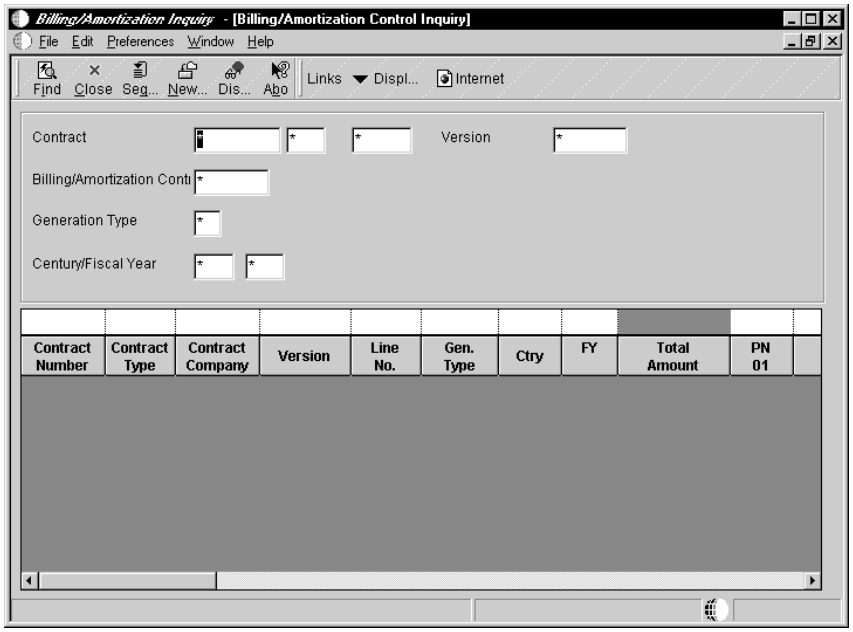
Reviewing Amortization Records

You can view the periods and amounts that have been billed and view the periods and amounts that have been amortized on a service contract. You can review whether a contract has been amortized for a specific processing period.

▶ To review amortization records

From the Periodic Service Contract Processing menu (G1724), choose Billing/Amortization Control Inquiry.

On Billing/Amortization Control Inquiry



Complete the following fields:

- Contract
- Contract Type
- Contract Company
- Generation Type

  Valid values for the Generation Type field for CSMS are as follows:

  - A – Recognized Domestic
  - B – Billed Domestic (Long)
  - C – Short Domestic

- D – Recognized Foreign
- E – Billed Foreign (Long)
- F – Short Foreign
- G – Credit Recognized Domestic
- H – Credit Domestic (Long)
- I – Credit Short Domestic
- J – Credit Recognized Foreign
- K – Credit Foreign (Long)
- L – Credit Short Foreign

Field	Explanation
Contract	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Contract Type	A user defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. J.D. Edwards has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.) The following document types are defined by J.D. Edwards and should not be changed: P Accounts Payable documents R Accounts Receivable documents T Payroll documents I Inventory documents O Purchase Order Processing documents J General Accounting/Joint Interest Billing documents S Sales Order Processing documents
Contract Company	A number that, along with order number and order type, uniquely identifies an order document (such as a purchase order, a contract, a sales order, and so on). If you use the Next Numbers by Company/Fiscal Year facility, the Automatic Next Numbers program (X0010) uses the order company to retrieve the correct next number for that company. If two or more order documents have the same order number and order type, the order company lets you locate the desired document. If you use the regular Next Numbers facility, the order company is not used to assign a next number. In this case, you probably would not use the order company to locate the document.

Reviewing Service Contract Reports

Review service contract reports to determine the status of your contracts, for example, to review if they are expiring soon and if you need to renew those that are expiring.

Reviewing service contract reports includes the following tasks:

- ❑ Reviewing the Service Contract report
- ❑ Reviewing the Service Contract Renewal report
- ❑ Reviewing the Detail Contract Renewal report

Reviewing the Service Contract Report

From the Periodic Service Contract Processing menu (G1724), choose Service Contract Report.

Run the Service Contract report to identify contracts to find out any information. You can set your data selection to define the type of report you need to review.

Processing Options for Contract Report

```
Print

      1. Enter a '1' to print detail.                    _____________
      If left blank, will only print
      header.
```

Reviewing the Service Contract Renewal Report

From the Periodic Service Contract Processing menu (G1724), choose Service Contract Renewal.

You can run the Service Contract Renewal report to identify contracts that require you to generate renewal contracts and letters. You can set up your processing options to include markup by percentage, to select the pricing to use for your renewal, and to set the lead time for contract expiration.

You can use this report to create a new contract or to advance the version number of the current contract if the renewal contract is to be a duplicate of the customer's existing contract.

Processing Options for Contract Renewal

Report Option

1. Renewal Options

Enter ’1’ to create a new contract. Enter ’2’ to advance contract change number. If blank, contract will not be renewed. _____

2. Pricing Options

Enter ’1’ to use existing prices. Enter ’2’ to use Advance Pricing. Enter ’3’ to markup by percentage. _____

Comment Text

Markup Percentage. _____
Example: enter 50 for 50% markup
3. P1720 Version _____
4. Enter Lead days for contract expiration. _____
5. Enter the contract renewal status code for old contract. _____
6. Enter the contract status for the renewal. _____

Process

1. Enter a ’1’ to have Final process. If left blank, Proof process will be used. _____

Defaults

1. Bill From Date:

1 = Calculate the Bill From Date based on old contract detail line. 2 = Calculate Bill From Date based on the 1st detail line of the contract. 3 = Set the Bill From Date the same as the contract detail line Start Date. 4 = Specify a Bill From Date. The default is 1 if blank. _____
If 4, specify the Bill From Date. If blank, current system date will be used. _____

2. Bill Through Date

1 = Calculate Bill Through Date based on old contract detail line. 2 = Calculate Bill Through Date based on the 1st detail line of the contract. 3 = Set the Bill Through Date to the contract detail line End Date. 4 = Specify a Bill Through Date. The _____

default is 1 if blank.
If 4, specify Bill Through Date. If blank, the Bill From Date will be used. _____

Base Warranty

Base Warranty Renewal Options. All of these entries will be applied to every Base Warranty that is renewed.

1. Enter 1 to renew Base Warranty contracts to billable contracts. If blank, Base Warranty Contracts will be omitted from the data selection. _____
2. Enter the company to be used for the renewed contract. If blank, the values from the P1721 version will be used. _____
3. Enter the contract document type. The value entered will be applied to both the header and detail lines. If blank, the value from the P1721 version will be used. _____
4. Enter the line type for the renewed contract details. If blank, the value from the P1721 version will be used. _____
5. Enter the contract status to be used for the renewed contract. If blank, the value from the Report Option tab will be used. _____
6. Enter the contract type. If blank, the value from the P1721 version will be used. _____
7. Enter Customer address number. _____
8. Enter the Site address number. _____
9. Enter the Bill To address number. _____
10. Enter the Send To address number. _____
11. Enter the number days in contract. _____
12. Enter the Adjustment Schedule for advanced pricing. _____
13. Enter the Billing Frequency Code. _____
14. Enter Billable Duration. _____
15. Enter the Non-billable Duration. _____
16. Enter the Billable/Non-billable duration Unit of Measure. _____

Reviewing the Detail Contract Renewal Report

From the Periodic Service Contract Processing menu (G1724), choose Detail Contract Renewal.

You can use this report to review detail line information for a contract. You can renew contract information by detail line as well as determine if new detail lines need to be added to the latest version of the contract.

Processing Options for Detail Contract Renewals

Process

1. Enter ’1’ to have Final process. If left blank, Proof will be process. _____
2. Renewal Options Enter ’1’ to create a new contract for these detail lines. Enter ’2’ to create a new version. Enter ’3’ to add new lines to contract being renewed. Enter ’4’ to add detail lines to the last version for the contract being renewed. Enter ’5’ to add detail lines to a specific contract number and version number. _____
3. Enter contract number if renewing to a specific contract number. _____
4. Enter version number if renewing to a specific contract number. _____
5. Pricing Options Enter ’1’ to use existing prices. Enter ’2’ to use advance pricing. Enter ’3’ to markup by percentage. _____
6. Enter Markup Percentage. Example: enter 50 for 50% markup. _____
7. P1720 Version _____
8. Enter contract status for renewing contract. _____
9. Enter contract status for the renewal. _____
10. Enter calculate Bill From option. Enter ’1’ to calculate based on renewing old contract detail line. Enter ’2’ to calculate based on the first detail line on old contract. Enter ’3’ equals new contract start date. Enter ’4’ to enter a date. _____
Enter Bill From date if ’4’ is on above. _____
11. Enter calculate Bill Through option. Enter ’1’ to calculate based on renewing old contract detail. Enter ’2’ to calculate based on the first detail line on old contract. Enter ’3’ equals new contract end date. Enter ’4’ to enter a date. _____
Enter Bill Through date if ’4’ is on above. _____
12. Enter the Billing Frequency Code: _____
13. Deleted Contract Status Code. _____

Service Order Management

Service Order Management

For customer requests that cannot be resolved with a phone call, you can create a service order. You enter service orders to request work to be performed at the customer site or at a repair depot. Service orders provide the central database for all service and repair information and the events associated with an equipment record, inventory item number, or product model. Service orders track requests for depot repairs and track shipments of replacement parts. The majority of service calls are initiated through the Call Management module, but the repair depot might also create them.

A service order allows you to track all phases of the work necessary to resolve the customer's issue, from scheduling the technician, to the technician's arrival and successful completion of the work.

You can also use service orders to manage the work flow of your service tasks and other projects. You can manage all aspects of a service task or project, including the following:

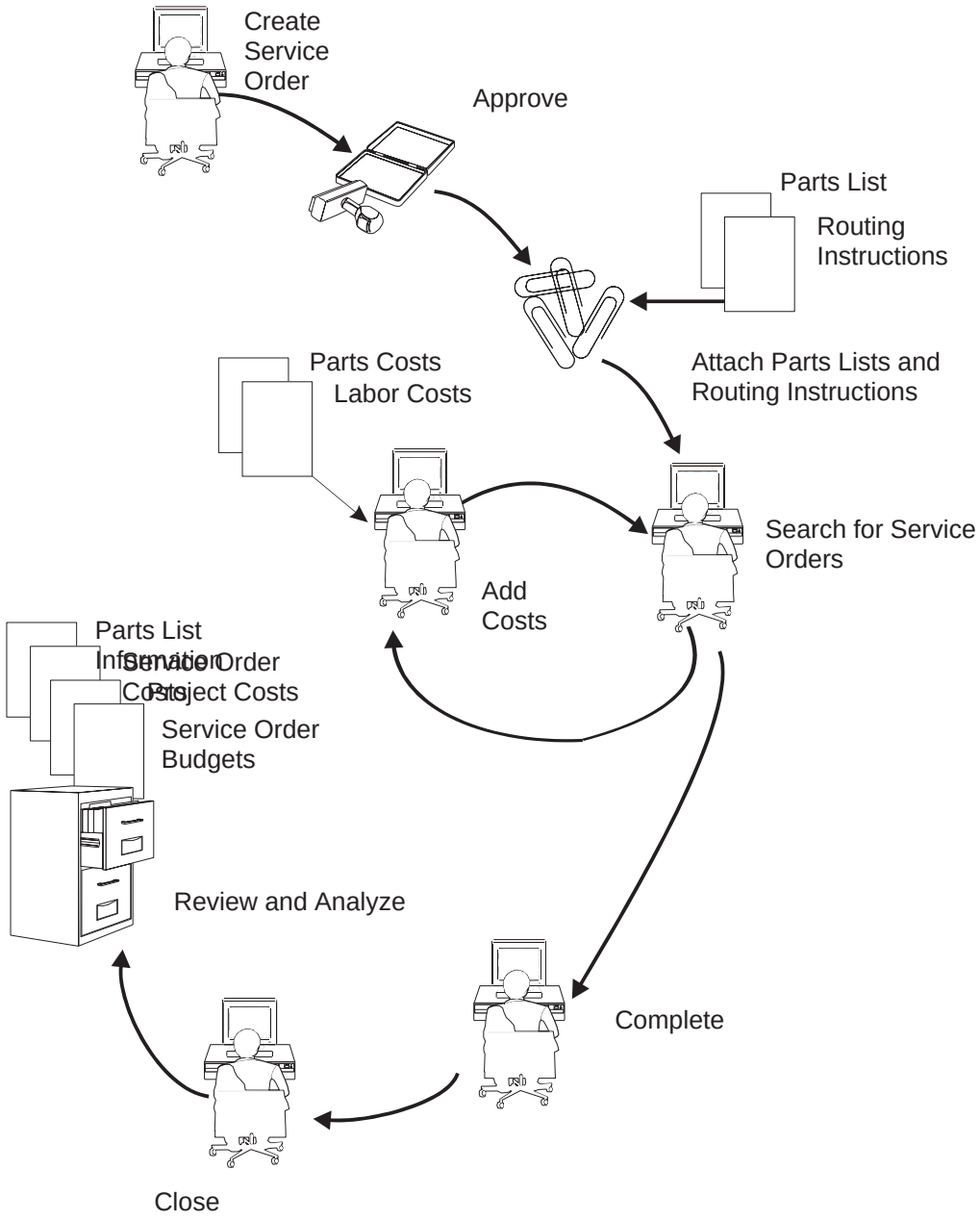
- Creating service orders for preventive and corrective maintenance
- Committing inventory to a service order
- Scheduling multiple tasks, such as mechanical, electrical, and so on, to a service order
- Tracking the progress of a service order by status
- Tracking service order costs, such as labor, materials, and so on
- Recording unlimited detailed information about a service order
- Completing and closing a service order

Service Order Management includes the following tasks:

- ❑ Setting up Service Order Management
- ❑ Working with service orders
- ❑ Processing service orders
- ❑ Billing service orders

Service Order Management Process Flow

The following graphic illustrates the flow of a service order through a typical service order life cycle.



Terms and Concepts

The following Service Order Management terms and concepts are used in this guide:

Base warranty	The warranty that is associated with the equipment. Base warranties are typically included in the purchase price of the equipment.
Extended warranty	An optional warranty that can be purchased to cover the performance of the equipment over and above the criteria set forth in the base warranty.
Equipment number	A number to identify a piece of equipment within the Equipment Master table (F1201).
Inventory item number	A number to identify an item within the Inventory Master table (F4101).
Mean Time Between Failure (MTBF)	The average time, distance, or events between breakdowns.
Mean Time to Repair	The average time it takes to repair a failed item.
Model	The numbers or letters that group products of a product family.
Product family	A group of products that have common characteristics and that share classification criteria.
Returned Material Authorization (RMA)	An authorization from the supplier for the customer to return inventory for credit, replacement, or repair. The system creates an authorization number for the supplier to track the return of the inventory. This is also known as Returned Goods Authorization (RGA).
Serial number	The numbers or letters that uniquely identify an item. The serial number is stored in the Equipment Master table (F1201).
Service package	The combination of service type and contract coverage that specifies the service support to which the customer is contractually entitled. Service packages also specify warranty types, such as base or extended.

Service types	The various services that you provide through the Service Order Management module, for example, you can set up different codes to differentiate an on-site repair or depot repair on an advanced exchange. The service type can differentiate the status flow, response time, and downstream accounting entries.
Service address number	The address book number of the site where a piece of equipment is located. The site number can be the same as the customer number, but might differ if the customer has multiple sites.
Warranty	An assurance by the manufacturer or seller that the equipment will perform as specified for at least a specified time.

Setting Up Service Order Management

Before you can use any of the features of Service Order Management, you need to define the critical information that the system needs for processing. You also specify the information you will use when you enter data throughout the system.

Setting up Service Order Management includes the following tasks:

- ❑ Setting up service order constants
- ❑ Setting up service order history
- ❑ Attaching activity rules to a service order

You also need to set up user defined codes for Service Order Management. See *Setting Up User Defined Codes* for more information.

Before You Begin

- ❑ Set up service order document types in the Document Type Maintenance table. See *Setting Up Document Type Information* in the *Inventory Management Guide*. For each document type, enter 1 in the Service Order field. The system uses this for splitting billing and costing amounts to different accounts based on the service contract.

Setting Up Service Order Constants

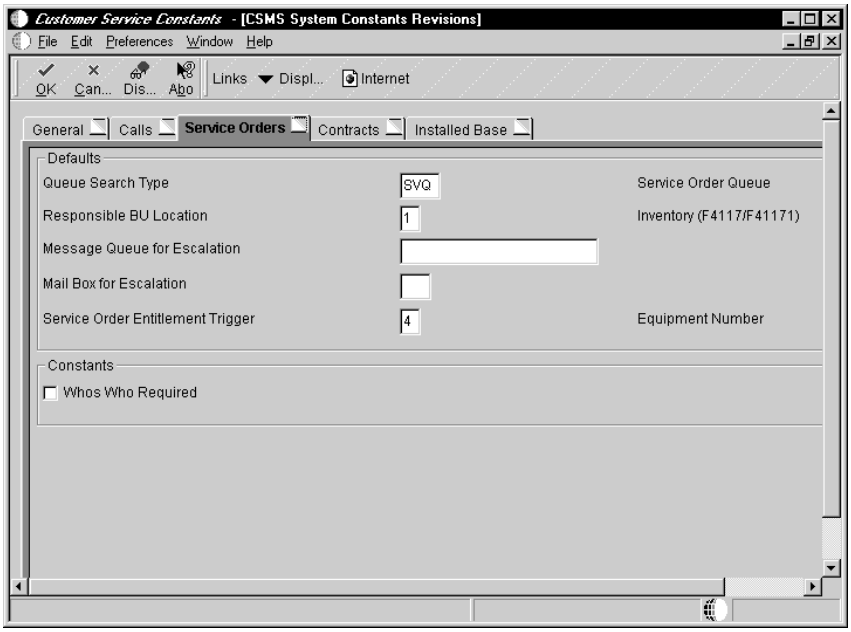
To define default information that applies to your entire system, you set up system constants. Constants control the types of information that you track and the rules that the system uses to perform certain calculations.

▶ To set up service order constants

From the Customer Service Setup menu (G1740), choose Customer Service Constants.

On CSMS Constants Revisions

1. Click the Service Orders tab.



2. If applicable, make changes to the following field:

   - Responsible BU Location

   When adding a service order, the business unit defaults based on the constant value. For example, if the business unit defaults based on the equipment number, the system retrieves the value for the Responsible Business Unit from the Equipment Master table.

3. To indicate the field that is used to trigger a service order entitlement check, complete the following field:

   - Service Order Entitlement Trigger

4. To indicate that the caller name must have a Who's Who record associated with the customer number, click the following option:

   - Whos Who Required

   You must select a customer number from the window. The system returns the short identifier that is associated with the Who's Who record.

Field	Explanation
Responsible BU Location	This field indicates from which program the system retrieves the Responsible Business Unit to use for billing service orders. Valid values are: 1 Inventory Item Number (F4117 and F41171) 2 Product Family/Model (F1790) 3 Equipment Number (F1201) 4 Customer Number (F0101) 5 CSMS Line Type (F1793) The default value is 1.
Service Order Entitlement Trigger	A user defined code (17/ET) that indicates what field should trigger entitlement checking when entering a CSMS service order.

Setting Up Service Order History

From the Service Order Setup menu (G1742), choose Service Order History – Equipment or choose Service Order History – Customer.

Set up service order history to track service order status information by customer and by equipment. You can also set up service order history so a duplicate is not created. These programs control the display of icons within the Service Order Entry program to indicate previous customer or product calls.

Default dates and status codes are defined by processing options. You can override default information by entering new dates and statuses. When you set processing options, you can enter different statuses and dates to limit the type of history information you want to review.

Icons appear at the top of the review history forms to alert you to existing customer or product history. Click the icons to see detailed information.

Processing Options for Work With Service Order History

```
Status

      1. Enter the beggining status for                _____________
      Service Order History.
      2. Enter the ending status for                   _____________
      Service Order History.

Time

      1. Enter the number of days of                   _____________
      Service Order History to display.
```

What You Should Know About Processing Options

Displaying an icon to indicate previous service orders associated with a piece of equipment or a customer

The values you enter determine whether the system displays an icon when there are existing service orders associated with the inventory item number, product model, equipment number, or customer number, if applicable.

You must first enter the status of the service orders that define the selection range criteria. Then define the number of days of history you want to display. For example, if you enter 30 days, the program displays the product or customer icon if a service order falls within the status range and was entered 30 days less than the system date.

Attaching Activity Rules to a Service Order

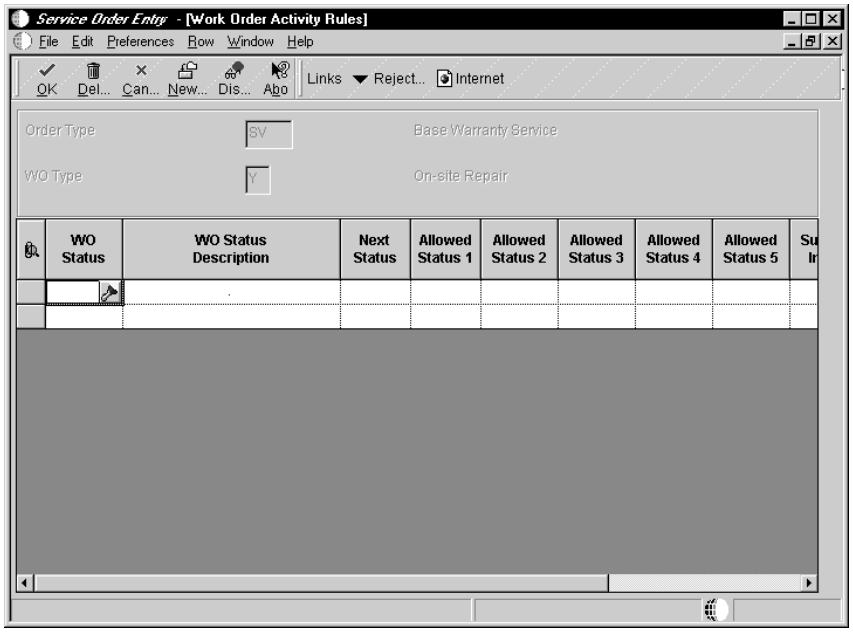
You can attach service order status activity rules to define the status flow and to indicate the next step as determined by the status. In order for the system to continue to the next step, you must enter the next status in the Next Status field. If you do not include the next status, the service order is considered complete. If you attach an open status code to the complete status revisions line, you can reopen the service order.

▶ To attach activity rules to a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

1. Locate the service order to which you are attaching activity rules and click Select.
2. On Service Work Order Revisions, choose Service Order from the Form menu, and choose Activity Rules.



3. On Work Order Activity Rules, complete the following fields:
   - WO Status
   - WO Status Description
   - Next Status
4. Complete any of the following fields, as applicable:
   - Allowed Status 1
   - Allowed Status 2
   - Allowed Status 3
   - Allowed Status 4
   - Allowed Status 5
   - Maint Status
   - Subledger Inactive
   - Lock Flag

Field	Explanation
WO Status	A user defined code (00/SS) that describes the status of a work order or engineering change order. Any status change from 90 thru 99 automatically updates the date completed.
WO Status Description	A user defined name or remark.

Field	Explanation
Next Status	The next status for a work order, according to the work order activity rules, as the work order flows through the chain of approval. You must define a status code as a work order status in the Work Order Activity Rules table before you can use it as a next status.
Allowed Status 1	This is an optional field that indicates a status that can be performed as the next step in the order process. Although this is not the preferred or expected next step, this field is an allowed override. The system does not allow you to initiate an order line step or status not defined as either the expected next status or an allowed status. Other allowed status codes let you bypass processing steps. In processing options, these codes are often referred to as override next status codes. You must define a status code as a work order status in the Work Order Activity Rules table before you can use it as a next status or another allowed status.
Maint Status	A user defined code (12/MS) that indicates the maintenance status of a piece of equipment, such as 50 for maintenance due or 60 for waiting for parts. Note: Status code 98 is reserved for canceled maintenance. Status code 99 is reserved for completed maintenance. Status code 01, the default, is reserved for initial maintenance setup.
Subledger Inactive	A code in WorldSoftware, or an option in OneWorld, that indicates whether a specific subledger is active or inactive. Any value other than blank indicates that a subledger is inactive. Examples are jobs that are closed, employees that have been terminated, or assets that have been disposed. If a subledger becomes active again, set this field back to blank. If you want to use subledger information in the tables for reports but want to prevent transactions from posting to the master record, enter a value other than blank in this field.
Lock Flag	A code that determines whether a work order can be changed at a particular status. The lock applies to records in both the Work Order Master table (F4801) and the Work Order Instruction table (F4802). Values are: blank Do not lock the work order. 1 Lock the work order. 2 Lock the work order with a completion date. 3 Do not lock the work order with a completion date. 4 Lock the work order with a parts list and routing. 5 Lock the work order with a completion date, parts list, and routing. 6 Lock the document type and the work order type.

Working with Service Orders

You can enter a service order to formally request repair work and schedule maintenance. You can also use service orders to record and communicate all details related to the repair task.

You must create a service order master for every service that you track. The service order master consists of basic information that defines the service order, such as the service order number, description, and the business unit to which the service order is charged. You can also enter additional information, such as category codes, to further identify the service order.

In addition, you can copy parts from a standard parts list or assign non-standard parts to a service order. You can also assign detailed labor routing instructions to a service order. You can perform the following steps:

- Identify each work center needed to perform repair tasks
- Specify the sequence in which the tasks are performed
- Indicate the estimated duration of each task

You can delete any service order from the system unless it has any of the following characteristics:

- It is used as a parent work order
- It has any account ledger transactions associated with it
- It has a parts list or a routing attached

Working with service orders includes the following tasks:

- ❑ Entering a service order
- ❑ Assigning parts to a service order
- ❑ Exchanging a piece of equipment
- ❑ Attaching service instructions
- ❑ Updating the life cycle information of a service order
- ❑ Reviewing the status history of a service order
- ❑ Reviewing service order parts lists

- ❑ Reviewing costs by parent service order
- ❑ Printing service orders
- ❑ Creating service order prepayment transactions

Entering a Service Order

If an issue cannot be resolved by a consultant using the Call Management system in combination with the Knowledge Management system, you can enter a service order.

You enter a service order under the following circumstances:

- You need to bill for the parts and/or labor required to fix a piece of equipment
- You need to send a technician to the site to repair the problem
- You use a service provider to resolve the problem and you need to create a voucher for payment

You can use processing options to set the default values for several fields, such as address book fields and category code fields if you defined those fields during system setup. You can also retrieve numerous default values from a parent service order. For example, you can use values from a parent service order to retrieve the following information:

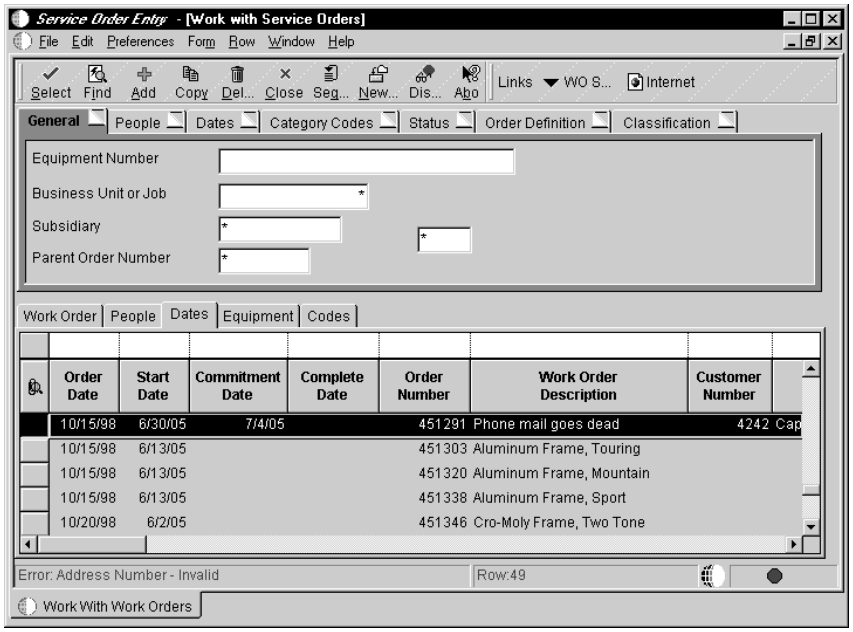
- Service type
- Start date
- Planned completion date

When you enter a service order, the system creates a record in the Work Order Master table (F4801) and creates an extension table to store information that is pertinent only to CSMS service orders, the Service Order Extension table (F4817).

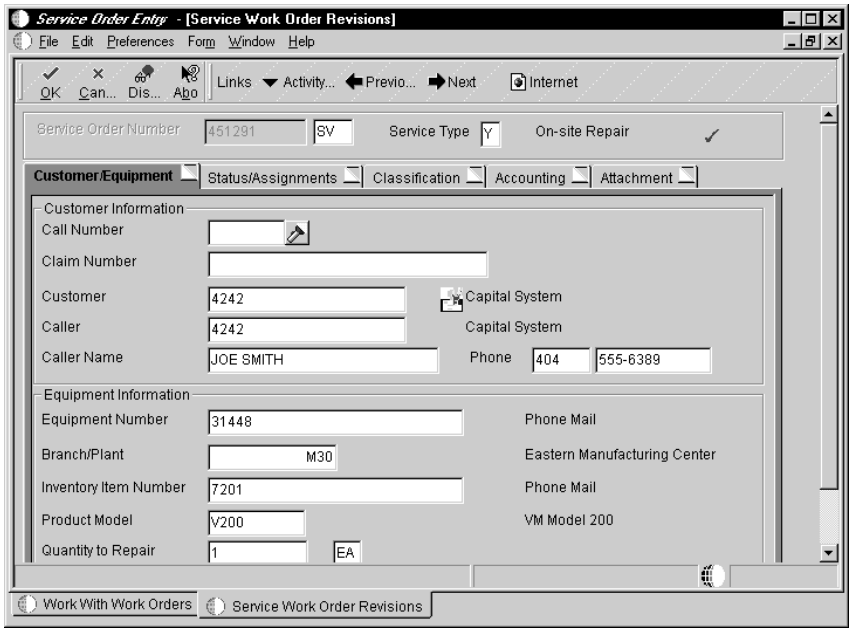
▶ To enter a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders



1. Click Add.



2. On Service Work Order Revisions, complete the following field:

   - Equipment Number

   Depending on installed base constants you set up on the CSMS System Constants Revisions form, the system displays an equipment number, unit number, or serial number description. Based on this number, the system supplies customer and equipment information from the installed base record.

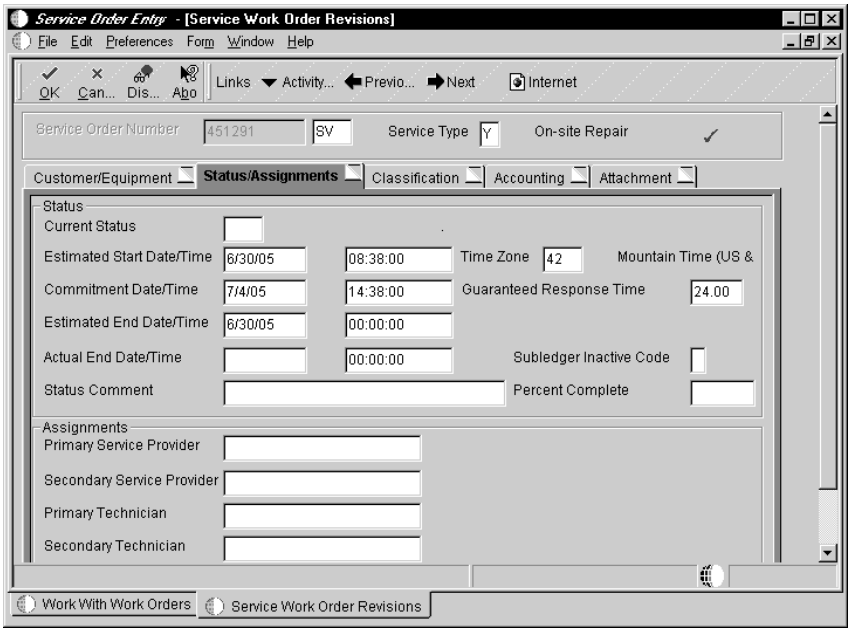
If you are accessing this form from the Call Management module, the system enters information from the call as the default. The system also checks entitlement for the customer.

3. Complete the following field:

   - Symptoms

   A processing option defines the default value for this field. If you have not set up your processing options to retrieve this value from the call, you must enter a value.

4. Click the Status/Assignments tab.



5. Complete the following fields:

   - Current Status
   - Estimated Start Date/Time
   - Time Zone
   - Estimated End Date/Time

   If the customer is entitled, the system calculates the commit date and time based on the entitlement check process.

6. Complete the following optional fields:

   - Status Comment
   - Percent Complete
   - Primary Service Provider

- Secondary Service Provider

  The system retrieves the primary service provider from the address book.

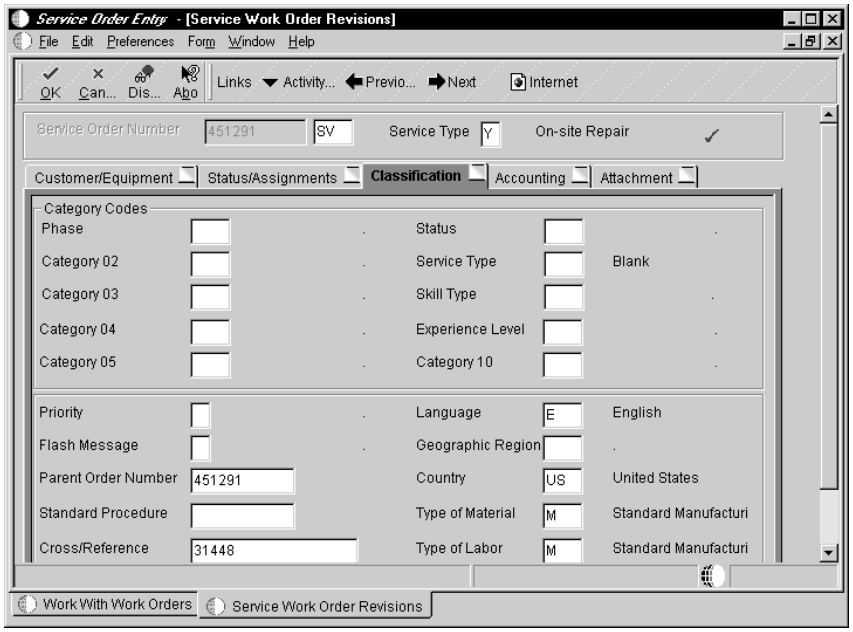
- Primary Technician
- Secondary Technician
- Site Number

7. Complete the following fields when the service order is complete:

   - Actual End Date/Time

   The value for the Actual End Date field defaults to today's date if the status of the service order is at a complete status.

8. Click the Classification tab.



9. Complete the following required field:

   - Short Description

10. Complete the following optional fields:

    - Phase
    - Category 02
    - Category 03
    - Category 04
    - Category 05
    - Status

- Service Type
- Skill Type
- Experience Level
- Category 10
- Priority
- Flash Message
- Language
- Geographic Region
- Country
- Type of Material
- Type of Labor

  The system attaches a bill of material and routing to a service order based on the Type of Material and Type of Labor fields.

The system retrieves the information for the Language, Geographic Region, and Country fields based on the customer record.

11. To associate a parent service order to a child service order, complete the following field:

    - Parent Order Number

    The system does not automatically update information between parent and child service orders.

12. To associate standard instructional information to the service order, complete the following field:

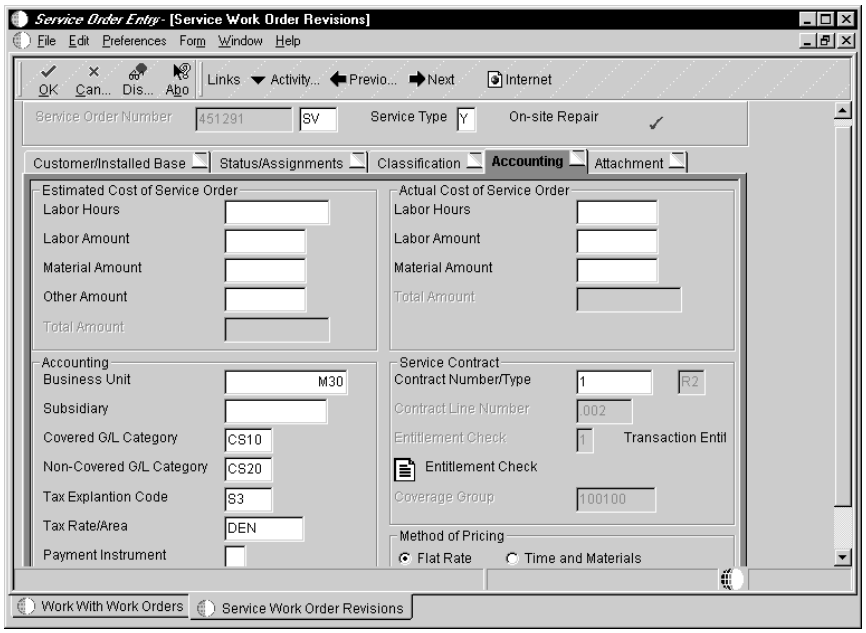
    - Standard Procedure

13. To set up a cross reference between this service order another service order, complete the following field:

    - Cross/Reference

    This is a text only field, but you can use the information as search criteria on Work with Service Orders.

14. Click the Accounting tab.



15. To track estimated costs and actual costs against this service order, complete the following fields:

    - Labor Hours
    - Labor Amount
    - Material Amount
    - Other Amount

    If you associate routings to a service order, you cannot enter values in the Labor Hours and Labor Amount fields. If you associate a parts list to a service order, you cannot enter a value in the Material Amount field. The system updates the cost to the service order header.

16. To override the unit responsible for costs and revenue, complete the following field:

    - Business Unit

    The system enters the default value for this field from the equipment number, inventory item number, or customer number records based on CSMS constants.

17. Enter other accounting information as applicable by completing the following fields:

    - Subsidiary
    - Covered G/L Category
    - Non–Covered G/L Category

The values for the Covered G/L Category and Non-Covered G/L Category fields default from the service contract's service package based on the type of service on the service order.

18. Click one of the following options to define the method of pricing:

    - Flat Rate

      If you use flat rate as the pricing method, you must associate one labor step with the service order.

    - Time and Materials

      If you use time and materials to price, both parts and labor will be priced.

    The values for the Flat Rate and Time and Materials fields default from the service contract's service package based on the type of service on the service order.

    The system retrieves Tax Rate/Area information based on the Service Address Number. Tax Rate/Area information is based on where the work is completed not the location of the customer.

19. To associate the service order with a contract, complete the following field:

    - Contract Number/Type

    The system supplies service contract values if the system is set up to check entitlements and the contract is valid.

20. Click the Attachments form.
21. If applicable, add attachments to the service order.
22. Click OK.

    The system uses next numbers to assign a service order number unless you override the information.

Field	Explanation
Equipment Number	A value for an installed base item that can be either the equipment number, the unit number, or the serial number. The Fixed Assets Constants define what symbol is used to identify each of the three types of values.
Symptoms	A description of the customer issue.
Current Status	A user defined code (00/SS) that describes the status of a work order or engineering change order. Any status change from 90 thru 99 automatically updates the date completed.

Field	Explanation
Estimated Start Date/Time	This is a start date that you enter. The date defaults from the system date or the date you enter.
Time Zone	Choose the time zone for which you want to view the date and time.
Estimated End Date/Time	The date that an item is to arrive or that an action is to be complete.
Status Comment	A brief description to explain the status of the work order.
Percent Complete	A measurement that identifies the progress being made on an item such as an account, work order, and so on. It is not always a calculated field and may need to be updated manually.
Primary Service Provider	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Secondary Service Provider	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Primary Technician	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Secondary Technician	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Actual End Date/Time	The date that the work order or engineering change order is completed or canceled.
Phase	A user defined code (00/W1) that indicates the current stage or phase of development for a work order. You can assign a work order to only one phase code at a time. Note: Certain forms contain a processing option that allows you to enter a default value for this field. If you enter a default value on a form for which you have set this processing option, the system displays the value in the appropriate fields on any work orders that you create. The system also displays the value on the Project Setup form. You can either accept or override the default value.

Field	Explanation
Category 02	A user defined code (00/W2) that indicates the type or category of a work order. Note: A processing option for some forms lets you enter a default value for this field. The value then displays automatically in the appropriate fields on any work orders that you create on those forms and on the Project Setup form. You can either accept or override the default value.
Category 03	A user defined code (00/W3) that indicates the type or category of the work order. Note: A processing option for some forms lets you enter a default value for this field. The value then displays automatically in the appropriate fields on any work orders that you create on those forms and on the Project Setup form. You can either accept or override the default value.
Category 04	A user defined code (00/W4) that indicates the type or category of the work order.
Category 05	A user defined code (00/W5) that indicates the type or category of the work order.
Status	A user defined code (00/W6) that indicates the status of the work order.
Service Type	A user defined code (00/W7) that indicates the service type for the work order.
Skill Type	A user defined code (00/W8) that indicates the type or category of the work order.
Experience Level	A user defined code (00/W9) that indicates the type or category of the work order.
Category 10	A user defined code (00/W0) that indicates the type or category of the work order.
Priority	A user defined code (00/PR) that indicates the relative priority of a work order or engineering change order in relation to other orders. A processing option for some forms lets you enter a default value for this field. The value then displays automatically in the appropriate fields on any work order you create on those forms and on the Project Setup form. You can either accept or override the default value.
Flash Message	A user defined code (00/WM) that indicates a change in the status of a work order. The system indicates a changed work order with an asterisk in the appropriate report or inquiry form field. The system highlights the flash message in the Description field of the work order.
Short Description	A user defined name or remark.

Field	Explanation
Language	A user defined code (01/LP) that specifies a language to use in forms and printed reports. Before any translations can become effective, a language code must exist at either the system level or in your user preferences.
Geographic Region	The geographic region of the customer.
Country	A user defined code (00/CN) that identifies a country. The country code has no effect on currency conversion. The Address Book system uses the country code for data selection and address formatting.
Type of Material	A user defined code (40/TB) that designates the type of bill of material. You can define different types of bills of material for different uses. For example: M Standard manufacturing bill RWK Rework bill SPR Spare parts bill The system enters bill type M in the work order header when you create a work order, unless you specify another bill type. The system reads the bill type code on the work order header to know which bill of material to use to create the work order parts list. MRP uses the bill type code to identify the bill of material to use when it attaches MRP messages. Batch bills of material must be type M for shop floor management, product costing, and MRP processing.
Type of Labor	A user defined code (40/TR) that indicates the type of routing. You can define different types of routing instructions for different uses. For example: M Standard Manufacturing Routing RWK Rework Routing RSH Rush Routing You define the routing type on the work order header. The system then uses the specific type of routing that you define in the work order routing. Product Costing and Capacity Planning systems use only M type routings.
Parent Order Number	A number that identifies the parent work order. You can use this number to do the following: • Enter default values for new work orders, such as Type, Priority, Status, and Manager • Group work orders for project setup and reporting
Standard Procedure	A generic rates and message code (48/SN) that is assigned to a standard note, message, or general narrative explanation. You can use this code to add instructional information to a work order. You set up codes for this field on Standard Description.

Field	Explanation
Cross/Reference	An alphanumeric value used as a cross-reference or secondary reference number. Typically, this is the customer number, supplier number, or job number.
Labor Hours	The estimated hours that are budgeted for this work order.
Labor Amount	This is the estimated labor cost of a work order.
Material Amount	This is the estimated material cost of a work order.
Business Unit	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Subsidiary	A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account.
Covered G/L Category	A user defined code (41/9) that identifies the G/L Offset to use when the system is searching for the account to which it will post the covered portion (by warranty or contract) of the accounting transaction. If you do not want to specify a G/L Offset, you can enter four asterisks (****) in this field or you can leave this field blank. If you leave this field blank, the system uses the G/L Offset from Inventory.
Non–Covered G/L Category	A user defined code (41/9) that identifies the G/L Offset to use when the system is searching for the account to which it will post the non-covered portion of the accounting transaction. If you do not want to specify a G/L Offset, you can enter **** (four asterisks) in this field or you can leave this field blank. If you leave the field blank, the system uses the G/L Offset from Inventory.

Field	Explanation
Flat Rate	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
Time and Materials	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
Contract Number/Type	A number that identifies the original document, such as a voucher, invoice, unapplied cash, journal entry, and so on. On entry forms, you can assign the original document number or let the system assign it through Next Numbers. Matching document (DOCM) numbers identify related documents in the Accounts Receivable and Accounts Payable systems. Examples: • Automated/Manual Payment Original document – Voucher Matching document – Payment • A/R Original Invoice Original document – Invoice • Receipt Application Original document – Invoice Matching document – Receipt • Credit Memo/Adjustment Original document – Invoice Matching document – Credit Memo • Unapplied Receipt Original document – Receipt

Processing Options for Work with Service Orders

Defaults 1

Enter the Default Category Codes to be used to Search for Work Orders

1. Phase _____
2. Category Code 02 _____
3. Category Code 03 _____
4. Category Code 04 _____
5. Category Code 05 _____
6. Category Code 06 _____
7. Category Code 07 _____
8. Category Code 08 _____
9. Category Code 09 _____
10. Category Code 10 _____

Defaults 2

Enter the Default Values to be used to Search for Work Orders.

1. From Status Code W.O. _____
2. Thru Status Code W.O. _____
3. Type – W.O. _____
4. Document Type _____

Defaults 3

Enter the default address book numbers to be used to search for work orders.

1. Job or Business Unit _____
2. Originator _____
3. Customer _____
4. Planner _____
5. Supervisor _____

Versions

Enter the version of the following applications to call. Leave blank to use the default version defined in parentheses.

1. Work Order Print. (XJDE0001) _____
2. Completed PM. (ZJDE0001) _____
3. Parts List. (ZJDE0001) _____
4. Routing Instructions. (ZJDE0001) _____
5. Inventory Issues. (ZJDE0002) _____
6. Time Entry. (ZJDE0002) _____
7. Returned Material Authorization. (ZJDE0001) (CSMS Only) _____

WO Entry

1. Choose the work order entry program to call when adding or selecting a work order. This _____

```
      entry program will also decide
      which UBE will be called for
      printing.        ’1’    -
      Equipment Work Orders (P48011)
      ’2’    –  Service Work Orders
      (P17714)      ’3’    –  Project
      Task Details       (P48014)
      2. Enter the version of  the                    _____________
      selected work order entry to call.
      Leave blank to use default version
      defined in parentheses.
      Work Order Entry (ZJDE0001)

Process

      1. Enter a ’1’ to highlight the                 _____________
      priority field within the grid.
      Leave blank to not highlight.
```

What You Should Know About Processing Options

Setting up a default document type	On the Defaults 2 tab, you can enter the document type you want the system to use for service orders. This document type will be overridden if the service order is entitled by a contract.
Searching for service orders by originator	On the Defaults 3 tab, enter an address book number in the Originator field. The system uses this address book number to search for service orders entered by a user. To display all service orders when you click Find on Work with Service Orders, enter 0 in this field.

Processing options for Service Order Revisions are found in the Interactive Versions P17714.

Processing Options for Service Order Revisions

```
Defaults

Enter default values for the following:

      1. Service Order Document Type                  _____________
      2. Service Order Type                           _____________
      3. Service Order Priority                       _____________
      4. Customer                                     _____________
      5. Primary Service Provider                     _____________
      6. Secondary Service Provider                   _____________
      7. Primary Technician                           _____________
      8. Secondary Technician                         _____________
      9. Parts List                                   _____________
      10. Routing Type                                _____________
      11.  Enter the following to select              _____________
      a default value for the Symptoms
      field:
      ’1’  Default Service Type
      description
```

’2’ Default Entitlement description
’3’ Default Method of Pricing
’ ’ No Default

Edits

Enter a ’1’ to accomplish the following for items 1 and 2:

1. Require the entry of equipment number. _____
2. Require the entry of customer number. _____
3. Enter one of the following for date edits. ’ ’ accept all dates entered; ’1’ provide a warning for date errors; ’2’ provide a hard error for date errors. _____
4. Enter a ’1’ to require the entry of caller number. _____
5. Enter a ’1’ to prevent the update of pricing method. _____
6. Enter a ’1’ to require the entry of the area code and phone number. _____
7. Enter the version of the “Work With Service Order History” (P17715) to define parameters that prevent the addition of a duplicate service order for an equipment number. _____

Process

Enter a ’1’ to accomplish the following for items 1, 2 && 3:

1. Default the Primary Service Provider and Secondary Service Provider based on category codes 1,2,&&3. _____
2. Default the standard parts from the equipment. _____
3. Automatically recalculate the start and requested dates for the parts list and routings. _____
4. Enter the approval type to be used in the Service Order Approval process. _____
5. Enter the value for the service order cross reference from the following: ’ ’ – Equipment’s immediate parent; ’1’ - Equipment’s top level parent; ’2’ – value from parent service order. _____
6. Enter a ’1’ to check entitlement using the date table (F1791). Enter a ’2’ to check entitlement without the date table. If left blank, no entitlement checking will be performed. _____
7. Enter a ’1’ to enter a _____

Knowledge Base Symptom when adding a Service Order.

8. Enter a '1' to display the Entitlement Inquiry following the entitlement check. _____

9. Enter a '1' to create routing labor instructions when adding a service order. _____

10. Enter a '1' to display Who's Who Search and Select when the Customer is exited and when the Caller Name is blank. _____

Process 2

1. Enter a '1' to prompt the user to change the customer number associated with Installed Base if inconsistent with customer referenced on service order. Enter a '2' to automatically update installed base. Leave blank to provide no editing against Installed Base. _____

2. Enter a '1' to prompt the user to change the site number associated with Installed Base if inconsistent with customer referenced on service order. Enter a '2' to automatically update installed base. Leave blank to provide no editing against Installed Base. _____

Versions

Enter the version to call for the following applications. If left blank, the version in parentheses will be the default value.

1. Service Order Parts List P3111 (ZJDE0001) _____

2. Service Order Labor Instructions P3112 (ZJDE0001) _____

3. Service Order Status History P1307 (ZJDE0002) _____

4. Product Repair History P17715 (ZJDE0001) _____

5. Customer Repair History P17715 (ZJDE0002) _____

6. Equipment Repair History P17715 (ZJDE0003) _____

7. Inventory Issues P31113 (ZJDE0002) _____

8. Work With Returned Material Authorization P40051 (ZJDE0001) _____

9. Return Material Authorization Revisions P400511 (ZJDE0001) _____

10. Work With Contracts P1720 (ZJDE0001) _____

11. Work With Routing Master _____
P3003 (ZJDE0001)
12. Bill of Material Revisions _____
P3002 (ZJDE0001)
13.Service Provider Address Book _____
P01012 (ZJDE0001)
14. Knowledge Base Symptoms, _____
Analysis,
Resolution
P17764 (ZJDE0001)
15. Installed Base Revisions _____
P1702 (ZJDE0001)
16. Equipment PM Schedule _____
P1207 (ZJDE0001)
17. Equipment Status History _____
P1307 (ZJDE0001)
18. Credit Check _____
P42050 (ZJDE0001)
19. Quick Customer/Contact Add _____
P01015 (ZJDE0001)
20 Customer Address Book _____
P01012 (ZJDE0001)
21. Call Entry – Customer _____
P17501 (ZJDE0001)
22. Call Entry – Caller _____
P17501 (ZJDE0001)

Category Codes

Enter default Category Code values for the following:

1. Category Code 1 _____
2. Category Code 2 _____
3. Category Code 3 _____
4. Category Code 4 _____
5. Category Code 5 _____
6. Category Code 6 _____
7. Category Code 7 _____
8. Category Code 8 _____
9. Category Code 9 _____
10. Category Code 10 _____

Prepayment

1. Prepayment Processing _____

Blank = Prepayment Processing files will not be updated and the form exit to the Prepayment Window will be protected.
'1' = Prepayment files will be updated and Prepayment Window will be activated.
2. Process Authorization _____

Blank = Authorization will not be processed.
'1' = Authorization will be processed interactively.
'2' = Authoization will be processed in batch or subsystem mode, based on the version.
3. Process Settlement _____

```
        Blank = Settlement will not be
        processed.
        '1' = Settlement will be processed
        interactively.
        '2' = Settlement will be processed
        in batch or sybsystem mode, based
        on the version.
        4. Authorize Prepayment                    _____________
        Transaction version
        5. Settle Prepayment Transaction           _____________
        version

6. Enter a Next Status Override code for
    (Future)

        Authorized                                 _____________
        Settled                                    _____________
```

Assigning Parts to a Service Order

You can assign parts to a service order to satisfy parts requirements for repair tasks. Depending on how you set up your system, you can indicate how and when the system commits inventory to satisfy a service order's parts requirements. For example, you can use Workflow Management to direct the system to commit inventory to a service order only at a particular service order status.

You can assign inventory parts when you are creating a service order for an unanticipated emergency repair. You can also assign parts for which you do not maintain an inventory master, such as order parts for which you rarely have a need. All parts inventory information applicable to a service order appears on Service Order Parts List.

You can assign a parts list to a service order using the following methods:

- Copy an existing parts list
- Manually assign a parts list

Before You Begin

❑ Verify that you have purchased and installed the following systems. You must have installed these systems to be able to use parts lists for service orders:

- System 30: Product Data Management
- System 31: Shop Floor Management
- System 40: Inventory Base and Order Processing
- System 41: Inventory Management
- System 43: Procurement

❑ Set up substitute parts through the Inventory Cross Reference program. See *Setting Up Item Cross-References* in the *Inventory Management Guide* for more information about assigning inventory cross-references.

▶ To copy an existing parts list

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

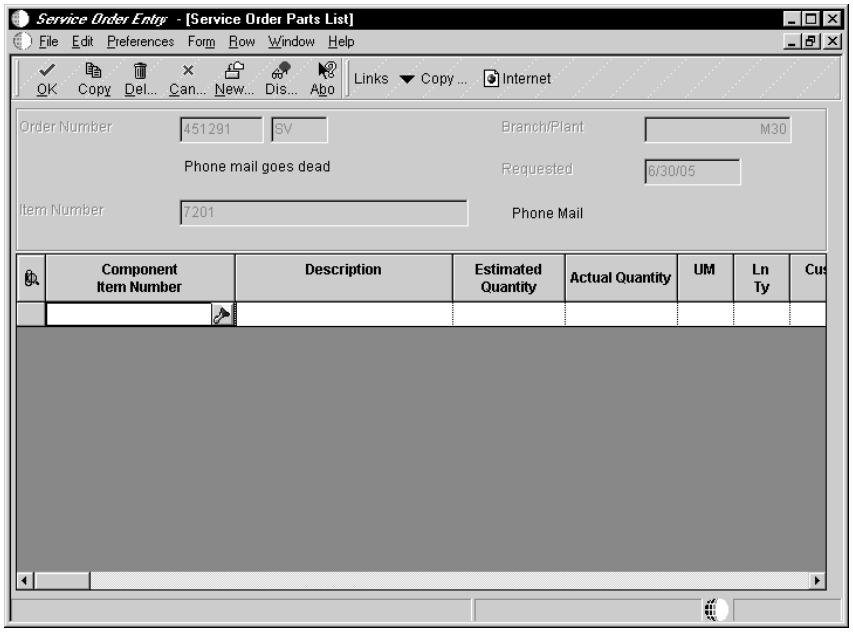
1. In the Query by Example row, complete the following field and click Find:
   - Order Number
2. Choose the record and then choose Parts List from the Row menu.
3. On Service Order Parts List, choose Copy BOM from the Form menu.
4. On Copy Screen, click OK to copy the bill of material for the displayed item and branch/plant to the service order parts list.
5. On Service Order Parts List, make any necessary changes to the parts list and click OK.

▶ To manually assign a parts list

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

1. Locate the service order to which you want to attach a parts list.
2. Choose the record and choose Parts List from the Row menu.



3. On Service Order Parts List, choose the applicable component to attach to the service order and click OK.
4. To override the billing adjustment schedule, complete the following field:
   - Bill Adj Schedule

   The system retrieves the value for this field from the extension table to the address book that contains CSMS-Address Book Information table (F1797).
5. To determine if the customer is entitled, review the following field:
   - Entitlement Check

   A value of 1 indicates that the customer is entitled.

   The system retrieves the value for the Entitlement Check field from the Service Order Master Extension table (F4817).
6. To review coverage information for entitled customers, review the following fields:
   - Coverage Group
   - Percentage Covered
7. To override the cost type of the part, complete the following field:
   - Cost Type

   The system retrieves the value for this field from the Item Branch Master – Customer Service Extension table (F41171).
8. To override whether or not the account is billable, complete the following field:

- Billable Y/N

If a service order has a flat rate, the parts are not billable.

9. If you are pricing using the Advanced Pricing system, review the following field, and override if necessary:

   - Estimated Billable Unit

   Based on the value in the Estimated Billable Unit field, the system calculates the Estimated Billable Amount.

10. To override the service provider payment information, complete the following fields:

    - Pay Adj Schedule
    - Pay Method Pricing

    The system retrieves values for the service provider fields from the extension table to the address book that contains CSMS-specific information (F1797).

Field	Explanation
Bill Adj Schedule	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.
Entitlement Check	A user defined code (17/ER) to indicate the results of an entitlement check. Valid values are: 0 Not entitled 1 Transaction entitled 2 Contract found, but no existing service type 3 Contract found, but no day and date assigned 4 Covered under default warranty
Coverage Group	A user-defined code that specifies the Coverage Group. The Coverage Group consists of unlimited cost codes and the percentage covered for each cost code.
Percentage Covered	The percentage covered under warranty or contract. This is used to calculate the amount to bill or the amount to cost for the line item being processed on the service order or call.

Field	Explanation
Cost Type	A code that designates each element of cost for an item. An example of the coding structure is as follows: A1 Purchased raw material B1 Direct labor routing rollup B2 Setup labor routing rollup C1 Variable burden routing rollup C2 Fixed burden routing rollup Dx Usually used for outside operation routing rollup Xx Usually used for extra add-ons, such as electricity and water The optional add-on computations usually operate with the type Xx extra add-ons. This cost structure allows you to use an unlimited number of cost components to calculate alternative cost rollups. The system then associates these cost components with one of six user defined summary cost buckets.
Billable Y/N	Specifies whether a general ledger account should be billed. Valid codes are: Y Yes, the account should be billed. N No, it should not be billed. 1 It is eligible only for invoicing. 2 It is eligible only for revenue recognition. 4 It is eligible only for cost. NOTE: Codes 1, 2, and 4 relate only to the Service Billing system.
Estimated Billable Unit	The estimated unit cost for billing.
Pay Adj Schedule	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.

Field	Explanation
Pay Method Pricing	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.

Processing Options for Work Order Parts List Processing Options

```
MFG Edits

      1. Allow attaching Parts List at                _____________
      prior revision levels
      2. Enter the Cross-Reference Code               _____________
      for retrieving item replacements
      for obsolete items

Process MFG

      1. Enter a '1' to create Routings               _____________
      when creating Parts List
      2. Enter the substitute processing              _____________
      method.

'1' – Use substitutes for shortages.
    (Commitment processing will be used
    if '1' is selected.)  '2' – Display
    the Substitute Availability Window
    when substitute quantity can cover
    the shortage.  If left blank,
    substitute processing will not be
    done.

      3. Enter a '1' to bypass                        _____________
      commitment processing.  If left
      blank, commitments will be
      processed per Commitment Control
      in Manufacturing Constants
      (F3009).
      4. Enter a '1' to copy the                      _____________
      component's generic text to the
      work order parts list.

Warehousing

      1. Enter the request processing                 _____________
      mode:  ' ' = No pick request  '1'
      = Generate request only  '2' =
      Generate request and process using
```

subsystem

2. If processing pick requests through the subsystem, enter the version of Location Selection to use. If blank, XJDE0002 is used. (R46171) _____

3. Enter the default staging location for moving goods out of the warehouse. The parts picked from the warehouse are staged at this location prior to use within manufacturing. _____

4. Enter a '1' if the default staging location should be checked for availability. If the part is available at the staging location a request will NOT be generated. This option only applies to parts without work center locations. _____

Versions

Enter the version of the following applications. If left blank, the version in parenthesis will be used.

1. Work Order Routings – P3112 (ZJDE0001) _____

EM Edits

1. Enter a '1' to require the entry of the Required Date. Leave blank to allow a blank required date. _____

Purchase Order Information

2. Enter a '1' to allow Purchase Orders to be created. _____

3. Enter the Parts List Status Code to signify that a Purchase Order has been created. _____

4. Enter a '1' to consolidate all messages onto one Purchase Order by vendor. _____

EM Versions

Enter the version of the following applications. If left blank, the version in parenthesis will be used.

1. Supplier Master – P01054 (ZJDE0001) _____

2. Open Order Inquiry – P430301 (ZJDE0006) _____

3. Supply and Demand Inquiry – P4021 (ZJDE0003) _____

4. Item Availability by Time – P3413 (ZJDE0002) _____

5. Purchase Order Entry – P4310 (ZJDE0001) _____

```
Export

      1. Enter the Transaction Type for                _____________
      the export transaction.  If left
      blank, export processing will not
      be performed.
      2. Enter a '1' to write the before               _____________
      image for a change transaction.
      If left blank, the before image
      will not be written .
```

Exchanging a Piece of Equipment

When a customer has to return a piece of equipment because it is faulty, or for any other reason, you can record the replacement piece that you are shipping on the service order. This is considered an advanced exchange when you ship a replacement piece of equipment before you receive the item being returned by the customer.

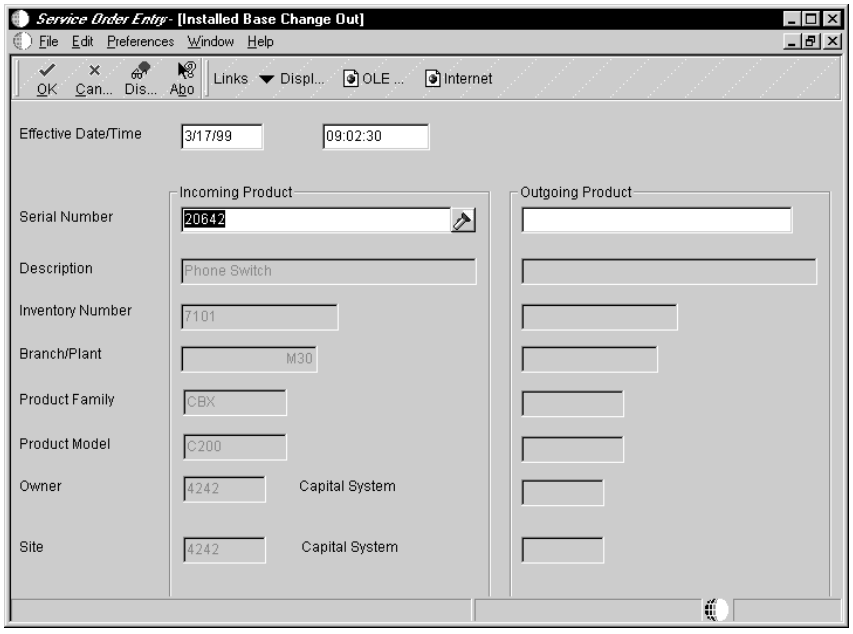
You can access the Installed Base Change Out form from the service order header. The system retrieves the serial number from the service order and enters it as the default as the incoming product for repair.

▶ To exchange a piece of equipment

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

1. Locate the service order and click Select.
2. On Service Work Order Revisions, choose Installed Base from the Form menu, then choose Changeout.



3. On Installed Base Change Out, complete the following fields to override the transaction date and time:

   - Effective Date/Time

   The system enters the current system date and time as the default.

4. Complete the following fields and click OK:

   - Incoming Product
   - Outgoing Product

   The system confirms the exchange by displaying a message that the exchange was successful.

5. Click OK.

   The outgoing product inherits whatever contracts were associated to the incoming product and updates the Installed Base record.

Field	Explanation
Effective Date/Time	The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to appear. The system uses this field depending on the program. For example, the date you enter in this field might indicate when a change of address becomes effective, or it could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, and so on.

Attaching Service Instructions

You can specify which work center is responsible for each maintenance task on a service order. You can specify the sequence of operations for each task, as well as the labor rates and the number of hours necessary to complete each task.

You can assign labor routing instructions to a service order using the following methods:

- Copy labor routing information from standard instructions
- Manually assign labor routing instructions

When you know the labor requirements for a particular task in advance, you can set up standard routing instructions for the task. You can copy from the instructions when you need to assign labor routings for similar tasks. You can manually assign labor routing instructions for any maintenance task for which you have not set up standard routing instructions.

Before You Begin

❑ Verify that you have purchased and installed the following systems. You must have installed these systems to be able to use routings for service orders:

- System 30: Product Data Management
- System 31: Shop Floor Management
- System 40: Inventory Base and Order Processing
- System 41: Inventory Management
- System 43: Procurement

❑ Verify that the following fields on the Service Work Order Revisions form are complete:

- Standard Procedure
- Start Date

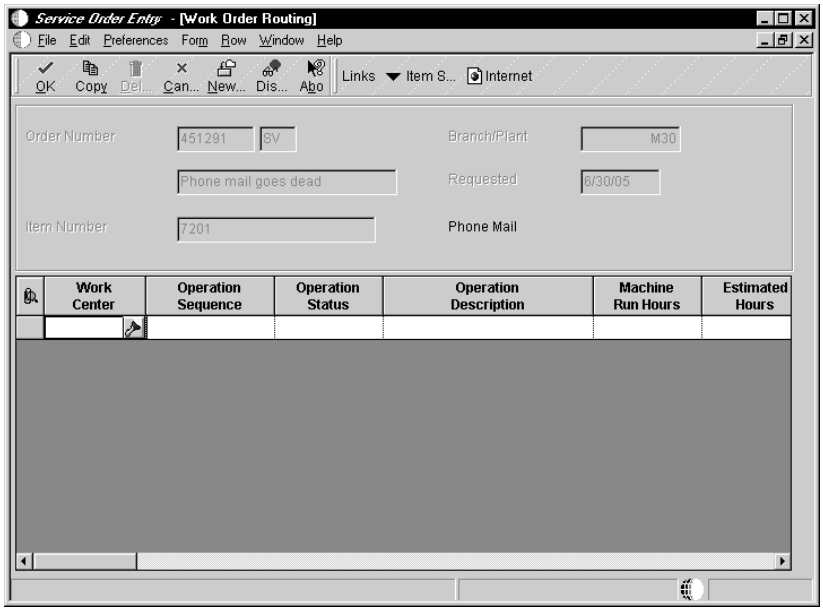
▶ To copy labor routing information from standard instructions

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

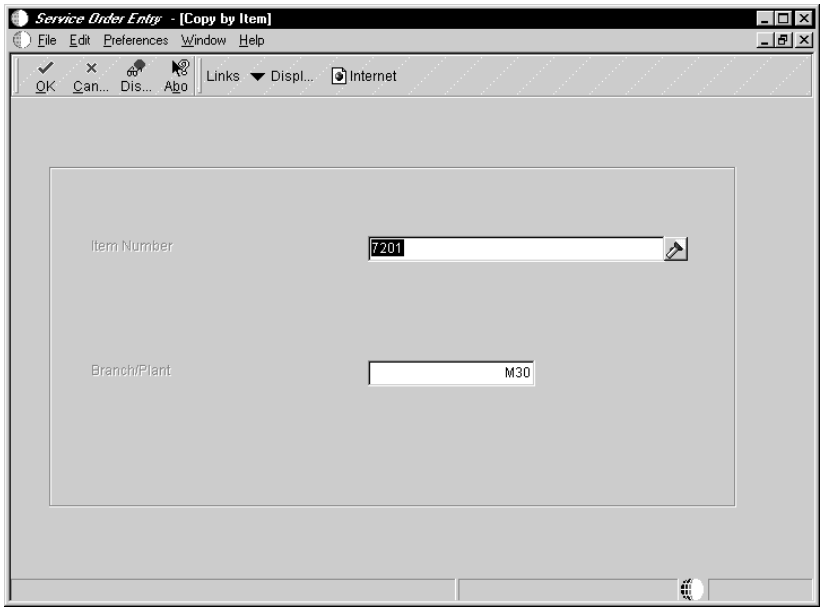
On Work with Service Orders

1. In the Query by Example row, complete the following field and click Find:
   - Order Number

2. Choose the record and choose Instructions from the Row menu.



3. On Work Order Routing, choose Copy by Item from the Form menu.



4. On Copy by Item, click OK to copy the standard instructions for the displayed item and branch/plant to the work order routing.

   You can accept the values on the Copy Screen form or enter different values. The system completes the Work Order Routing form with values from the standard instructions.

5. On Work Order Routing, make any additional changes and click OK.

▶ To manually assign labor routing instructions

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work With Service Orders

1. In the Query by Example row, complete the following field and click Find:
   - Order Number
2. Choose the record and choose Instructions from the Row menu.
3. On Work Order Routing, complete the following fields:
   - Work Center

     The system retrieves the value for the Work Center field from the service provider address book record, if available.

   - Operation Sequence
   - Operation Description
   - Labor Run Hours
   - Capacity Unit of measure (Labor Unit of Measure)

     Capacity Unit of measure is required if you use Advanced Pricing.

   The system retrieves the value for the Customer field from the Service Order Master table (F4801).

4. To determine if the customer is entitled, review the following field:
   - Entitlement Check

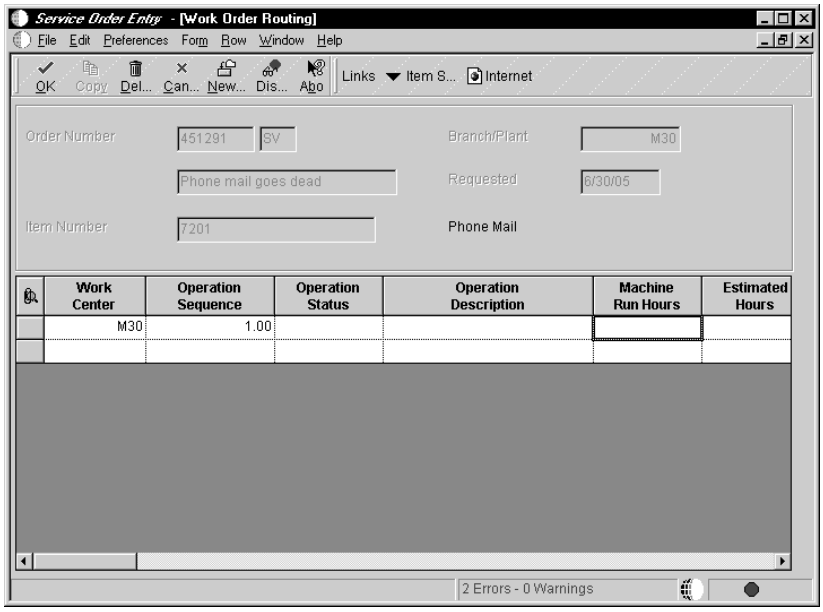
   A value of 1 indicates that the customer is entitled.

   The system retrieves the value for the Entitlement Check field from the Service Order Master table (F4801).

5. To review coverage information for entitled customers, review the following fields:
   - Coverage Group
   - Percentage Covered
6. To override the cost type of the part, complete the following field:
   - Cost Type
7. To override whether or not the account is billable, complete the following field:

- Billable Y/N

8. To override the labor costs associated with the order, complete the following field:
    - Estimated Billable Rate
9. Complete the following optional fields:
    - Operation Status
    - Rate
    - Estimated
    - Request Date
    - Overlap Percent
    - Crew Size
    - Instruction Number
10. To override payable information, complete the following fields and click OK:
    - Payable Y/N
    - Pay Method of Pricing
    - Pay Adjustment Schedule
    - Estimated Payable Rate
    - Estimated Payable Amount
    - Actual Payable Rate
    - Actual Payable Amount
    - Date Paid



11. On Work Order Routing, choose the applicable instructions to attach to the service order and click OK.

Field	Explanation
Work Center	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Operation Sequence	A number used to indicate an order of succession. In routing instructions, a number that sequences the fabrication or assembly steps in the manufacture of an item. You can track costs and charge time by operation. In bills of material, a number that designates the routing step in the fabrication or assembly process that requires a specified component part. You define the operation sequence after you create the routing instructions for the item. The Shop Floor Management system uses this number in the backflush/preflush by operation process. In engineering change orders, a number that sequences the assembly steps for the engineering change. For repetitive manufacturing, a number that identifies the sequence in which an item is scheduled to be produced. Skip To fields allow you to enter an operation sequence that you want to begin the display of information. You can use decimals to add steps between existing steps. For example, use 12.5 to add a step between steps 12 and 13.
Operation Description	A brief description of an item, a brief description of a remark, or a brief description of an explanation.
Labor Run Hours	The standard hours of labor that you expect to incur in the normal production of this item. The run labor hours in the Routing Master table (F3003) are the total hours that it takes the specified crew size to complete the operation. The hours are multiplied by the crew size during shop floor release and product costing.

Field	Explanation
Capacity Unit of measure	A unit of measure used to express the capacity of a production line, for example, stamps, injections, and so on.
Operation Status	A user defined code (31/OS) that identifies the current status of a work order or engineering change order as the operation steps in the routing are completed.
Rate	The rate to be paid for the type of component (piece) being produced.
Estimated	This is a start date that you enter. The date defaults from the system date or the date you enter.
Request Date	The date that an item is to arrive or that an action is to be complete.
Overlap Percent	A number that indicates the percentage that successive operations can overlap. The actual overlap percentage entered for the operation sequence is the percent by which that operation overlaps the prior operation. For example, if you enter 80%, this indicates that work can begin on the overlapped operation when 20% of the prior operation is completed. Notes: 1. Overlapping has no effect on move and queue calculations. 2. The percent entered must be less than or equal to 100%. Enter percents as whole numbers: 5% as 5.00
Crew Size	The number of people who work in the specified work center or routing operation. The system multiplies the Run Labor value in the Routing Master table (F3003) by crew size during costing to generate total labor amounts. If the Prime Load Code is L or B, the system uses the total labor hours for backscheduling. If the Prime Load Code is C or M, the system uses the total machine hours for backscheduling without modification by crew size.
Instruction Number	A generic rates and message code (48/SN) that is assigned to a standard note, message, or general narrative explanation. You can use this code to add instructional information to a work order. You set up codes for this field on Standard Description.
Payable Y/N	Specifies whether a general ledger account should be paid. Valid codes are: Y Yes, the account should be paid. N No, it should not be paid.

Field	Explanation
Pay Method of Pricing	A code used to determine if this type of service should be priced based on a flat rate or based on actual time and materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
Pay Adjustment Schedule	A user defined code (system 40, type AS) identifying a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level.
Estimated Payable Rate	The estimated payable rate associated with a transaction.
Estimated Payable Amount	This is the estimated payment amount used in service billing.
Actual Payable Rate	The actual payable rate associated with a transaction.
Actual Payable Amount	In A/P, this is the actual amount of the payment. In A/R, this is the actual amount of the receipt. This amount must balance to the total amount applied to the open pay items or invoice.
Date Paid	The date a service provider was payed for a service.

Processing Options for Work Order Routing

Capacity

Enter a '1' to highlight the resource when it is over capacity. If left blank, the resource will not be highlighted. _____

Parts List

Enter a '1' to Create Parts List when creating Routings. If left blank, the Parts List will not be created. _____

Process MFG

Enter a '1' to copy the operation's generic text to the work order routing. _____

Export

Enter the transaction type for the export transaction. If left blank, export processing will not be performed for Routings. _____

Versions

Enter the version of the Capacity Load program to be called. Leave blank to default to ZJDE0003. _____

Updating the Life Cycle Information of a Service Order

The life cycle of a service order includes the steps, or statuses, through which a service order must pass in order to accurately communicate the progress of the service tasks the service order represents. For example, the life cycle of a service order can include statuses that indicate:

- Service order entered
- Service order pending review
- Waiting for parts
- Work in progress

When you have completed all of the tasks requested on a service order, you can change the service order status to complete. When you change the status of a service order to complete, the system issues a warning message to alert you to any open purchase orders associated with the service order. You can close a service order to prevent transactions from being entered against it.

Updating the life cycle information of a service order includes the following tasks:

- Changing the status of a service order
- Closing a service order

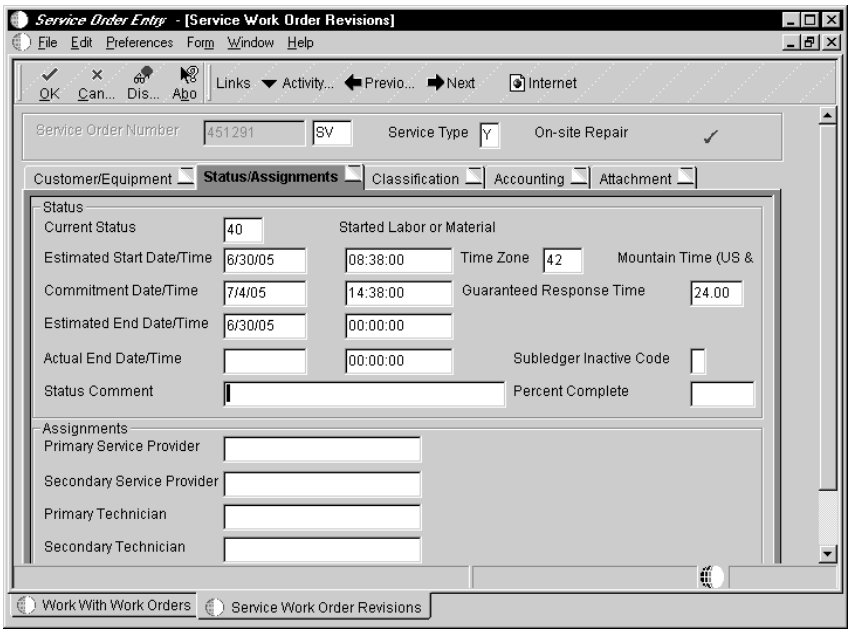
▶ To change the status of a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

After you create a service order, you can revise its status to indicate the progress of the tasks indicated on the order.

On Work with Service Orders

1. Complete the steps for locating a service order, choose a service order, and click Select.
2. On Service Work Order Revisions, click the Status/Assignments tab.



3. Complete the following field and click OK:
   - Current Status
4. Complete the following field:
   - Estimated Start Date/Time

     Enter an estimated start date/time when you enter status information.

- Status Comment

Field	Explanation
Current Status	A user defined code (00/SS) that describes the status of a work order or engineering change order. Any status change from 90 thru 99 automatically updates the date completed.
Estimated Start Date/Time	This is a start date that you enter. The date defaults from the system date or the date you enter.
Status Comment	A brief description to explain the status of the work order.

▶ To close a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

You can close a service order to prevent transactions from being entered against it.

On Work with Service Orders

1. Complete the steps for locating a service order, choose a service order, and then click Select.
2. On Service Work Order Revisions, click the Status/Assignments tab.
3. Enter a value other than blank in the following field:
   - Subledger Inactive Code
4. Complete the following fields:
   - Actual End Date/Time
   - Percent Complete

Field	Explanation
Subledger Inactive Code	A code in WorldSoftware, or an option in OneWorld, that indicates whether a specific subledger is active or inactive. Any value other than blank indicates that a subledger is inactive. Examples are jobs that are closed, employees that have been terminated, or assets that have been disposed. If a subledger becomes active again, set this field back to blank. If you want to use subledger information in the tables for reports but want to prevent transactions from posting to the master record, enter a value other than blank in this field.
Actual End Date/Time	The date that the work order or engineering change order is completed or canceled.

Reviewing the Status History of a Service Order

You can review a history of the statuses that you have assigned to a service order, such as new order, parts list attached, and in progress. This is especially useful when you need to determine how long a service order has been at various statuses in the service order life cycle. When you review the status history of a service order, you can also review:

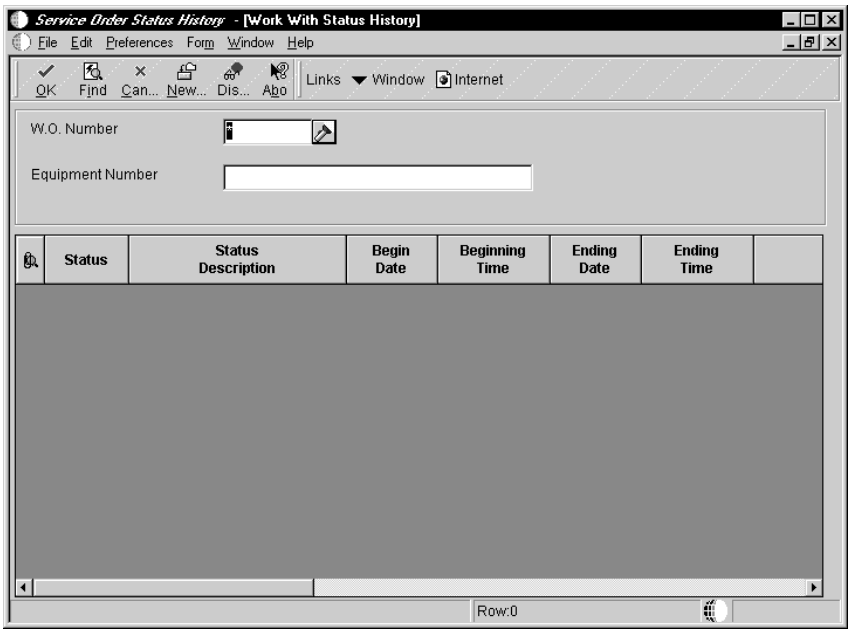
- Remarks entered when you changed the service order status
- The beginning and ending dates and times of each status change
- The hours associated with each occurrence of a particular status

Processing options for Work With Status History allow you to revise existing remarks for any status change, enter a new remark, or protect the remarks field from future revisions.

▶ To review the status history of a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Status History.

On Work With Status History



Complete the following field and click Find:

- W.O. Number

A history of each status assigned to the service order, from its creation to the present appears.

Processing Options for Service Order Status History

```
Process

1. Enter a '1' to protect the Remarks
    field.  Enter a '2' to protect the
    Remarks field if it is not blank.
    Leave blank to allow modifications
    to the Remarks field.

       Protect Remarks                          _____

2. Enter the Work Day Calendar to use
    for the calculation of the number of
    days for Equipment Analysis.

      Work Day Calendar                         _____

3. Enter the primary product for this
    version.  Enter a '1' for Equipment
    and '2' for CSMS.

      Select Product                            _____
```

Reviewing Service Order Parts Lists

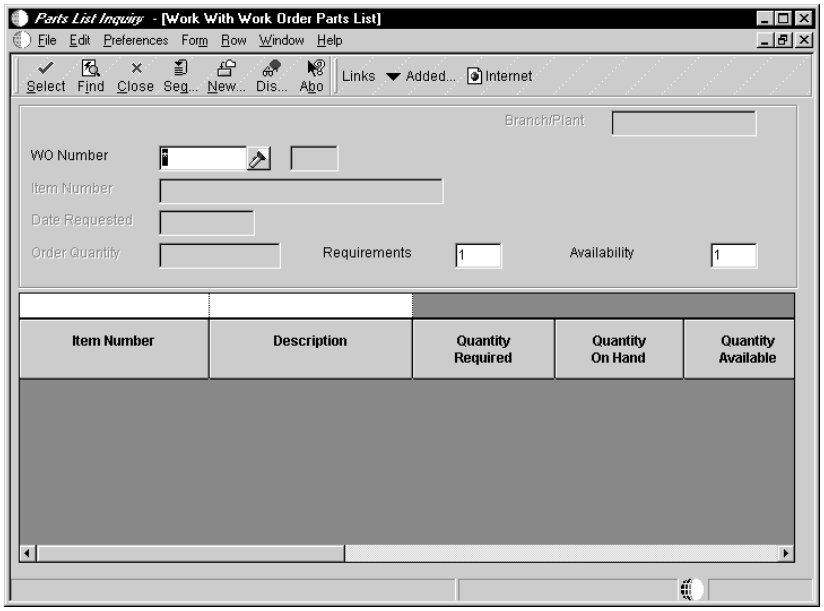
Review service order parts lists to view the most current information about the parts requirements of your service orders. Use Parts List Inquiry to review information for individual service orders or a group of related service orders. You can review the following:

- Parts requirements based on service order status
- Parts requirements based on the start date
- Parts with a negative availability

▶ To review service order parts lists

From the Daily Service Order Processing menu (G1712), choose Parts List Inquiry.

On Work With Work Order Parts List

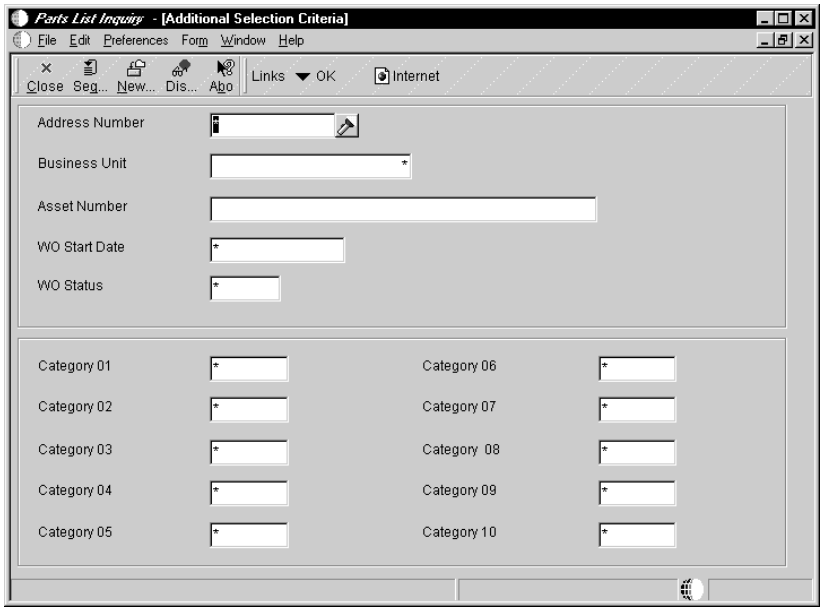


1. Complete the following field:

   - WO Number

   You can search for parts information based on a service order number or on a combination of fields on the Additional Selection Criteria form, but not on both.

2. From the Form menu, choose Added Selection.



3. On Additional Selection Criteria, complete any combination of the following fields to search for parts associated with multiple service orders:
   - Address Number
   - Business Unit
   - Asset Number
   - WO Start Date
   - Status Code W.O
4. Complete any of the optional category code fields to further limit your search to specific service orders and click Close.
5. On Work With Work Order Parts List, complete the following fields and click Find:
   - Requirements
   - Availability
6. To determine which service orders are creating a demand for a part, choose a record, and choose Supply and Demand Inquiry from the Row menu.

   The system displays Work with Supply and Demand, from which you can review the associated service orders.

Field	Explanation
Requirements	This field indicates whether to display all parts or only those parts with a requirement. 1 Display all parts. 2 Display only those parts with a requirement.
Availability	This field indicates whether to display all parts or only those parts with a negative availability. 1 Display all parts. 2 Display only those parts with a negative availability.

Processing Options for Service Order Parts List Inquiry

```
Versions

If blank, version 'ZJDE0001' will be
    used.

      1. Purchase Order Inquiry Version          _____________
      (Future)
      2. Supply/Demand Version                   _____________
```

Reviewing Costs by Parent Service Order

You can quickly review all service order costs associated with a parent service order. Use Work with Cost by Parent Work Order to review the total amounts and hours at the parent service order level, with individual service orders summarized as follows:

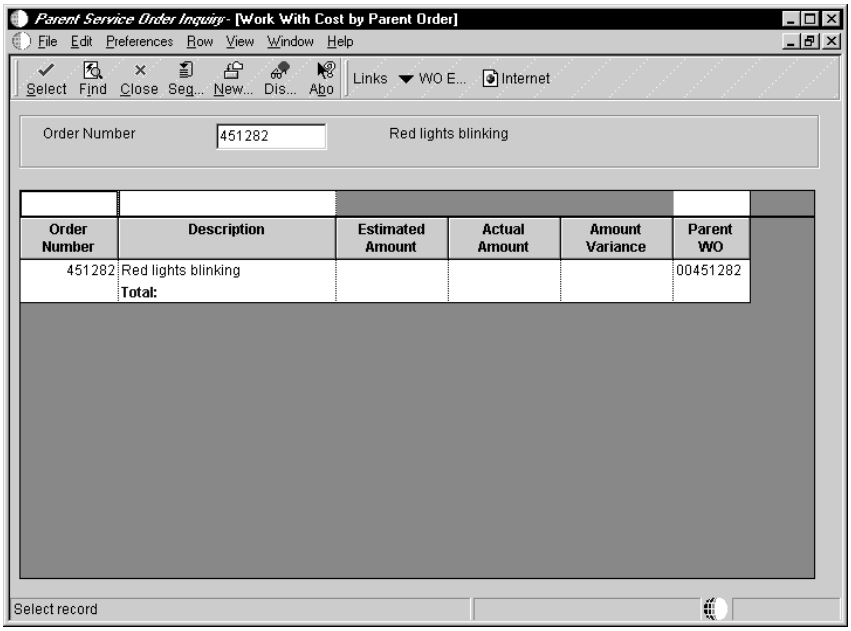
- Estimated amount or hours
- Actual amount or hours
- Variance between estimated and actual

You review costs by amounts or hours. After you review a summary of costs for the parent service order, you can review detailed costs for each service order in the project.

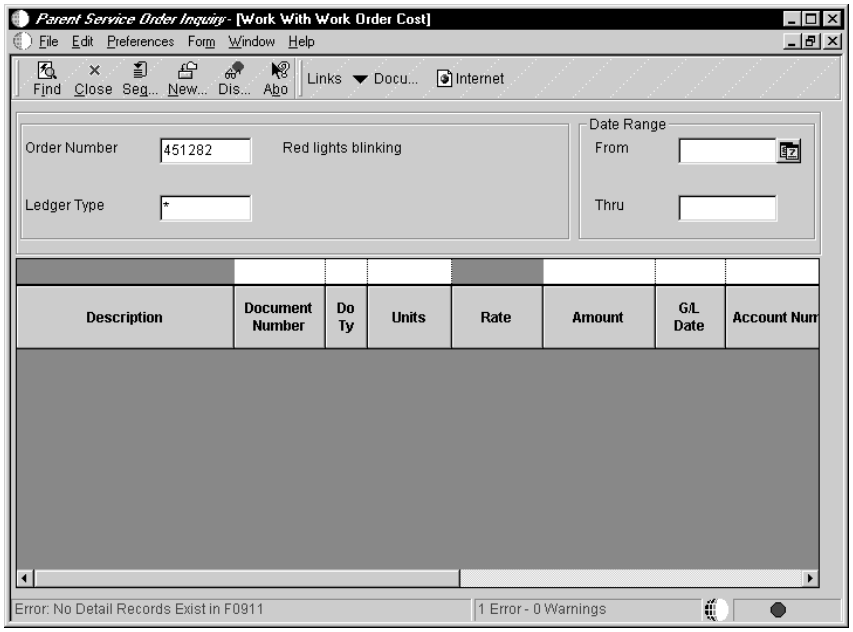
▶ To review costs by parent service order

From the Daily Service Order Processing menu (G1712), choose Parent Service Order Inquiry.

On Work With Cost by Parent Order



1. Complete the following field and click Find:
   - Order Number
2. To review costs for a particular service order, choose the record, and choose Work Order Cost Detail from the Row menu.



3. To limit the transactions that the system displays, complete the following fields:
   - From
   - Thru
   - Ledger Type

Field	Explanation
Order Number	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
From	Number that identifies either a fiscal period (numbers from 1 to 14) or a beginning date. The display begins with this date or period. If you leave this field blank, the system displays all transactions up to the Thru Date. Totals are for the transactions displayed.
Thru	Identifies either the period number or date for which you want to inquire. If you leave this field blank, the system uses the ending date of the current period set up for the company that contains the business unit. Valid period numbers are from 1 through 14.
Ledger Type	A user defined code (09/LT) that specifies the type of ledger, such as AA (Actual Amounts), BA (Budget Amount), or AU (Actual Units). You can set up multiple, concurrent accounting ledgers within the general ledger to establish an audit trail for all transactions.

See Also

- *Reviewing Work Order Transactions* in the *Equipment/Plant Maintenance Guide*

Printing Service Orders

Print service orders when you need a hard copy of a service order.

▶ To print service orders

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

1. Complete the steps for locating a service order and choose a service order.
2. From the Row menu, choose Print WO.

   You can view the service order online or print the service order.

Creating Service Order Prepayment Transactions

To track your customer's payments that are made up-front, you can use prepayment processing. Customers can prepay by using cash, check, or credit card. If payment has already been made for service, the invoice reflects that the service order has been prepaid. If prepayments are being used with the service order, the full amount of the service order must be prepaid.

Before You Begin

❑ Define the processing options for the Service Order Revisions form to process prepayment transactions.

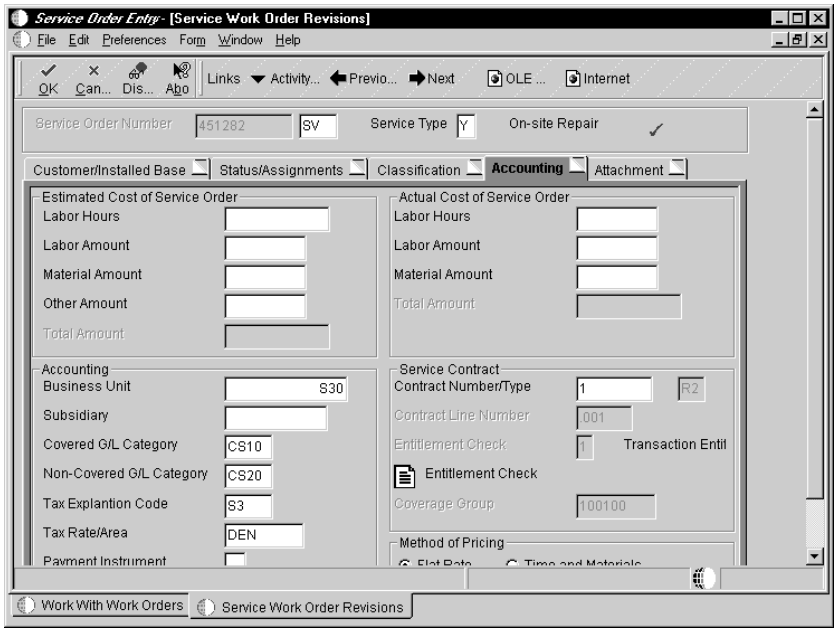
▶ To create service order prepayment transactions

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

1. Locate and select the service order that is being prepaid.
2. On Service Work Order Revisions, click the Accounting tab.
3. Complete the following fields:

- Payment Instrument
- Prepayment Amount



See Also

- *Appendix C – Working with Prepayments*

Processing Service Orders

After you have created service orders and made revisions, if necessary, you can issue inventory to service orders and post inventory to the general ledger.

Processing service orders includes the following tasks:

- ❑ Issuing inventory to service orders
- ❑ Reviewing and approving inventory journal entries
- ❑ Posting inventory to the general ledger
- ❑ Entering time
- ❑ Working with hours and quantities

Issuing Inventory to Service Orders

You can use the Inventory Issue Revisions form to issue material associated with a service order. You can also change the commitments that the system recorded. When you change commitments, the system displays an error message if the quantities do not equal the total quantity required. The system also adjusts the available balance for any location for which you changed the quantity committed. The system creates journal entries. The total cost of each part will be split into separate journal entries based on the percentage of the part covered under a contract.

To reverse an issue transaction, enter the item quantity as a negative number. The system decreases the amount in the Quantity Issued field.

Issuing inventory to service orders includes the following tasks:

- Setting up inventory AAIs
- Issuing material from a single location
- Issuing material from multiple locations

Before You Begin

- ❑ Ensure that the document type on your service order is set to 1 in the Service Order field on the Document Type Maintenance table.

To set up inventory AAIs

To cost inventory, you must identify information about your account structure and specific account values to process business transactions properly. You define your account structure and specific account values by using automatic accounting instructions (AAIs). The system stores the AAI values in the Automatic Accounting Instructions table (F40905). Whenever a program performs an accounting function, it accesses the Automatic Accounting Instructions table.

Inventory-related distribution AAIs consist of the following:

- 4124 – Expense or COGS
- 4122 – Inventory

From the Service Order Setup menu (G1742), choose AAIs – Costing Parts.

On Work with AAIs

1. Choose the row which contains the AAI table you want to set up.
2. From the Row menu, choose Details.
3. On Account Revisions, on the first open line, complete the following fields and click OK:
   - Co

     This value corresponds with the Company, which defaults from the Business Unit on the Accounting tab on Service Work Order Revisions.

   - Do Ty

     This value corresponds with the value in the Document Type field on the service order. This allows you to separate your costs based on the type of contract covering the service.

   - Description
   - G/L Cat

     This value corresponds with the value in either the Covered G/L Category or Non-Covered G/L Category field on the Accounting tab on Service Work Order Revisions. This allows you to separate your costs based on the type of service and whether it is covered or not covered under a contract.

   - Cost Type

     This value corresponds with the value in the Cost Type field on the Part detail line.

- Branch Plant

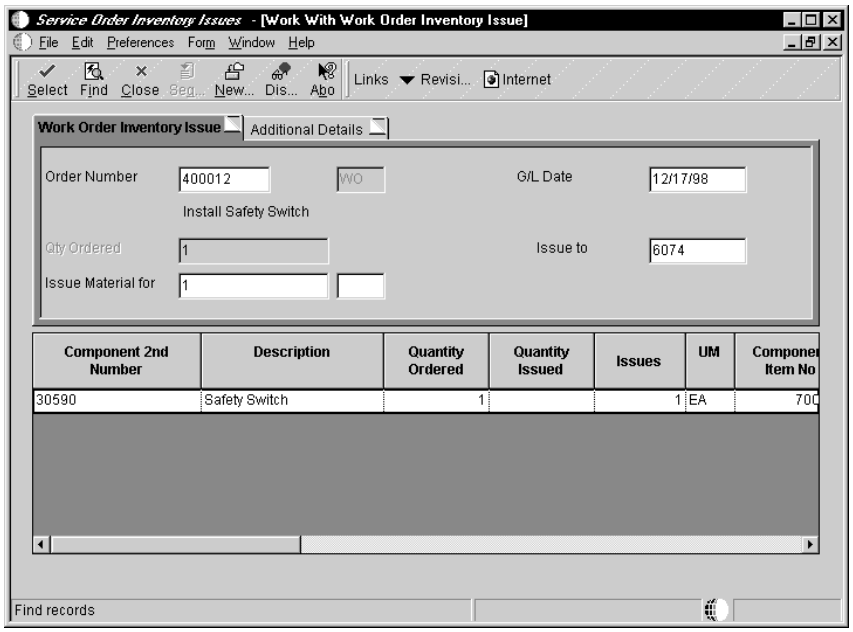
  This value is overridden and the value in the Business Unit field on the Accounting tab on Service Work Order Revisions.

- Obj Acct
- Sub

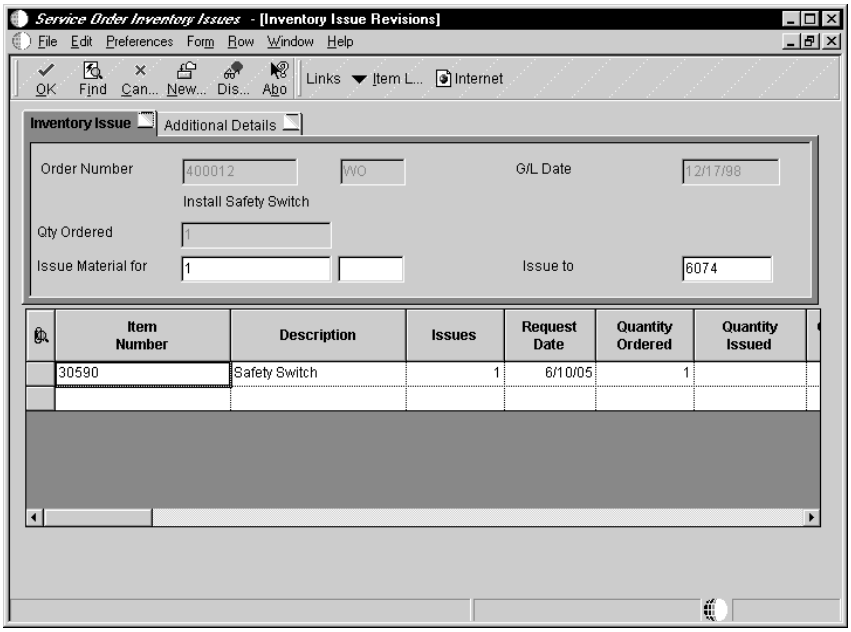
▶ To issue material from a single location

From the Daily Service Order Processing menu (G1712), choose Service Order Inventory Issues.

On Work With Work Order Inventory Issue



1. Complete the following field and click Find:
   - Order Number
2. Choose an item and click Select.



3. On Inventory Issue Revisions, review or revise the following fields:
   - Issue Material for
   - Unit of Measure as Input
   - Issue to
   - Mt St
   - Qty Ordered
   - UM
   - Location
   - Lot/Serial
4. Click OK.

Field	Explanation
Order Number	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.
Issue Material for	The total quantity requested.
Unit of Measure as Input	A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).
Issue to	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other address book members.

Field	Explanation
Mt St	A user defined code (31/MS) that identifies the current status of a particular component on the work order.
Qty Ordered	The quantity of units affected by this transaction.
UM	A user defined code (00/UM) that identifies the unit of measurement for an amount or quantity. For example, it can represent a barrel, box, cubic meter, liter, hour, and so on.
Location	The location that the system uses as the default when you receive inventory at the warehouse. The format of the location is user defined by branch/plant.
Lot/Serial	A number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.

▶ To issue material from multiple locations

From the Daily Service Order Processing menu (G1712), choose Service Order Inventory Issues.

This task is only necessary to issue material from locations that are different than what is listed on the Inventory Issues form.

On Work With Work Order Inventory Issue

1. Complete the following field and click Find:
   - Order Number
2. Choose an item and click Select.
3. On Inventory Issue Revisions, complete the following field:
   - Issues
4. Choose an item and choose Multi-location from the Row menu.
5. On Select Multiple Locations, review the following default information:
   - Quantity
   - Location
   - Lot / Serial
   - Branch Plant

Field	Explanation
Issues	The total quantity requested.

Field	Explanation
Quantity	The number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item. In the Manufacturing system and Work Order Time Entry, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.
Location	The location that the system uses as the default when you receive inventory at the warehouse. The format of the location is user defined by branch/plant.
Lot / Serial	A number that identifies a lot or a serial number. A lot is a group of items with similar characteristics.
Branch Plant	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.

Processing Options for Work Order Inventory Issue

Edits

1. Enter the inventory issue document type. _____
2. Enter the status code to update to the WO Header. Blanks will not update the header. _____
3. Enter the default value for material status code. Blanks will not default a code. (Mfg. only) _____
4. Enter status beyond which issues cannot be made. [Mfg Only] _____
5. Enter a '1' to error on negative quantity on hand. _____
6. Enter a '1' to update Item Sales History (F4115). _____

7. Enter the Lot Hold Codes (up to five) that are acceptable for inventory issues, or enter a '*' to allow issues to all held lots. Blanks will not allow issues to held lots. (Mfg. only)

a. Lot Hold Code #1 _____
b. Lot Hold Code #2 _____
c. Lot Hold Code #3 _____
d. Lot Hold Code #4 _____
e. Lot Hold Code #5 _____
8. Enter a '1' to allow for unplanned issues. _____
9. Enter the document type for purchase orders. (Default is 'OP'). _____
10. Enter the default route type for items with a receipt routing. (FUTURE) _____
11. Enter the default route type for items without a receipt routing. (FUTURE) _____

Display

1. Enter a '1' to display only valid issue type codes. Blanks will display all Parts List Items. _____
2. Enter a '1' to display operations that 'Equal' the entered Operation Sequence only. If left blank, the value will be used as a 'Skip To'. (Mfg. only) _____
3. Enter a '1' to display operations that 'Equal' the entered Requested Date only. If left blank, the value will be used as a 'Skip To'. (Mfg. only) _____
4. Enter a '1' to protect the Lot Number from entry. _____
5. Enter a "1" to default the 'Issue Material For' quantity. If left blank, no issue quantity will be recommended. _____

Versions

Enter the version of the following programs to be called. If left blank, the version listed will be used as the default value.

1. Shortage Maintenance (ZJDE0001) _____
2. Open Purchase Orders (ZJDE0001) _____
3. PO Receipts (ZJDE0008) _____
4. Receipt Routing Movement and Disposition (ZJDE0002) _____

Equipment Mgt

The following processing options apply to Equipment/Plant Management Issues.

1. Enter a '1' to run Equipment/Plant Management Issues. _____

```
2.  Enter a '1' to default the
Work Order number to a Subledger
field.                                  _____________
```

What You Should Know About Processing Options

Equipment Management heading	For CSMS, enter 1 for equipment issue entries.

Reviewing and Approving Inventory Journal Entries

From the Daily Service Order Processing menu (G1712), choose G/L Journal Review.

You can review information at different levels before posting journal entries. You can:

- Review a list of journal entry batches
- Revise journal entry detail

When you review journal entries for posting, you can display a list of batches based on the batch type, number, date, status, or your user ID. For example, you might want to review all batches with a posting status of pending. If the batch review security feature is activated, the system lists only the batches that you are authorized to review and approve.

After you review a list of batches, you can access transaction detail within a specific batch of journal entries. For example, you can review the number of journal entries within a batch. You can also select a specific journal entry for review.

The General Journal Review program displays and updates information in the Batch Control (F0011) and Account Ledger (F0911) tables.

After you enter and review a batch of journal entries, you might need to approve it before posting can occur. Based on your company requirements, as defined by the general accounting constants, the system assigns either a pending or an approved status to the batch.

See Also

- *Reviewing Batch Journal Entries* in the *General Accounting Guide* for steps to review, revise, and approve journal entries

Posting Inventory to the General Ledger

From the Daily Service Order Processing menu (G1712), choose Post Inventory to G/L.

After you enter, review, and approve inventory journal entries, post them to the general ledger. You can use various methods to post journal entires. For information about these methods and instructions on posting journal entries, see *Posting Journal Entries* in the *General Accounting Guide*.

Before You Begin

- ❑ Verify that the batch has an approved status.
- ❑ Ensure that all post menu selections are routed to the same job queue and that the job queue allows only one job to process at a time.

See Also

- *Understanding the Post Process for Journal Entries* in the *General Accounting Guide*

Processing Options for General Ledger Post Report

```
Print

1)  Enter which Account Number to print
    on the report.    '1' = Structured
    Account;    '2' = Short Account ID;
    '3' = Unstructured Account;    ' ' =
    Default Account Format.

      Account Format                                _____________

Versions

1)  Enter a version of the Detailed
    Currency Restatement (R11411) to
    execute.  If left blank, Detailed
    Currency Restatement entries will
    not be created.  (i.e. ZJDE0001)

      Detailed Currency Restatement                 _____________
      Version

2)  Enter a version of the Fixed Asset
    Post (R12800) to execute.  If left
    blank, Fixed Asset Post will not be
    executed.  (i.e. ZJDE0001)

      Fixed Asset Post Version                      _____________

3)  Enter a version of the 52 Period
    Post (R098011) to execute.  If left
    blank, 52 Period Post will not be
    executed.  (i.e. ZJDE0001)

      52 Period Post Version                        _____________

Edits

1)  Enter a '1' if you wish to update
```

```
    Account ID, Company, Fiscal Year,
    Period Number, Century, and Fiscal
    Quarter in records being posted,
    prior to editing and posting the
    records.

      Update Transaction                                  _____

Taxes

1)  Enter when to update the Tax File
    (F0018).    '1' = V.A.T. or Use Tax
    only;    '2' = for all Tax Amounts;
    '3' = for all Tax Explanation Codes;
    ' ' = no update to Tax File
    (Default).

      Update Tax File                                     _____

2)  Adjust V.A.T. Account for Discount
    Taken.  The Tax Rules file must be
    set to Calculate Tax on Gross
    Amount, including Discount and
    Calculate Discount on Gross Amount,
    including Tax.  Tax explanation must
    be a 'V'.

      '1' = Update VAT only;  '2' =                       _____
      Update VAT, Ext. Price and
      Taxable

3)  Adjust V.A.T Account for Receipt
    Adjustments and Write Offs.  Tax
    explanation must be a 'V'.

      '1' = Update VAT only;  '2' =                       _____
      Update VAT, Ext. Price and
      Taxable

Process

Enter a '1' if you wish to explode
    parent item time down to the
    assembly component level. Component
    billing rates will be used.  (This
    applies to batch type 'T' only.)

      Explode parent item time.                           _____
```

Entering Time

Use the Service Order Time Entry program to charge hours and quantities to a service order. You can use the processing options to display the information in order number format or employee number format. Use these formats to record time and quantities for employees against service order routing steps or service order routing steps against employees.

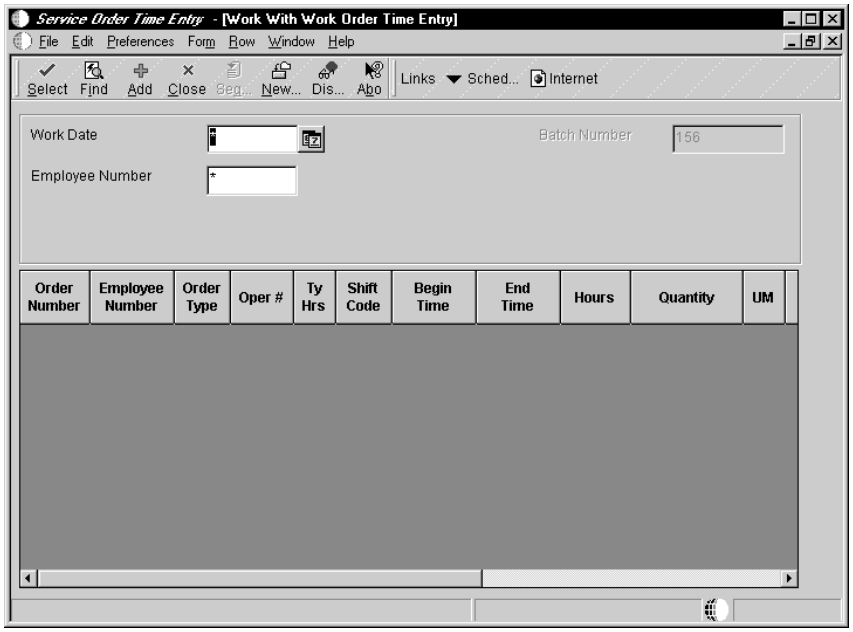
Note the following important information about entering hours and quantities:

- Enter the quantity completed only once for each operation sequence number. Entering the quantity for each type of hours causes a variance amount.
- Enter hours using beginning and ending times for each entry or enter the actual hours up to two decimal places.
- Reverse completed or scrapped quantities you have entered by entering the quantity as a negative value.

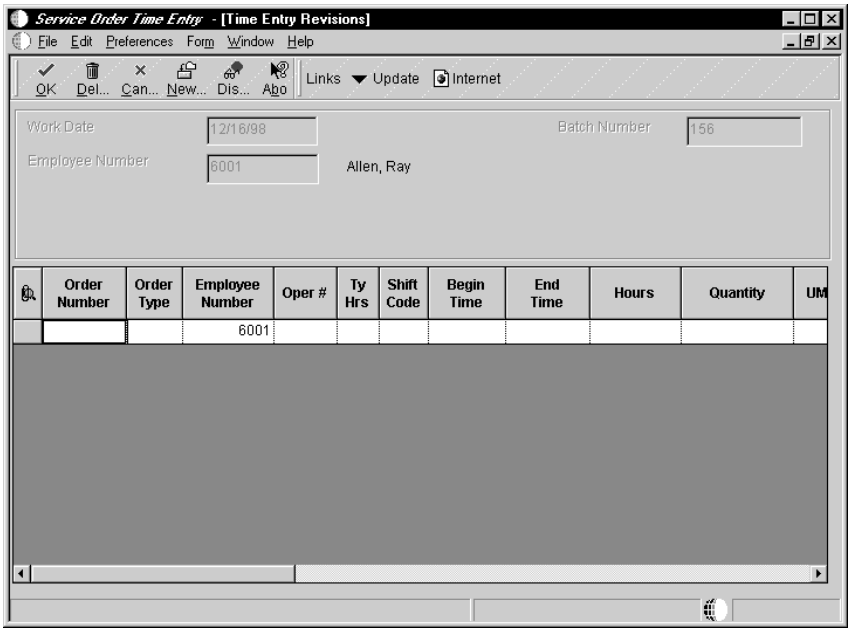
▶ To enter time

From the Daily Service Order Processing menu (G1712), choose Service Order Time Entry.

On Work With Work Order Time Entry



1. Complete the following fields and click Find:
   - Work Date
   - Order Number
2. To enter hours and quantities, click Add.



3. On Time Entry Revisions, complete the following optional fields and click OK:
   - Oper #
   - Ty Hrs
   - Hours
   - Quantity
   - UM
   - St

Field	Explanation
Work Date	A date that identifies the financial period to which the transaction is to be posted. The general accounting constants specify the date range for each financial period. You can have up to 14 periods. Generally, period 14 is used for audit adjustments. The system edits this field for PBCO (posted before cutoff), PYEB (prior year ending balance), and so on.
Order Number	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on. . . . . . *Form-specific information* . . . . . . You can specify the order number or employee number in the processing options for the Hours and Quantities program.

Field	Explanation
Oper #	A number used to indicate an order of succession. In routing instructions, a number that sequences the fabrication or assembly steps in the manufacture of an item. You can track costs and charge time by operation. In bills of material, a number that designates the routing step in the fabrication or assembly process that requires a specified component part. You define the operation sequence after you create the routing instructions for the item. The Shop Floor Management system uses this number in the backflush/preflush by operation process. In engineering change orders, a number that sequences the assembly steps for the engineering change. For repetitive manufacturing, a number that identifies the sequence in which an item is scheduled to be produced. Skip To fields allow you to enter an operation sequence that you want to begin the display of information. You can use decimals to add steps between existing steps. For example, use 12.5 to add a step between steps 12 and 13.
Ty Hrs	A code that indicates the type of time entered. Valid codes are: 1 Run Labor Hours 2 Setup Labor Hours 3 Machine Hours 4 Quantities Completed 5 Quantities Scrapped 9 Miscellaneous (such as piece rate bonus)
Hours	The number of hours associated with each transaction.
Quantity	The number of units committed for shipment in Sales Order Entry, using either the entered or the primary unit of measure defined for this item. In the Manufacturing system and Work Order Time Entry, this field can indicate completed or scrapped quantities. The quantity type is determined by the type code entered.
UM	A user defined code (00/UM) that indicates the quantity in which to express an inventory item, for example, CS (case) or BX (box).
St	A user defined code (31/OS) that identifies the current status of a work order or engineering change order as the operation steps in the routing are completed.

Processing Options for Work Order Time Entry

```
Display

      1.  Enter a '1', for the screen to                _____________
      be displayed in Order Number
```

format. If left blank, the screen will be displayed in Employee format.

Defaults

1. Enter the Document Type associated with Shop Floor Activity. _____

Edits

1. Enter the Status Code beyond which Shop Floor Activity cannot be entered. _____
2. Enter a '1' to verify that, for a given operation, the total of the quantity completed plus scrapped does not exceed the 'Quantity At Operation'. If left blank, the verification is not performed. _____
3. Enter a '1' to block employee rate being written to screen. Leave blank to show employee rates. _____

Versions

Enter the version for each application. If left blank, ZJDE0001 will be used.

1. Test Results Revisions (P3711) _____

Working with Hours and Quantities

Working with hours and quantities includes the following tasks:

- ❑ Setting up AAIs to cost routings
- ❑ Updating hours and quantities
- ❑ Reviewing and approving cost routing journal entries
- ❑ Posting cost routing journal entries to the general ledger

Before You Begin

- ❑ Ensure that the document type on your service order is set to 1 in the Service Order field on the Document Type Maintenance table.

Setting Up AAIs to Cost Routings

To cost routings, you must identify information about your account structure and specific account values to process business transactions properly. You define your account structure and specific account values using automatic accounting instructions (AAIs). The system stores the AAI values in the Automatic Accounting Instructions table (F40905). Whenever the system performs an accounting function, it accesses the Automatic Accounting Instructions table.

Routing-related distribution AAIs consist of the following:

- 3122 – Routing Service Costs
- 3401 – Accruals

▶ To set up AAIs to cost routings

From the Service Order Setup menu (G1742), choose AAIs – Costing Routings.

On Work with AAIs

1. Choose the row which contains the AAI table you want to set up.
2. From the Row menu, choose Details.
3. On Account Revisions, on the first open line, complete the following fields and click OK:
    - Co

      This value corresponds with the Company, which defaults from the Business Unit on the Accounting tab on Service Work Order Revisions.

    - Description
    - G/L Cat

      This value corresponds with the value in either the Covered G/L Category or Non-Covered G/L Category field on the Accounting tab on Service Work Order Revisions. This allows you to separate your costs based on the type of service and whether it is covered or not covered under a contract.

    - Or Ty

      This value corresponds with the value in the Document Type field on the service order. This allows you to separate your costs based on the type of contract covering the service.

    - Cost Type

This value corresponds with the value in the Cost Type field on the Routing detail line.

- Branch Plant

  This value is overridden and the value in the Business Unit field on the Accounting tab on the Service Work Order Revisions form.

- Obj Acct
- Sub

Updating Hours and Quantities

From the Daily Service Order Processing menu (G1712), choose Hours and Quantities Update.

To process the hours and quantities you've entered and create journal entries for the costs, you must run the Hours and Quantities Update batch program. This updates the Work Order Routing table (F3112) and creates journal entries. The Total cost of each routing will be split into separate journal entries based on the percentage of the routing covered under a contract. After you run this program, you cannot make changes.

Processing Options for Hours and Quantity Update

```
Interop

      1. Transaction Type        A                    _____________
      specific transaction type
      Blank = No outbound transaction
      processing
      transaction processing
      2. Outbound Subsystem UBE        1              _____________
      = The UBE will be called
      Blank = The UBE will not be
      called
      called
```

CSMS

```
      1. CSMS Journal Entries         1               _____________
      = Create CSMS journal entries
      Blank = Do not create CSMS journal
      entries
      2. Flex Accounting         1= Use               _____________
      flex accounting       Blank = Do
      not use flex accounting
      3. General Ledger Date          A               _____________
      specific date       Blank = Use
      today's date
      4. Subledger          1 = Default               _____________
      order number       Blank = Do not
      default order number
      5. Document Type         A                      _____________
      specific document type       Blank
      = Default 'IH'
```

Reviewing and Approving Cost Routing Journal Entries

From the Daily Service Order Processing menu (G1712), choose G/L Journal Review.

Before You Begin

❑ Change the value in the Batch Type field to 0 (zero).

You can review information at different levels before posting journal entries. You can:

- Review a list of journal entry batches
- Revise journal entry detail

When you review journal entries for posting, you can display a list of batches based on the batch type, number, date, status, or your user ID. For example, you might want to review all batches with a posting status of pending. If the batch review security feature is activated, the system lists only the batches that you are authorized to review and approve.

After you review a list of batches, you can access transaction detail within a specific batch of journal entries. For example, you can review the number of journal entries within a batch. You can also select a specific journal entry for review. The General Journal Review program displays and updates information in the Batch Control (F0011) and Account Ledger (F0911) tables.

After you enter and review a batch of journal entries, you might need to approve it before posting can occur. Based on your company requirements, as defined by the general accounting constants, the system assigns either a pending or an approved status to the batch.

See Also

- *Reviewing Batch Journal Entries* in the *General Accounting Guide* for steps to review, revise, and approve journal entries

Posting Cost Routing Journal Entries to the General Ledger

From the Daily Service Order Processing menu (G1712), choose Post Inventory to G/L.

After you enter, review, and approve cost routing journal entries (batch type equal to zero), post them to the general ledger. You can use various methods to post journal entires.

Before You Begin

❑ Verify that the batch has an approved status.

❑ Ensure that all post menu selections are routed to the same job queue and that the job queue allows only one job to process at a time.

See Also

- *Understanding the Post Process for Journal Entries* in the *General Accounting Guide*
- For information about these methods and instructions on posting journal entries, see *Posting Journal Entries* in the *General Accounting Guide*

Processing Options for General Ledger Post Report

```
Print

1)  Enter which Account Number to print
    on the report.    '1' = Structured
    Account;    '2' = Short Account ID;
    '3' = Unstructured Account;    ' ' =
    Default Account Format.

      Account Format                                _____________

Versions

1)  Enter a version of the Detailed
    Currency Restatement (R11411) to
    execute.  If left blank, Detailed
    Currency Restatement entries will
    not be created.  (i.e. ZJDE0001)

      Detailed Currency Restatement                 _____________
      Version

2)  Enter a version of the Fixed Asset
    Post (R12800) to execute.  If left
    blank, Fixed Asset Post will not be
    executed.  (i.e. ZJDE0001)

      Fixed Asset Post Version                      _____________

3)  Enter a version of the 52 Period
    Post (R098011) to execute.  If left
    blank, 52 Period Post will not be
    executed.  (i.e. ZJDE0001)

      52 Period Post Version                        _____________

Edits

1)  Enter a '1' if you wish to update
    Account ID, Company, Fiscal Year,
    Period Number, Century, and Fiscal
    Quarter in records being posted,
    prior to editing and posting the
    records.

      Update Transaction                            _____________

Taxes
```

1) Enter when to update the Tax File (F0018). '1' = V.A.T. or Use Tax only; '2' = for all Tax Amounts; '3' = for all Tax Explanation Codes; ' ' = no update to Tax File (Default).

   Update Tax File _____

2) Adjust V.A.T. Account for Discount Taken. The Tax Rules file must be set to Calculate Tax on Gross Amount, including Discount and Calculate Discount on Gross Amount, including Tax. Tax explanation must be a 'V'.

   '1' = Update VAT only; '2' = Update VAT, Ext. Price and Taxable _____

3) Adjust V.A.T Account for Receipt Adjustments and Write Offs. Tax explanation must be a 'V'.

   '1' = Update VAT only; '2' = Update VAT, Ext. Price and Taxable _____

Process

Enter a '1' if you wish to explode parent item time down to the assembly component level. Component billing rates will be used. (This applies to batch type 'T' only.)

   Explode parent item time. _____

Billing Service Orders

The typical billing process includes accumulating service orders to bill, creating and printing invoices, and recording journal entries for income and receivables.

Invoices are based on billable service orders and the first step in the billing process is to accumulate billable service orders. When you run Service Order Workfile Generation, the system gathers the service orders eligible for billing from the Contract Detail table (F1721), and creates Service Billing Workfile records (F4812).

For multi-currency environments, the system retrieves currency information from the following sources:

When billing for a part or routing	Domestic: Currency code of the company to which the Service Order Business Unit belongs. Foreign: Currency code of the customer within the Customer Master.
When paying for a part or routing	Domestic: Currency code of the company to which the Service Order Business Unit belongs. Foreign: Currency code of the service provider within the Supplier Master.

Billing service orders includes the following tasks:

- ❑ Setting up AAIs to bill service orders
- ❑ Generating the Service Order Workfile

See Also

- *Appendix B – Billing for CSMS* for related tasks

Setting Up AAIs to Bill Service Orders

To bill service orders, you must identify information about your account structure and specific account values to process business transactions properly. You define your account structure and specific account values by using automatic accounting

instructions (AAIs). The system stores the AAI values in the Automatic Accounting Instructions table (F40905). Whenever a program performs an accounting function, it accesses the Automatic Accounting Instructions table.

Contract-related distribution AAIs consist of the following:

- 1742 – Service Orders
- 1782 – Service Order Claims

▶ To set up AAIs to bill service orders

From the Service Order Setup menu (G1742), choose AAIs Billable/Payables.

On Work with AAIs

1. Choose the row which contains the AAI table you want to set up.
2. Choose Details from the Row menu.
3. On Account Revisions, on the first open line, complete the following fields and click OK:
   - Co

     This value corresponds with the Company, which defaults from the Business Unit on the Accounting tab on Service Work Order Revisions.

   - Do Ty

     This value corresponds with the value in the Order Type field in the header on Service Work Order Revisions.

   - Description
   - G/L Cat

     This value corresponds with the value in either the Covered G/L Category or Non-Covered G/L Category field on the Accounting tab on Service Work Order Revisions.

   - Cost Type

     This value corresponds with the value in the Cost Type field on the Part or Routing detail line.

   - Branch Plant

     This value is overridden and the value in the Business Unit field on the Accounting tab on Service Work Order Revisions.

- Obj Acct
- Sub

Generating the Service Order Workfile

Generating the service order workfile allows you to do the following:

- Bill customers for services provided to them
- Pay service providers for services they have provided the company

The system retrieves the billing information from the parts and routing detail lines.

The following tables are accessed when you generate the Service Order Workfile:

Work Order Master (F4801)	Contains general service order information.
Service Order Extension (F4817)	Contains CSMS-specific information about the service order.
Work Order Parts List (F3111)	Contains general parts list information.
Parts List – Extension (F31171)	Contains CSMS-specific information about the parts list.
Work Order Routing (3112)	Contains general routing and instruction information.
Routing Instructions – Extension (F31172)	Contains CSMS-specific information about routing and instruction.

Generating the Service Order Workfile, creates or updates the following tables:

Billing Details Workfile (F4812)	When you run the Service Order Workfile Generation program in final mode, the system creates F4812 records for each detail line within the Work Order Parts List (F3111) and Work Order Routing (F3112). When you create payable records to pay a service provider, the system creates a record within the Billing Details Workfile for the Covered Expense and a separate record for the Non-Covered Expense.

Parts List – Extension (F31171)

Based on the processing involved, it is possible for the system to update the following:

- Date Billed
- Date Paid
- Actual Billable Unit
- Actual Payable Unit
- Actual Billable Amount
- Actual Payable Amount

Routing Instructions – Extension (F31172)

Based on the processing involved, it is possible for the system to update the following:

- Date Billed
- Date Paid
- Actual Billable Rate
- Actual Payable Rate
- Actual Billable Amount
- Actual Payable Amount

Processing Options for CSMS Service Order Workfile Generation

```
Defaults

      1. Enter the appropriate value                    _____________
      from below to determine what to
      default into the Subledger field.
      'blank' = No Default
      1 = Service Order Number
      2 = Customer Number
      3 = Site Number
      4 = Short Item Number         5 =
      Contract Number

Process

      1. Enter a '1' to run in Final                    _____________
      mode.  Final mode will update all
      records.  If left blank, no
      records will be udpated except in
      the following situation: If
      processing options were set to
      calculate the Actual Billable
      Amount or Actual Payable Amount in
      the Parts List or the Routing
      Instructions then those records
      will be updated with the
      calculated amount but no billable
      or payable records will be
      created.
      2. Enter a '1' to write errors to                 _____________
      report.  If left blank, errors
      will be written to the Work
      Center.
      3. Bill Service Orders                            _____________
      Blank = Bill Service Orders
      1 = Do NOT Bill Service Orders
      4. Pay Service Orders                             _____________
```

Blank = Pay Service Orders
1 = Do NOT Bill Service Orders

Billables

1. Enter the G/L Date to use when billing for parts and routings. If left blank then the system date will be used. _____
2. Enter the appropriate value for how to price Parts and Routings that do not have Actual Billable Amounts yet. _____

Payables

1. Enter the G/L Date to use when Paying for parts and routings. If left blank then the system date will be used. _____
2. Enter the appropriate value for how to price Parts and Routings that do not have Actual Payable Amounts yet. _____

Vertex

These processing options only pertain if Vertex's Quantum Sales and Use Tax Software (3rd party tax software) has been implemented.

Billables:

1. Enter the appropriate Transaction Type for taxing billable Parts when using Vertex. If left blank, "SERVIC" will default. _____
2. Enter the appropriate Transaction Type for taxing billable Routings. If left blank, "SERVIC" will default. _____
3. Enter the appropriate Transaction Type for taxing Flat Rate billings when using Vertex. If left blank, "SERVIC" will default _____

Payables:

1. Enter the appropriate Transaction Type for taxing payable Parts when using Vertex. If left blank, "SERVIC" will default. _____
2. Enter the appropriate Transaction Type for taxing payable Routings when using Vertex. If left blank, "SERVIC" will default. _____
3. Enter the appropriate Transaction Type for taxing Flat Rate payables when using Vertex. _____

Returned Material Authorization

Returned Material Authorization

A Returned Material Authorization (RMA) is an approval from the supplier for the customer to return inventory for credit, replacement, or repair. The system creates an authorization number for the supplier to track the return of the inventory. This is also known as Returned Goods Authorization (RGA).

Returned material authorization includes the following tasks:

- ❑ Setting up RMA defaults
- ❑ Working with Returned Material Authorizations

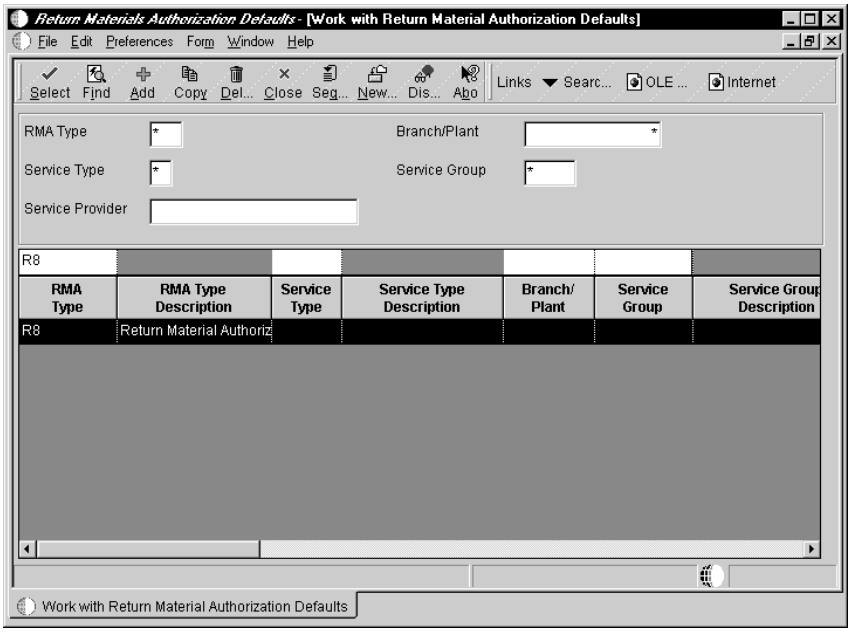
Setting Up RMA Defaults

When you set up RMA defaults, you identify to the system that you want the system to reserve and release parts for shipment using the default data based on the service type, model, parts recommendation, RMA type, and service provider.

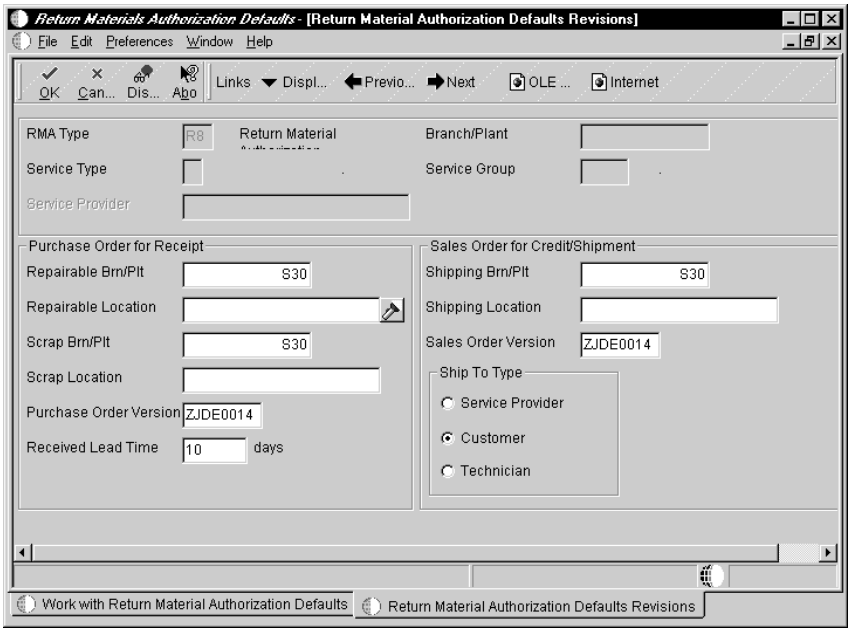
▶ To set up RMA defaults

From the Service Order Setup menu (G1742), choose Return Materials Authorization Defaults.

On Work with Return Material Authorization Defaults



1. Click Add.



2. On Return Material Authorization Defaults Revisions, complete the following fields:

   - RMA Type
   - Service Type
   - Service Provider
   - Branch/Plant
   - Service Group

3. To set up Purchase Order for Receipt default information, complete the following fields:

   - Repairable Brn/Plt
   - Repairable Location

     If a returned inventory item is repairable, the places the item in a repairable branch/plant. If the returned item is not repairable, the system places the item in a scrap branch/plant.

   - Scrap Brn/Plt
   - Scrap Location
   - Purchase Order Version
   - Received Lead Time

   The system uses the value from the Received Lead Time field to calculate the promised delivery for the returned inventory item number.

4. To set up Sales Order for Credit/Shipment default information, complete the following fields:

   - Shipping Brn/Plt
   - Shipping Location
   - Sales Order Version

5. To set up the type of customer receiving the shipment, click one of the following options under Ship To Type:

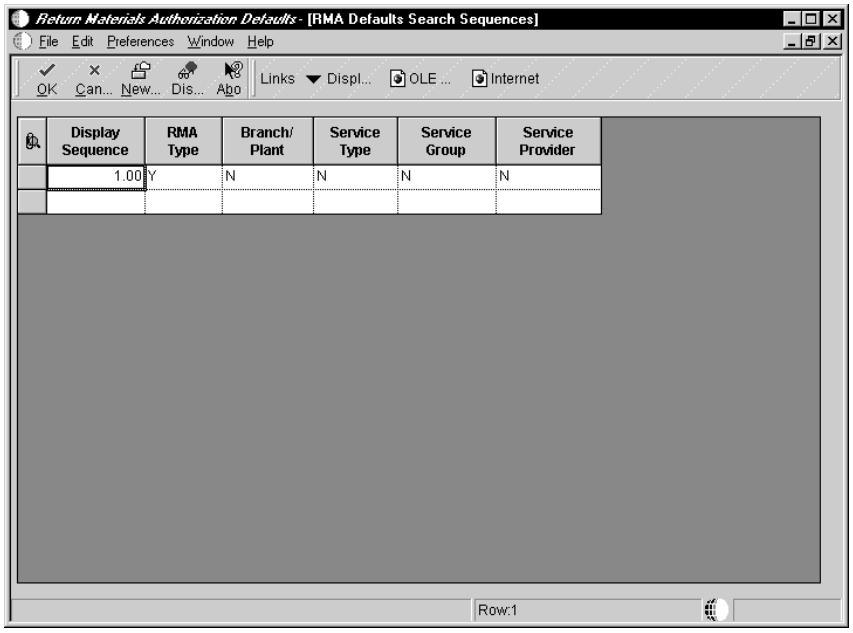
   - Service Provider
   - Customer
   - Technician

   The system retrieves the address book information from the Service Work Order table (F4801) that is created when you enter a service order.

   When you enter an RMA from a service order, the system retrieves the service provider information from the service order. If you enter an RMA directly from the menu, the system does not provide the service provider.

6. To define how the system retrieves RMA defaults, exit to Work with Return Material Authorization Defaults.

7. From the Form menu, choose Search Sequence.



8. On RMA Defaults Search Sequences, complete the following fields:

   - RMA Type
   - Branch/ Plant

- Service Type
- Service Group
- Service Provider

Define the order that you want the system to use to search for a match between the call and routing rules. The system uses a hierarchical search method, from most specific to most general. To include fields in the hierarchical search, complete them with a Y or N.

Field	Explanation
RMA Type	A user defined code (00/DT) that indicates the document type of the secondary or related order. For example, a purchase order might be document type OP and might have been created to fill a related work order with document type WO.
Service Type	A user defined code (00/TY) that indicates the type classification of a work order or engineering change order. You can use work order type as a selection criteria for work order approvals.
Branch/Plant	A code that represents a high-level business unit. Use to reference a branch or plant that might have departments or jobs, which represent lower-level business units (data item MCU), subordinate to it. For example: • Branch/Plant (MMCU) • Dept A (MCU) • Dept B (MCU) • Job 123 (MCU) Business unit security is based on the higher-level business unit.
Service Group	An attribute of a service provider that allows the end user to group the service provider into logical groups, such as regional, type of service provided, billing arrangements.
Repairable Brn/Plt	A business unit is an accounting entity, such as a profit center, department, warehouse location, job, project, workcenter, and so on, required for management reporting.
Repairable Location	The location that the system uses as the default when you receive inventory at the warehouse. The format of the location is user defined by branch/plant (P410012).
Scrap Brn/Plt	This business unit is used to generate A/R invoices.
Scrap Location	The location that the system uses as the default when you receive inventory at the warehouse. The format of the location is user defined by branch/plant (P410012).

Field	Explanation
Purchase Order Version	Version identifies a specific set of data selection and sequencing settings for the application. Versions may be named using any combination of alpha and numeric characters. Versions that begin with 'XJDE' or 'ZJDE' are set up by J.D. Edwards.
Received Lead Time	The actual number of days from the date of the purchase order to the date the item was fully received.
Shipping Brn/Plt	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Shipping Location	The location that the system uses as the default when you receive inventory at the warehouse. The format of the location is user defined by branch/plant (P410012).
Sales Order Version	A version is a user-defined set of specifications. These specifications control how applications and reports run. You use versions to group and save a set of user-defined processing option values and data selection and sequencing options. Interactive versions are associated with applications (usually as a menu selection). Batch versions are associated with batch jobs or reports. To run a batch process, you must choose a version.
Ship To Type	A flag that indicates to whom the shipment of replacement parts or return and exhange inventory items should be shipped.

Processing Options for RMA Revisions Processing Option DS

```
Defaults

      1. Enter the default RMA document                _____________
      type.
      2. Enter a '1' to default the                    _____________
      Service Order Number to the Sales
      Order Subledger Field.
      3. Enter a '1' to default the                    _____________
      Inventory Item Number for Receipt
      from the Service Work Order
      Header.
      4. Enter a '1' to default the                    _____________
```

Inventory Item Number for Shipment from the Service Work Order Header.

5. Enter a '1' to default the Equipment Number for Receipt from the Service Work Order Header. _____

6. Enter a '1' to default the Equipment Number for Shipment from the Service Work Order Header. _____

Edits

1. Enter a '1' if Service Order Number is required _____

2. Enter a '1' if Call Number is required _____

Versions

1. Enter the version of Credit Memo (P42025) to be used. If left blank, version ZJDE0001 will be used. _____

2. Enter the version of Quick Customer Add (P01015) to be used. If left blank, version ZJDE0001 will be used. _____

3. Enter the version of Work With Work Orders (P48201) to be used. If left blank, version ZJDE0002 will be used. _____

4. Enter the version of Work With Calls (P17500) to be used. If left blank, version ZJDE0001 will be used. _____

5. Enter the version of OnLine Invoice Inquiry (P42230) to be used. If left blank, version ZJDE0001 will be used. _____

6. Enter the version of Shipment Confirmation (P4205) to be used. If left blank, version ZJDE0001 will be used. _____

7. Enter the version of Purchase Receipts Inquiry (P43214) to be used. If left blank, version ZJDE0001 will be used. _____

8. Enter the version of Item Availability (P41202) to be used. If left blank, version ZJDE0001 will be used. _____

9. Enter the version of Item Cross Reference (P4104) to be used. If left blank, version ZJDE0001 will be used. _____

Working with Returned Material Authorizations

A Returned Material Authorization is an authorization from the supplier for the customer to return inventory for credit, replacement, or repair. The system creates an authorization number for the supplier to track the return of the inventory. This group of programs assists the user in managing the return of inventory by inventory item numbers.

You can create a purchase order to receive a returned item, which allows you to take advantage of system processes, such as receipt routings, warehouse puts, and quality inspections. You can also create a sales order to ship a replacement inventory item to a customer or to issue a credit for the return.

With the RMA module, the system can perform the following functions:

- Trigger invoicing for parts or machines not returned
- Deduct inventory and forecast the reorder level based on usage
- Substitute parts wherever parts numbers are involved (reservation, shipping, receiving, balancing, backorder fulfillment, and so on)

Working with Returned Material Authorizations includes the following tasks:

- ❑ Entering Returned Material Authorization information
- ❑ Entering credit memos
- ❑ Running the RMA – Sales Order Update program

Before You Begin

- ❑ Define defaults for creating sales orders and purchase orders. See *Setting Up RMA Defaults*.
- ❑ Set up RMA status user defined codes (40/RN). See *Setting Up User Defined Codes for CSMS*.

❑ Verify that you have purchased and installed the following systems. You must have installed these systems to be able to use Returned Material Authorization:

- System 41: Inventory Management
- System 42: Sales Order Management
- System 43: Procurement

Entering Returned Material Authorization Information

Enter RMA information to manage the return of inventory items for credit or repair. If a customer calls one of your consultants with a defective item claim, the consultant can use the RMA programs to:

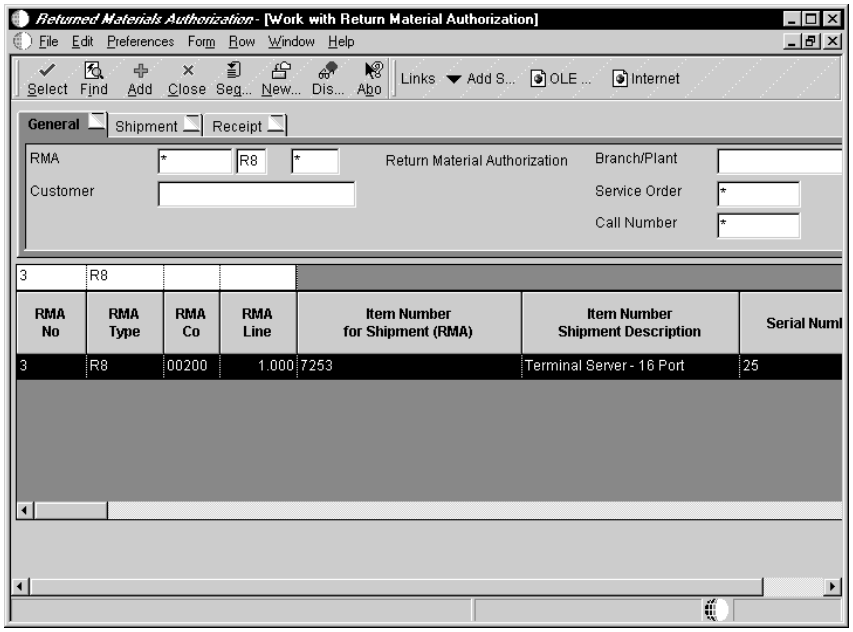
- Provide an authorization number for the return
- Define a purchase order to record the return of the item
- Define a sales order to credit the customer's account
- Define a sales order to reserve and release items for shipment

If necessary, the consultant can also enter a service order for repair of the returned item. Additionally, you can use the RMA process to ship replacement items to a customer, service provider, or technician if a service order is referenced in the header of the authorization. When you enter the return material authorization, the system creates a record in the Return Material Authorization table (F40051).

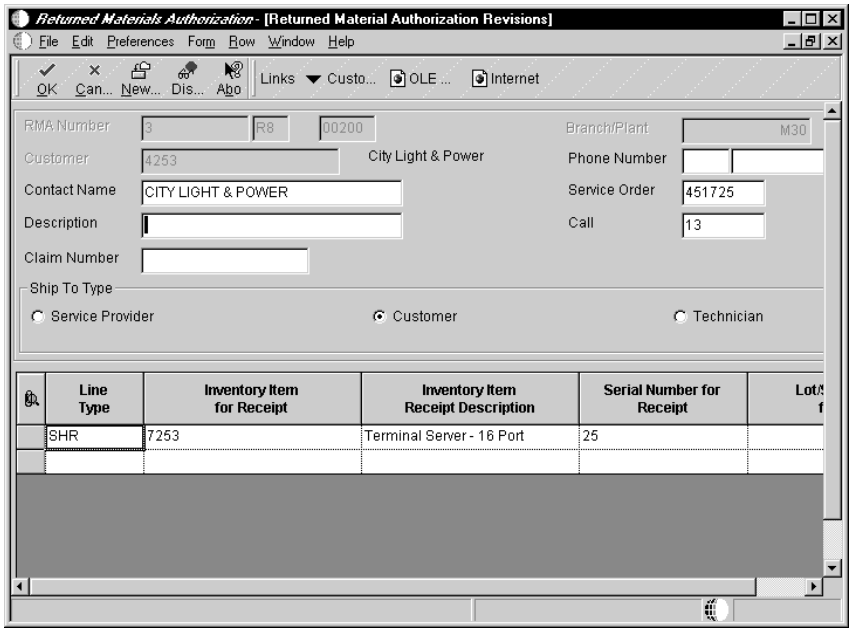
▶ To enter Returned Material Authorization information

From the Daily Service Order Processing menu (G1712), choose Returned Materials Authorization.

On Work with Return Material Authorization



1. Click Add.



2. On Returned Material Authorization Revisions, complete the following fields:
   - Customer
   - Branch/Plant

   The system uses next numbers to generate the RMA number. The RMA number associates the purchase order with the sales order.

3. To associate a service order claim number with the RMA, complete the following field:
   - Claim Number
4. To associate a service order with the RMA, complete the following field:
   - Service Order
5. To associate a call with the RMA, complete the following field:
   - Call
6. Complete the following fields:
   - Line Type
   - Inventory Item for Receipt
   - Quantity for Receipt
   - Expected Receipt Date

     The system calculates this date based on the Received Lead Time field on the Returned Material Authorization Default Revisions form.

   - Inventory Item for Shipment
   - Inventory Item Shipment Description
   - Equipment Number for Shipment
   - Carrier Number for Receipt
   - Returned Reason

Field	Explanation
Customer	A user defined name or number that is unique to the address book number. You can use this field to enter and locate information. You can use it to cross-reference the supplier to a Dun & Bradstreet number, a lease number, or other reference.
Branch/Plant	A code that represents a high-level business unit. Use to reference a branch or plant that might have departments or jobs, which represent lower-level business units (data item MCU), subordinate to it. For example: • Branch/Plant (MMCU) • Dept A (MCU) • Dept B (MCU) • Job 123 (MCU) Business unit security is based on the higher-level business unit.
Claim Number	A claim submitted by a service provider for a warranty repair.

Field	Explanation
Service Order	A number that identifies the original document, such as a voucher, invoice, unapplied cash, journal entry, and so on. On entry forms, you can assign the original document number or let the system assign it through Next Numbers. Matching document (DOCM) numbers identify related documents in the Accounts Receivable and Accounts Payable systems. Examples: • Automated/Manual Payment Original document – Voucher Matching document – Payment • A/R Original Invoice Original document – Invoice • Receipt Application Original document – Invoice Matching document – Receipt • Credit Memo/Adjustment Original document – Invoice Matching document – Credit Memo • Unapplied Receipt Original document – Receipt
Call	A number that identifies a customer issue.
Line Type	A user defined code (40/RN) that indicates the current status of a Returned Material Authorization Line. The special handling code will determine if a purchase order, sales order, or both a purchase and sales order are created when you enter the status on a Returned Material Authorization line. The second description stores the beginning status of the purchase order and sales order. Valid codes are: 1 Purchase order only 2 Sales order only 3 Purchase order and sales order
Inventory Item for Receipt	A number that the system assigns to an item. It can be in short, long, or third item number format.
Quantity for Receipt	The available quantity can be on-hand balance minus commitments, reservations, and backorders. This is user defined in branch/plant constants.
Expected Receipt Date	The date the item is supposed to arrive.
Carrier Number for Receipt	The address number for the preferred carrier of the item. The customer or your organization might prefer a certain carrier due to route or special handling requirements.

Field	Explanation
Returned Reason	A user defined code (system 42, type RC) that explains the purpose for a transaction. For example, you might set up codes to identify the following reasons for a return: • Goods were damaged in shipment • Too many goods were shipped

Processing Options for Work with Return Material Authorization

```
Default

      1. RMA Document Type                                  _____________

Versions

Enter the PO version for the following
    programs. If left blank, version
    'ZJDE0001' will be passed.

      1. RMA Revisions (P400511)                            _____________
      2. Shipment Confirmation (P04205)                     _____________
      3. Receipt Entry (P4312)                              _____________
      4. SO Entry (P4210)                                   _____________
      5. PO Entry (P4310)                                   _____________
```

Entering Credit Memos

When you enter credit memos, you are generally creating a reversal for an existing sales order. This creates a negative amount for the sales order.

▶ To enter a credit memo

From the Daily Service Order Processing menu (G1712), choose Returned Materials Authorization.

On Work with Return Material Authorization

1. Click Add.
2. On Return Material Authorization Revisions, choose Credit Memo from the Form menu.
3. On Work with Sales Ledger Inquiry, click Find.
4. To enter a credit memo for a detail line, choose the sales order and choose Credit Memo from the Row menu, and then choose Select Line.

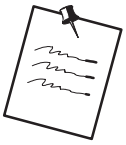
   To enter a credit memo for a sales order, you must enter C for the line type.

5. To enter a credit memo for the sales order, choose the sales order and choose Credit Memo from the Row menu, then choose Select Order.
6. Click Close to return to the Work with Return Material Authorization form and review the updated credit line information.

   The system creates a negative shipment line type of SHP from the inventory item number entered with the quantity received as a -1 on the original sales order.

7. To clear a credit memo, choose Clear Credit Memo from the Form menu.

   The system clears the credit and displays a message to signal that the credit has been cleared.



When you clear a credit memo, the system clears the credit each time you choose Clear Credit Memo from the Form menu.

Running the RMA – Sales Order Update Program

From the Daily Service Order Processing menu (G1712), choose RMA – Sales Order Update.

You run the RMA – Sales Order Update program for advanced exchanges. For example, you create a sales order to ship an item and a purchase order to receive a defective, yet similar item. If the defective item is not received by the promised delivery date, the program updates the status of the related sales order detail line to a user defined status such as Print Sales Invoice. If the defective item is received, the program updates the status of the related sales order detail line to a user defined status such as Complete – Ready to Purge.

The system bases the data selection based on the RMA table (F40051). The system calculates the promised delivery date from the Received Lead Time field. If the date has passed and the RMA has been returned, the system updates the sales order status. If the RMA received, the system updates the sales order to another status.

Processing Options for RMA – Sales Order Update

Process

For Inventory Items sthat have not been received.

1. Enter the Status of Related Sales Orders for Inventory Item Numbers Not Received. _____
2. Enter the Status of Related Sales Orders for Inventory Item Numbers Received. _____

Versions

Enter the version of the following applications to call. Leave blank to use the default version defined in paratheses.

1. Sales Order Entry – P4210 (ZJDE0001) _____

Knowledge Management

Knowledge Management

The Knowledge Management module is the database that allows you to associate symptoms, analysis, and resolutions with calls and service orders.

Knowledge Management includes the following tasks:

- ❑ Setting up the knowledge base
- ❑ Working with Knowledge Management transactions

Terms and Concepts

The following Knowledge Management terms and concepts are used in this guide:

Knowledge type	A category that distinguishes among symptom, analysis, and resolution.
Knowledge code	A user defined code describing symptoms, analyses, and resolutions.
Knowledge tree	A hierarchy of knowledge base codes used as a means of selecting knowledge base codes for a symptom, analysis, or resolution.
Symptom	The problem according to the customer. Symptoms are stored separately from analyses and resolutions, and can be searched for and reused for other issues.
Analysis	The cause of the symptom. Analyses are stored separately from symptoms and resolutions.
Resolution	The means use to correct the symptoms of an issue. Resolutions are stored separately from analyses and symptoms, and can be searched for and reused for other issues.

Unit of knowledge

A piece of information that consists of one or all of the following:

- Knowledge codes
- Descriptions
- Media objects

A knowledge type is used to distinguish units of knowledge. Knowledge types are:

- Symptoms
- Analyses
- Resolutions

Pareto analysis

The method of ranking the analyses and resolutions of a problem to identify the most commonly occurring ones.

Setting Up the Knowledge Base

Before you can use Knowledge Management to assist you in resolving calls or service orders, you must set up the knowledge base. You also specify information that will be used later when you enter data into the system.

Setting up the knowledge base includes the following tasks:

- ❑ Setting up Knowledge Management constants
- ❑ Setting up Knowledge Management codes
- ❑ Defining Knowledge Management tree names
- ❑ Setting up the knowledge tree structure
- ❑ Setting up symptoms, analyses, and resolutions

You also need to set up user defined codes for Knowledge Base Management. See *Setting Up User Defined Codes* for more information.

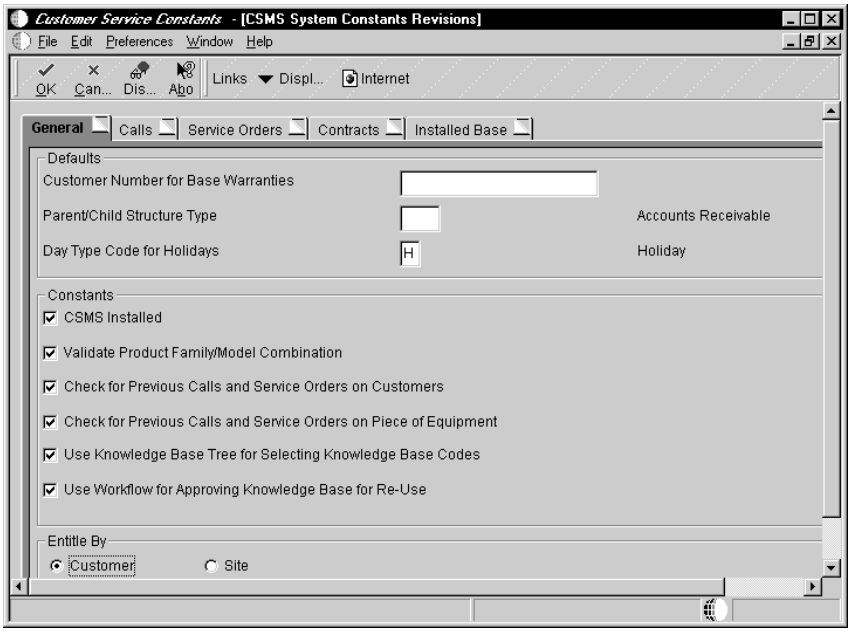
Setting Up Knowledge Management Constants

To define default information for the entire system, you set up constants. Constants control the types of information that you track and the rules that the system uses to perform certain calculations.

▶ To set up Knowledge Management constants

From the Customer Service Setup menu (G1740), choose Customer Service Constants.

On CSMS System Constants Revisions



1. To enable CSMS to work as designed when interfacing with other systems, click the following option:
   - CSMS Installed
2. To require users to choose Knowledge Management codes from the knowledge tree, click the following option:
   - Use Knowledge Base Tree for Selecting Knowledge Base Codes

   By choosing this option, you protect the knowledge base codes from being overwritten on Knowledge Base Revisions.

   For Knowledge Management, the workflow feature is reserved for future use.

Field	Explanation
CSMS Installed	A flag that describes whether there is an interface to the Customer Service Management System (CSMS).
Use Knowledge Base Tree for Selecting Knowledge Base Codes	The Yes or No Entry field is a common single character entry field for simple yes or no responses on prompt screens.

Setting Up Knowledge Management Codes

Set up knowledge codes if you use codes to define a unit of knowledge. The codes are the building blocks of the tree, but you are not required to set up knowledge trees to use knowledge codes. Use codes with symptoms, analyses, and resolutions for calls. Until you attach these codes to a transaction, the system does not recognize them. You can

associate codes with a symptom, analysis, or resolution using a tree, which standardizes how the codes are defined. As an alternative, you can select a code from a table. When you create symptoms, analyses, and resolutions for calls or service orders, you can associate up to five knowledge codes to more clearly define the symptom, analysis, or resolution. Then you can create up to five user defined codes to associate with each knowledge code, which you might create for reporting purposes. You must set up knowledge codes if you are using the knowledge tree.

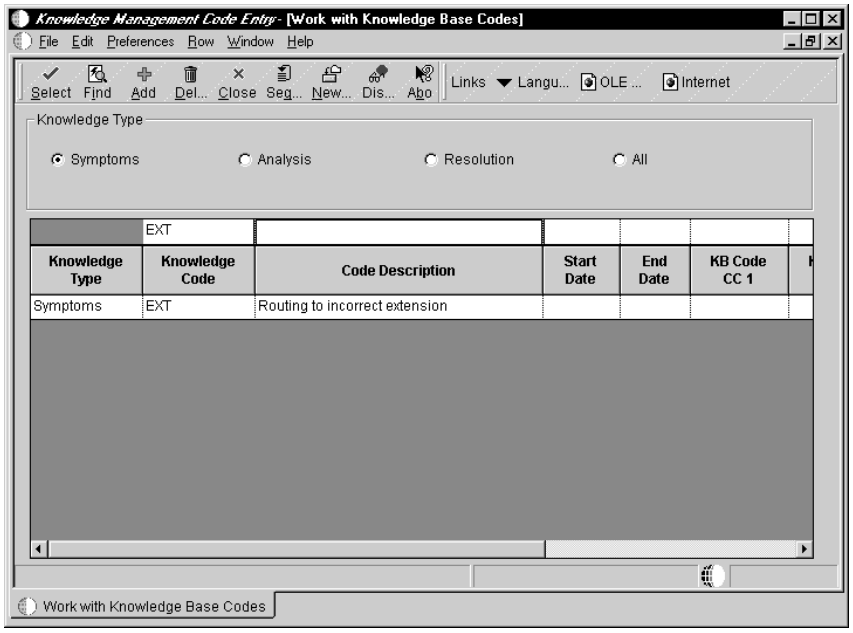
You can assign the following knowledge types to Knowledge Management codes:

- Symptom
- Analysis
- Resolution
- All of the above

▶ To set up Knowledge Management codes

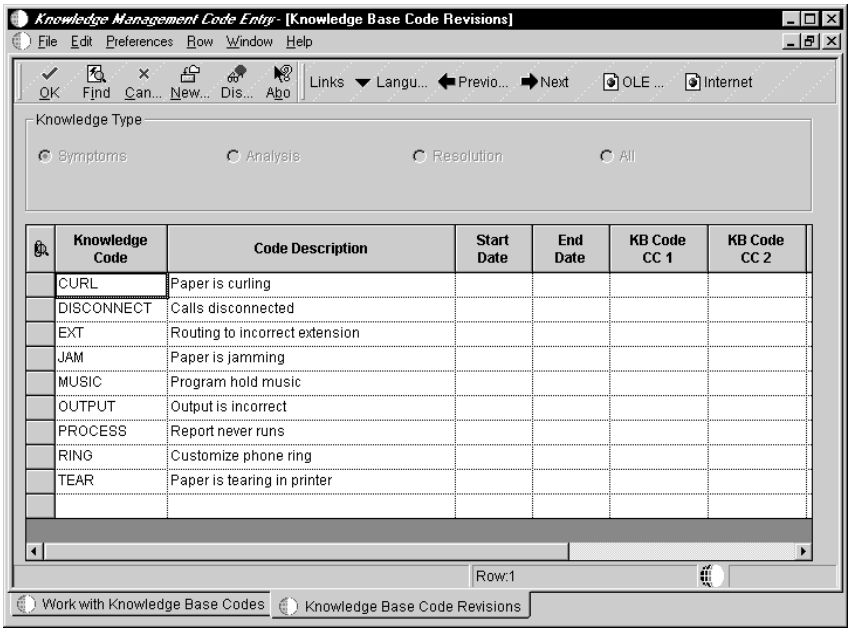
From the Knowledge Management Setup menu (G1745), choose Knowledge Management Code Entry.

On Work with Knowledge Base Codes



1. To define the knowledge type, click one of the following options and click Add:
   - Symptoms
   - Analysis
   - Resolution

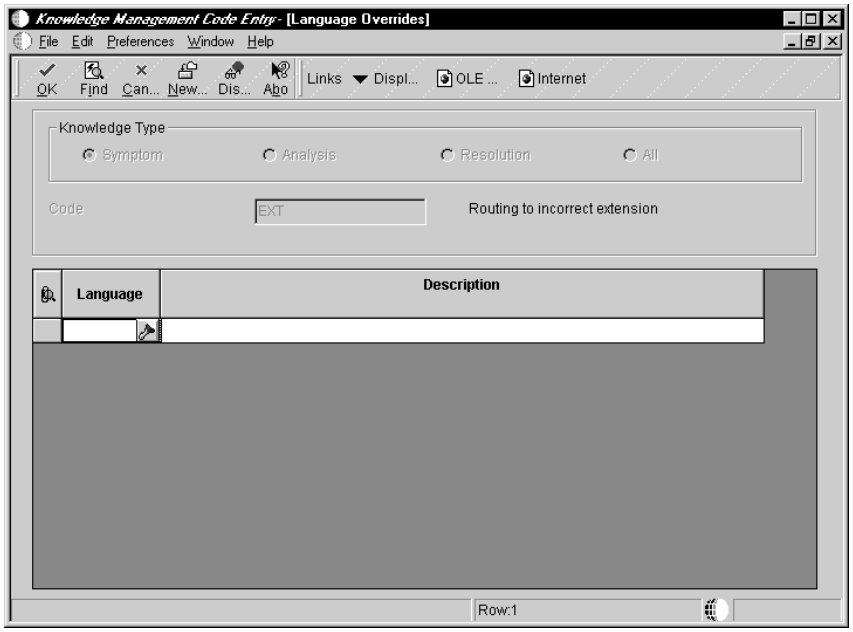
- All



2. On Knowledge Base Code Revisions, complete the following fields:
   - Knowledge Code

     You can enter up to twelve alphanumeric characters in the Knowledge Code field.

   - Code Description
3. Complete the following optional fields:
   - Start Date
   - End Date
   - KB Code CC 1
   - KB Code CC 2
   - KB Code CC 3
   - KB Code CC 4
   - KB Code CC 5
4. To attach descriptions in foreign languages to knowledge management codes, highlight the code and choose Language from the Row menu.



5. On Language Overrides, complete the following fields:
   - Language
   - Description

Field	Explanation
Knowledge Type	A code that allows the user to define the type of action that is associated with defining the knowledge base. Valid values are: • Symptom • Analysis • Repair • All
Code Description	A 40-character description.
Start Date	User Defined Date used in Issue Management System. . . . . . *Form-specific information* . . . . . . Date that a knowledge code is first available for you to use.
End Date	User Defined Date used in Issue Management System. . . . . . *Form-specific information* . . . . . . Date when the knowledge code is no longer available for use.
Language	A user defined code (01/LP) that specifies a language to use in forms and printed reports. Before any translations can become effective, a language code must exist at either the system level or in your user preferences.

Processing Options for Knowledge Base Codes

```
Defaults

      Knowledge Type                                  _____
      Knowledge Base Code CC1                         _____
      Knowledge Base Code CC2                         _____
      Knowledge Base Code CC 3                        _____
      Knowledge Base Code CC 4                        _____
      Knowledge Base Code CC 5                        _____
```

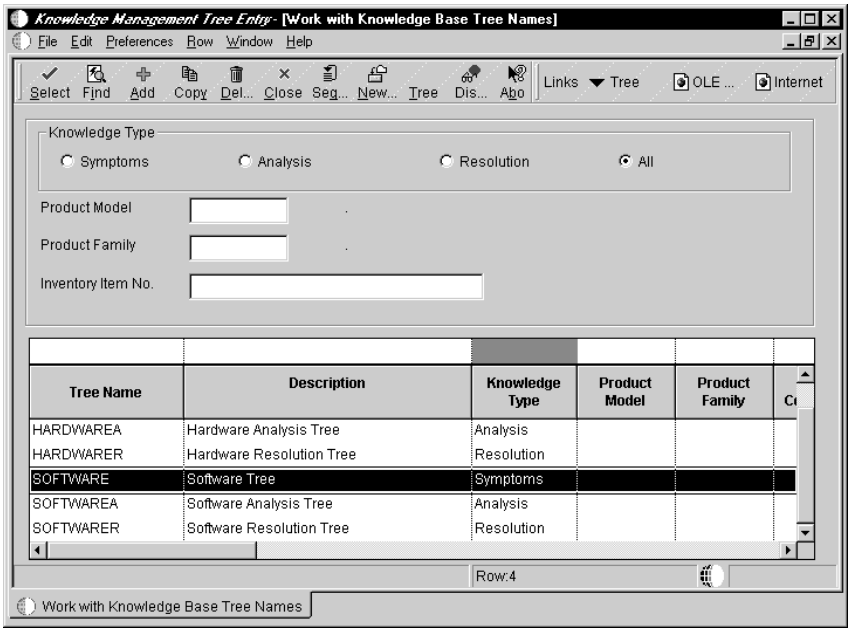
Defining Knowledge Management Tree Names

You define Knowledge Management tree names to give logical meaning to a hierarchical structure of knowledge codes and types.

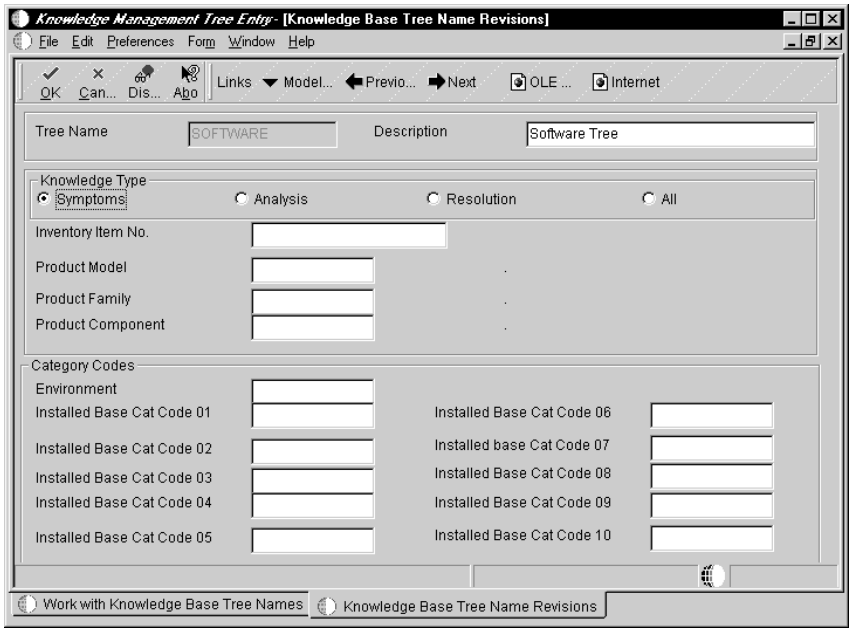
▶ To define Knowledge Management tree names

From the Knowledge Management Setup menu (G1745), choose Knowledge Management Tree Entry.

On Work with Knowledge Base Tree Names



1. Click Add.



2. On Knowledge Base Tree Name Revisions, complete the following fields:
    - Tree Name
    - Description
3. Click one of the following options:
    - Symptoms
    - Analysis
    - Resolution
    - All
4. Complete the following optional fields:
    - Inventory Item No
    - Product Model
    - Product Family
    - Product Component
    - Environment
    - Installed Base Cat Code 01
    - Installed Base Cat Code 02
    - Installed Base Cat Code 03
    - Installed Base Cat Code 04
    - Installed Base Cat Code 05
    - Installed Base Cat Code 06

- Installed base Cat Code 07
- Installed Base Cat Code 08
- Installed Base Cat Code 09
- Installed Base Cat Code 10

Field	Explanation
Knowledge Base Tree Name	The name of the Knowledge Base Tree. A Knowledge Base Tree is a hierarchical organization of codes selected from the Knowledge Base Codes table.
Description	A 40-character description.
Knowledge Type	A code that allows the user to define the type of action that is associated with defining the knowledge base. Valid values are: • Symptom • Analysis • Repair • All
Inventory Item No	A number that the system assigns to an item. It can be in short, long, or third item number format.
Product Model	A code that classifies an inventory item into a model for customer service. Some examples include: Laser Printer, Inkjet or Fax.
Product Family	A code that classifies an inventory item into a group for customer service. Some examples include: Laser Printer, Inkjet, or Fax.
Product Component	The components that make an equipment number or components associated with a customer site.
Environment	The operating environment of the user. Some examples include Windows 95, Windows NT, UNIX or AS/400.
Installed Base Cat Code 01	User defined reporting code for Installed Base.

Setting Up the Knowledge Tree Structure

After you define a knowledge tree name, you set up the structure for the tree. When you set up a knowledge tree, you create a hierarchical structure of knowledge base codes using a parent-child order.

Setting up the knowledge tree structure includes the following tasks:

- Setting up the structure by parent code
- Setting up the structure by child code

Before You Begin

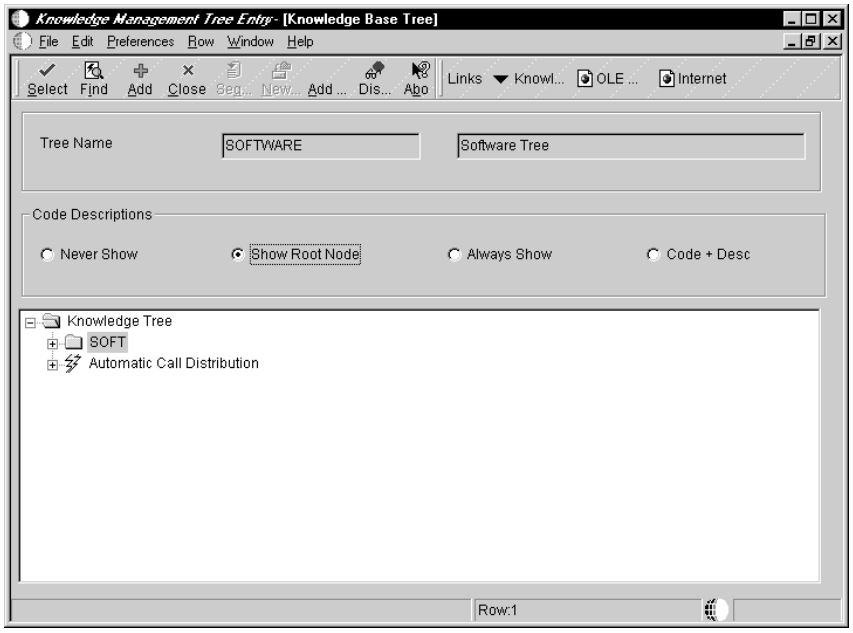
❑ Define the knowledge base codes you will use when you create the tree structure. See *Setting Up Knowledge Management Codes*.

▶ To set up the structure by parent code

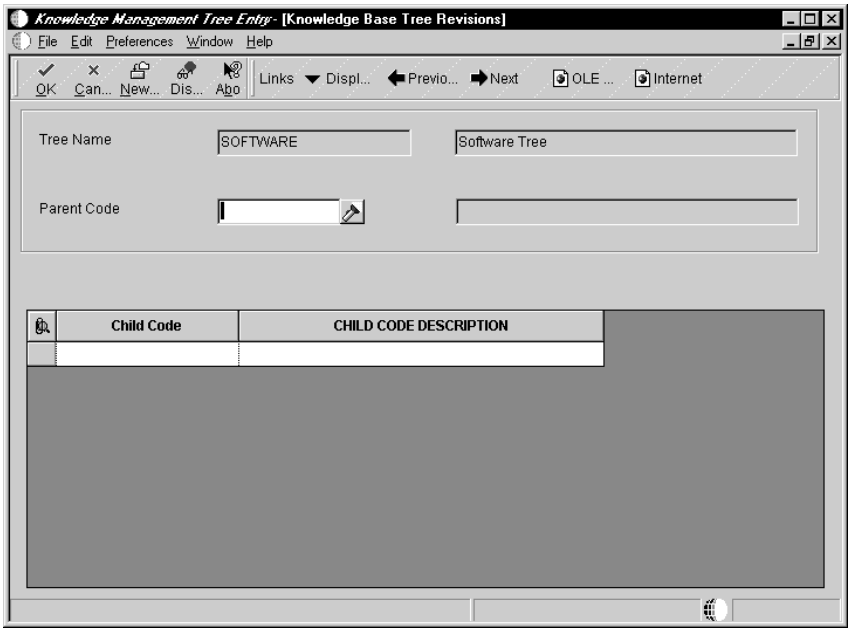
From the Knowledge Management Setup menu (G1745), choose Knowledge Management Tree Entry.

On Work with Knowledge Base Tree Names

1. Locate the tree name to which you are adding the structure and choose Tree from the Row menu.



2. On Knowledge Base Tree, click Add.



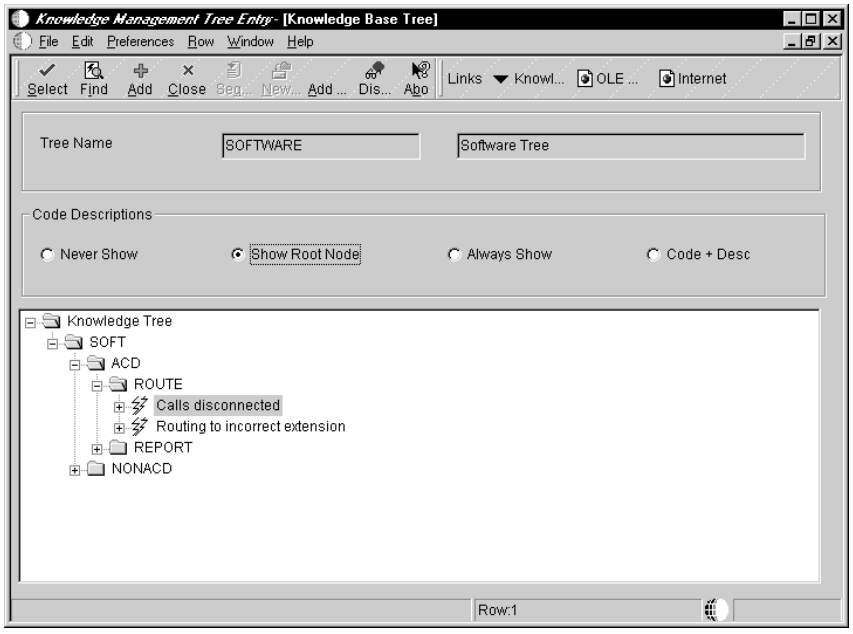
3. On Knowledge Base Tree Revisions, to enter one parent code and all of its children, complete the following fields:
   - Parent Code
   - Child Code
4. Click OK.
5. On Knowledge Base Tree, click one of the following options to define how the code descriptions are displayed:
   - Never Show

     The system displays the code only with no description.
   - Show Root Node

     The system displays the description only at bottom of the tree.
   - Always Show

     The system always displays the description.
   - Code + Desc

     The system displays the code and description concatenated.
6. To add codes at the first level, click Add.
7. To add children to an existing code, locate the code and choose Add Children from the Row menu.

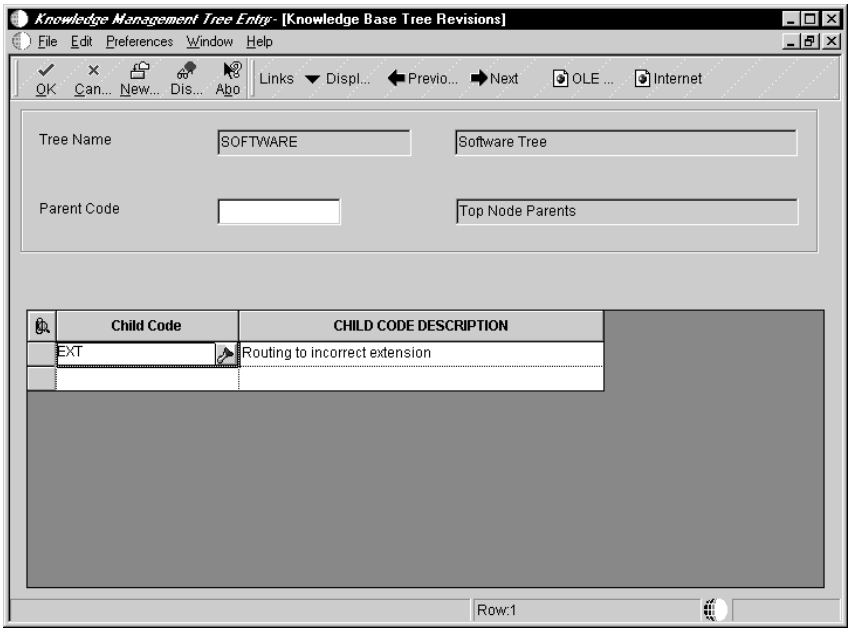


▶ To set up the structure by child code

From the Knowledge Management Setup menu (G1745), choose Knowledge Management Tree Entry.

On Work with Knowledge Base Tree Names

1. Locate the tree name to which you are adding the structure and choose Tree from the Row menu.
2. On Knowledge Base Tree, click Add.
3. To enter codes for all of the first level parents, complete the following field:
   - Child Code



4. Click OK.
5. On Knowledge Base Tree, click one of the following options to define how the code descriptions are displayed:

   - Never Show

     The system displays the code only with no description.

   - Show Root Node

     The system displays the description only at bottom of the tree.

   - Always Show

     The system always displays the description.

   - Code + Desc

     The system displays the code and description concatenated.

6. To add children to an existing code, locate the code and choose Add Children from the Row menu.

Setting Up Symptoms, Analyses, and Resolutions

Based on prior experience, a business might identify common or recurring symptoms, analyses, or resolutions. You set up Knowledge Management symptoms, analyses, or resolutions, to reuse existent information. You can attach this information to new calls or service orders.

A Knowledge Management symptom, analysis, or resolution is composed of the following information:

- Up to five Knowledge Management codes, which have been selected from either a Knowledge Management tree or the Knowledge Management code table
- A description that is up to 80 characters long
- Media objects, such as:
  - Text documents
  - Images
  - OLE objects
  - Shortcuts

When you create a Knowledge Management symptom, analysis, or resolution, and select the codes from a Knowledge Management tree, the system creates a link between the last code selected and the symptom, analysis, or resolution. From this point forward, whenever you choose that code from the Knowledge Management tree, the system also retrieves the description and attached media objects.

Setting up symptoms, analyses, and resolutions includes the following tasks:

- Setting up symptoms, analyses, and resolutions by code
- Setting up symptoms, analyses, and resolutions by tree

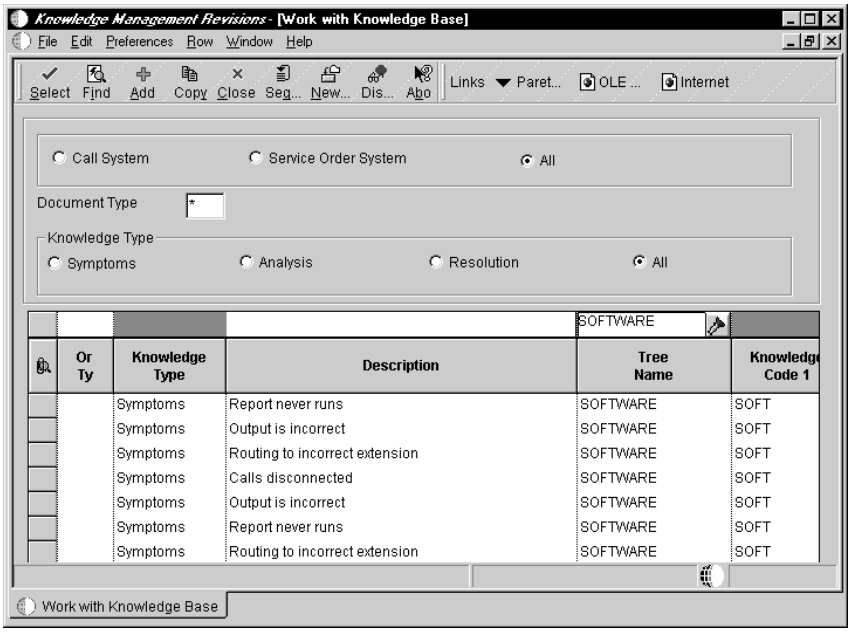
Before You Begin

❑ See *Setting Up Knowledge Management Constants* to define how the user is to select a unit of knowledge.

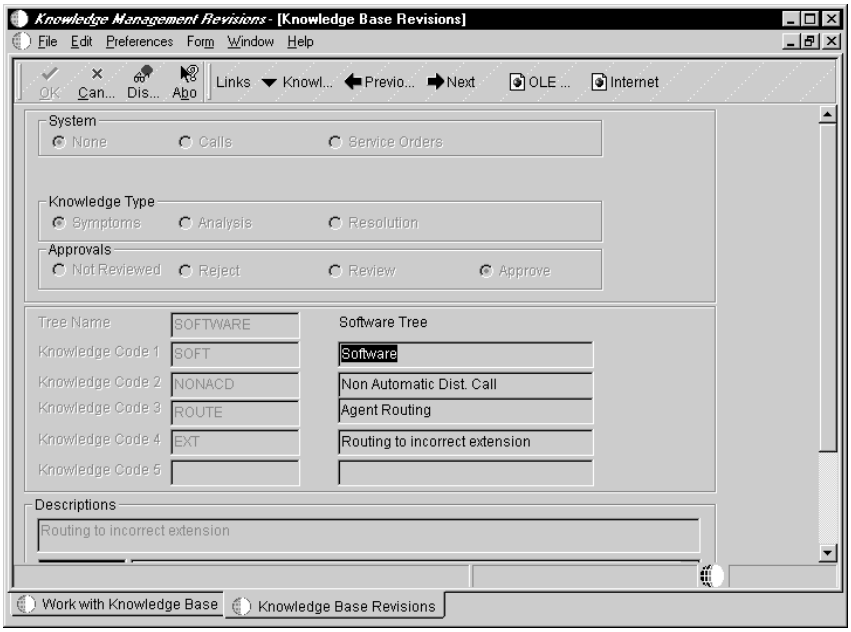
▶ To set up symptoms, analyses, and resolutions by code

From the Knowledge Management Setup menu (G1745), choose Knowledge Management Revisions.

On Work with Knowledge Base



1. Click Add.



2. On Knowledge Base Revisions, to define the system to which you are applying the knowledge unit, click one of the following options:
   - None
   - Calls
   - Service Orders

When you associate a call with the knowledge database, you must assign a symptom to the call.

3. To define the knowledge type, click one of the following options:
   - Symptoms
   - Analysis
   - Resolution
4. To indicate that the unit of knowledge is available for reuse, click the following option:
   - Approve

   If you are using workflow, the approval option is disabled until the reviewer accesses Knowledge Base Revisions to choose the approval or rejection option.
5. To indicate that the unit of knowledge is not approved for reuse, click the following option:
   - Reject
6. To attach knowledge codes to the unit of knowledge, complete any or all of the following fields:
   - Knowledge Code 1
   - Knowledge Code 2
   - Knowledge Code 3
   - Knowledge Code 4
   - Knowledge Code 5
7. To override the text description that the system retrieves from the last knowledge code, complete the following field:
   - Descriptions
8. To add media objects or text descriptions that are longer than 80 characters, attach the information in the media object area.

Field	Explanation
Knowledge Type	A code that allows the user to define the type of action that is associated with defining the knowledge base. Valid values are: • Symptom • Analysis • Repair • All

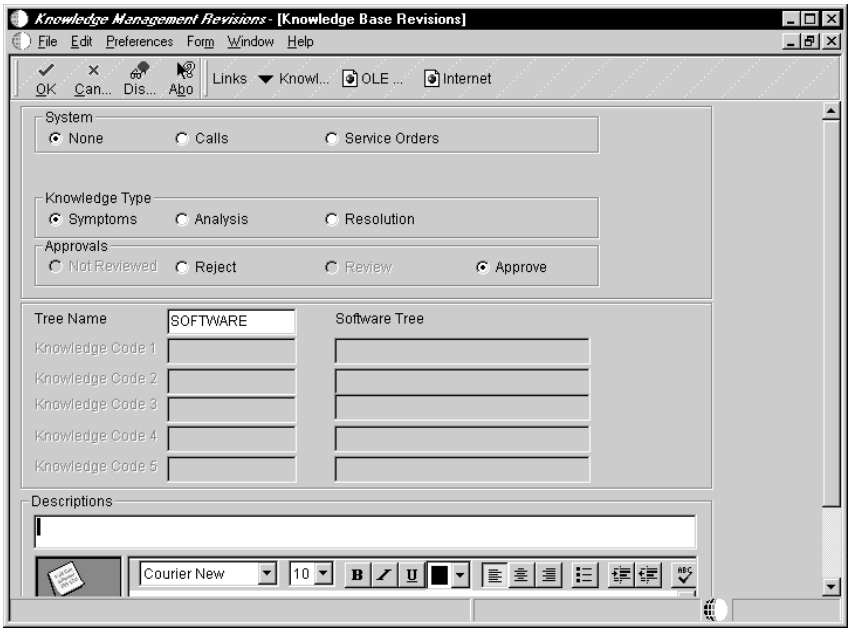
Field	Explanation
System	A code that identifies whether Knowledge Management is used by the Call system, the Service Order system, or by both systems.
Approvals	This field identifies the status of a Knowledge Base for reuse.
Descriptions	A free-form, 80-character text field.

▶ To set up symptoms, analyses, and resolutions by tree

From the Knowledge Management Setup menu (G1745), choose Knowledge Management Revisions.

On Work with Knowledge Base

1. Click Add.



2. On Knowledge Base Revisions, to define the system to which you are applying the knowledge unit, click one of the following options:

   - None
   - Calls
   - Service Orders

   When you associate a call with the knowledge database, you must assign a symptom to the call.

3. To define the knowledge type, click one of the following options:
   - Symptoms
   - Analysis
   - Resolution
4. To indicate that the unit of knowledge is available for reuse, click the following option:
   - Approve

   If you are using workflow, the approval option is disabled until the reviewer accesses Knowledge Base Revisions to choose the approval or rejection option.
5. To indicate that the unit of knowledge is not approved for reuse, click the following option:
   - Reject
6. To attach a knowledge base tree to a unit of knowledge, complete the following field:
   - Tree Name
7. To select codes from the specified tree, choose Tree from the Form menu.

   If you do not know the tree name, search using an inventory number or product family to filter tree name possibilities. The form lists trees based on knowledge type, inventory number, item number, product model, and product family.
8. To override the text description that the system retrieves from the last knowledge code, complete the following field:
   - Descriptions
9. To add media objects or text descriptions that are longer than 80 characters, attach the information in the media object area.

If you create reusable symptoms, analyses, and resolutions, the knowledge unit is forever attached to the last code you select in the tree.

Processing Options for Knowledge Base

```
Defaults

      Calling System (blank, C or S)          _____________
      Document Type                           _____________
      Knowledge Type                          _____________
      Knowledge Base Tree Name                _____________
      Created by user                         _____________
```

Working with Knowledge Management Transactions

Knowledge Management is flexible in how you can use it with Call Management and Service Order Management. When you are using Knowledge Management, you must first attach a symptom to a call or service order. Then you attach analyses and/or resolutions to that symptom. You can attach additional symptoms to the same call or service order. There is no limit to the number of symptoms, analyses, and resolutions you can attach to a call or service order.

When you enter the knowledge database from a call or service order, the system displays all symptoms associated with the issue. If a standard, reusable symptom has been used, the symptom entry information is disabled. If a non-standard symptom has been used, the symptom fields are enabled.

Working with Knowledge Management transactions includes the following tasks:

- Attaching symptom information to a call or service order
- Attaching analyses and resolutions to a symptom

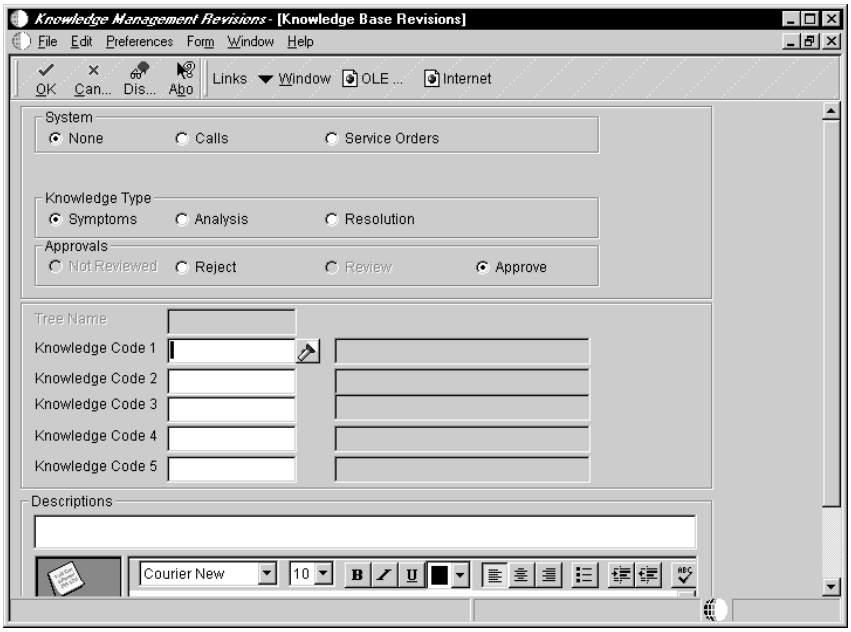
▶ To attach symptom information to a call or service order

From the Daily Call Processing menu (G1713), choose Call Entry.

The steps for this process are shown as you enter the Knowledge Management system from a the Call Management system, but the same steps apply if you enter from the Service Order Management system.

On Work With Calls

1. Complete the steps to locate a specific call, choose a call, and click Select.
2. On Customer Call Entry, choose Knowledge Base from the Form menu, choose Add/Attach, and then choose Symptom.



3. On Knowledge Base Revisions, complete either of the following fields and click OK:

   - Tree Name
   - Knowledge Code 1

   Depending on how you have set the constants for the Use Knowledge Base Tree for Selecting Knowledge Base Codes option, either the Tree Name field or the Knowledge Code field is enabled.

   To add or attach a symptom from the Work with Calls form, you enter symptom information, then choose a knowledge code that has information attached (reusable code). The system uses the knowledge code to override the symptom you entered on the call.

To add analysis information to a call, complete the same steps you use to add resolution information to a call. See Attaching Resolution Information to a Call.

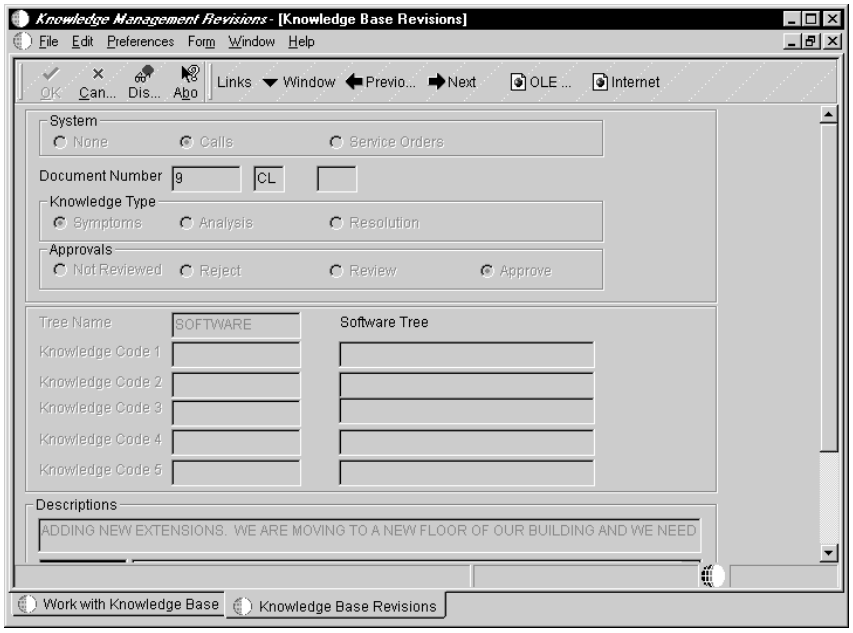
▶ To attach analyses and resolutions to a symptom

From the Daily Call Processing menu (G1713), choose Call Entry.

On Work With Calls

1. Complete the steps to locate a specific call, choose a call, and click Select.
2. On Customer Call Entry, choose Knowledge Base from the Form menu, choose Add/Attach, and then choose Resolution.

3. On Work with Call/Order Knowledge Base, locate the existing symptom or analysis and choose Resolution from the Row menu.



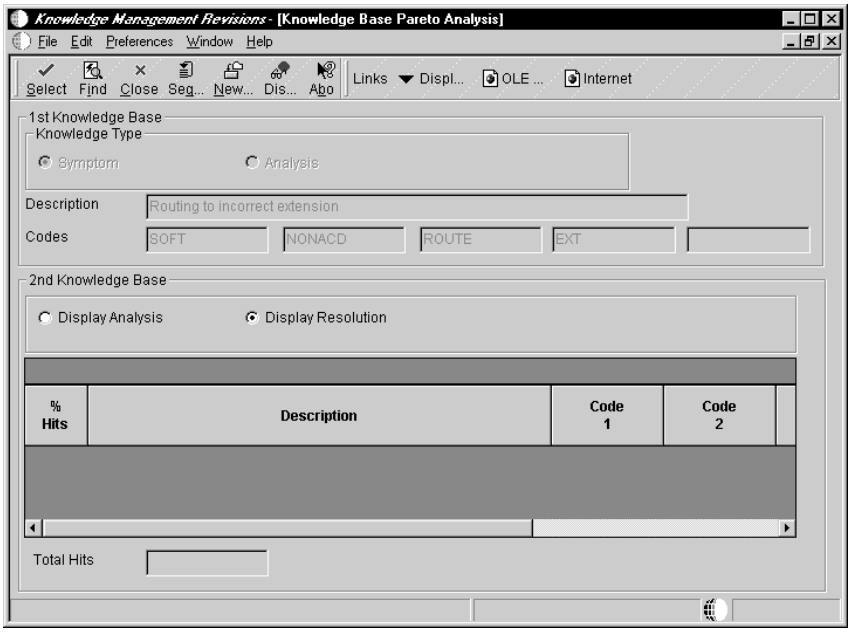
4. On Knowledge Base Revisions, complete either of the following fields and click OK:

   - Tree Name
   - Knowledge Code 1

   Depending on how you have set the Use Knowledge Base Tree for Selecting Knowledge Base Codes option in your system constants, either the Tree Name field or the Knowledge Code field is enabled.

5. Click OK to return to Work with Call/Order Knowledge Base.
6. To review pareto analysis results of resolutions or analyses attached to the symptom, choose Pareto Analysis from the Row menu.

   Only resolutions or analyses that are chosen from the knowledge tree structure and attached to a symptom appear in pareto analysis results.



7. On Knowledge Base Pareto Analysis, choose one of the following options:

   - Display Analysis
   - Display Resolution

   These options define whether the system displays an analysis attached to a symptom or if the system displays a resolution attached to a symptom or an analysis.

8. To detach a resolution that is attached to a symptom, highlight the resolution and choose Detach from the Row menu.

   You can also detach an analysis that is attached to a symptom or detach a resolution that is attached to an analysis. You cannot detach a symptom or an analysis that has any other knowledge types attached to it.

See Also

- *Searching for Customer Issues and Solutions* for information about adding symptoms to a call

Appendices

Appendix A – Setting Up Advanced Pricing for CSMS

Setting up advanced pricing for contracts and service orders allows you to price items and services using an advanced pricing structure, and allows you to streamline pricing setup and maintenance.

Advanced pricing provides flexibility when defining pricing. You can easily adjust prices for each contract or service order and then combine the adjustments into a pricing structure or schedule. Within each schedule, you can define unlimited price adjustments. The adjustment schedule attaches to the customer record and therefore is used for any contract or service order for that customer.

Setting up advanced pricing for CSMS includes the following tasks:

- ❑ Setting up preference hierarchies
- ❑ Setting up customer service detail groups
- ❑ Setting up price adjustment definitions
- ❑ Setting up adjustment schedules
- ❑ Setting up adjustment details
- ❑ Attaching adjustment schedules to contracts and service orders

Setting Up Preference Hierarchies

The system applies pricing adjustments to service contract and service order prices in the order you determine on the pricing hierarchy. The system uses the pricing structure to calculate price adjustments and updates. For this reason, you should set up your hierarchy to search from specific combinations to general combinations.

Complete the following tasks to set up preference hierarchies:

- ❑ Set up a preference master
- ❑ Define a pricing hierarchy

Setting Up a Preference Master

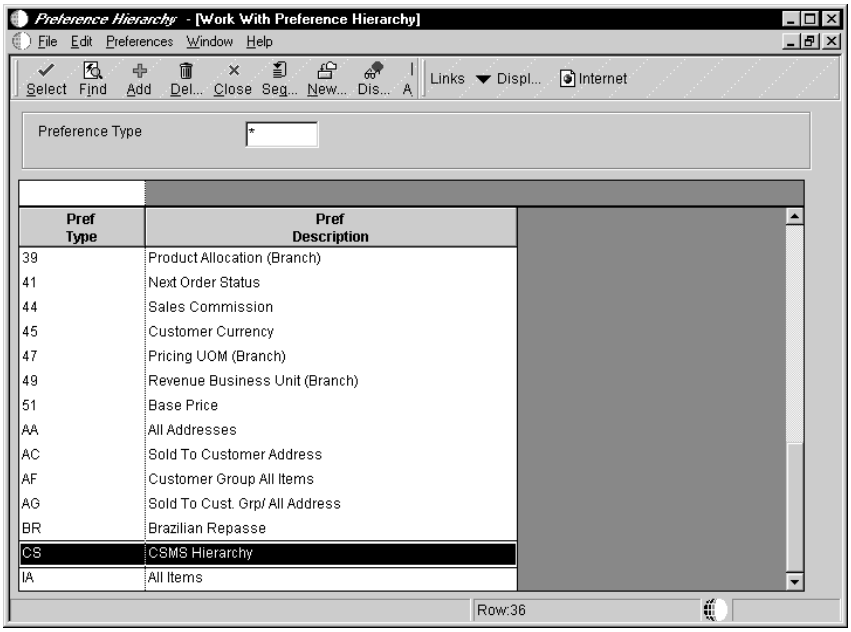
Before you define each pricing hierarchy, you must create a master record called the preference master. You can create as many different preference hierarchies as you need.

You define the hierarchy and then attach it to an adjustment definition. You can create a hierarchy for each adjustment definition or you can use a single hierarchy for many adjustment definitions. J.D. Edwards recommends that you set up a few hierarchies that can be used for multiple adjustment definitions.

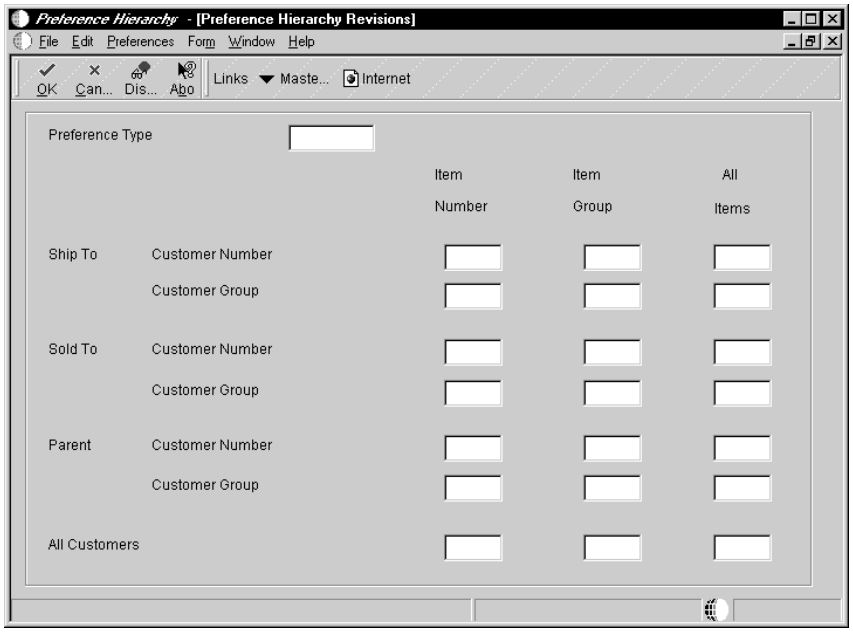
▶ To set up a preference master

From Customer Service Advanced Pricing Setup (G1746), choose Preference Hierarchy.

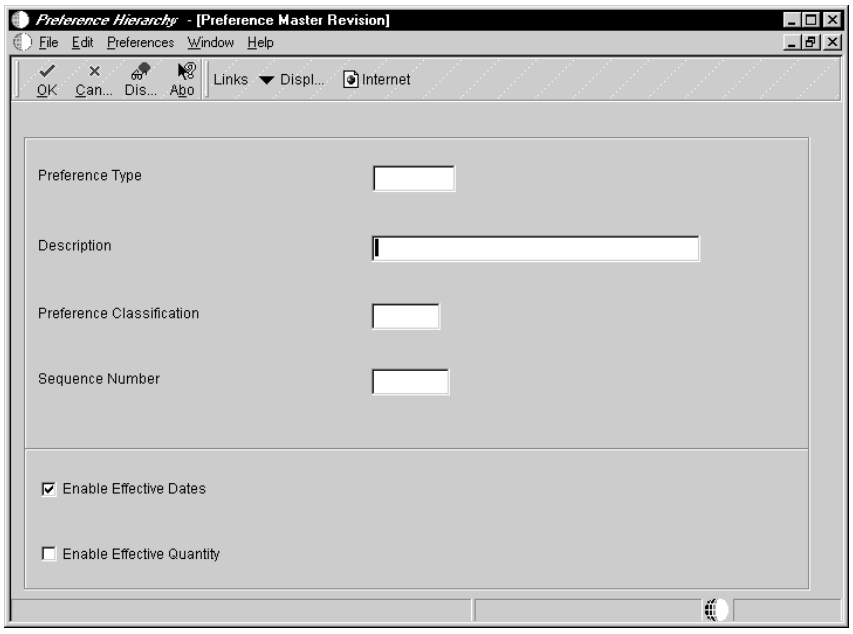
On Work With Preference Hierarchy



1. Click Add.



2. On Preference Hierarchy Revisions, choose Master Revision from the Form menu.



3. On Preference Master Revision, complete the following fields and click OK:
   - Preference Type
   - Description
   - Preference Classification
   - Sequence Number

4. If applicable, click either of the following options:
   - Enable Effective Dates
   - Enable Effective Quantity

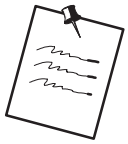
Field	Explanation
Preference Type	A user defined code (40/PR) that identifies a preference type or a price adjustment hierarchy. In the user defined code table 40/PR, a 1 in the Special Handling Code field identifies a preference that J.D. Edwards supports. This field is hard coded for each preference. For Agreement Penalty Schedules, first set up a user defined code of PN (for penalty). Then enter it in this field.
Description	A user defined name or remark.
Preference Classification	A classification or title that the system uses to group preferences on the Preference Profile form (P4007).
Sequence Number	For OneWorld, the sequence by which users can set up the order in which their valid environments are displayed. For World, a sequence or sort number that the system uses to process records in a user defined order.
Enable Effective Dates	A flag that indicates if you want to identify effective date ranges for a preference. Valid values are: Y Display Effective From and Effective Thru date fields on the Preference Profile Revisions forms (P40300 and P40300EC) for this preference. N Do not enable or display effective dates for this preference. Effective date fields are optional fields that you can set to N prior to setting up any preference records, but not after you have created preferences. You can assign effective dates without assigning effective quantity. However, if you assign effective quantity, you must assign effective dates.
Enable Effective Quantity	A code that indicates if you want to use quantity ranges for this preference. Valid values are: Y Yes, display the Quantity From and Quantity Thru fields on the Preference Profile Revisions forms (P40300 and P40300EC) for this preference. N No, do not enable or display the quantity range fields. Effective quantity fields are optional fields that you can disable prior to setting up any preference records, but not after you have created preference records. If you assign effective quantity, you must assign effective dates.

Defining a Pricing Hierarchy

A preference hierarchy allows you to specify the order in which pricing adjustments are applied. You identify the pricing hierarchy by typing numbers at the intersections of the rows and columns. The pricing search begins at the intersection where you type 1 and looks for records defined for that customer and item combination. If no adjustment details are found for that combination, the system moves to the next combination in the hierarchy, identified by the number 2 in the intersection, and so on.

The system selects the first combination found during a search; therefore, you should set up the most specific method of pricing first in your hierarchy and continue defining the hierarchy to the most general pricing.

Although you can enter as many as 9 Sold To numbers, searching takes system time and resources so you should limit your hierarchy to three or four numbers. Each number represents a system search and increases system processing time. The Sold To and All Customer rows are the only fields that CSMS will recognize.



For Customer Service Management, only the information attached to the Sold To and All Customer rows is currently applicable.

Before You Begin

❑ Verify that a master record has been created for the preference hierarchy.

▶ To define a pricing hierarchy

From Customer Service Advanced Pricing Setup (G1746), choose Preference Hierarchy.

On Work With Preference Hierarchy

1. Click Add.
2. On Preference Hierarchy Revisions, complete the following field:
   - Preference Type
3. Beginning with 1, enter numbers in the intersections to indicate search order. When you define the pricing hierarchy, start with 1 and do not skip any numbers.
4. Click OK.

Setting Up Customer Service Detail Groups

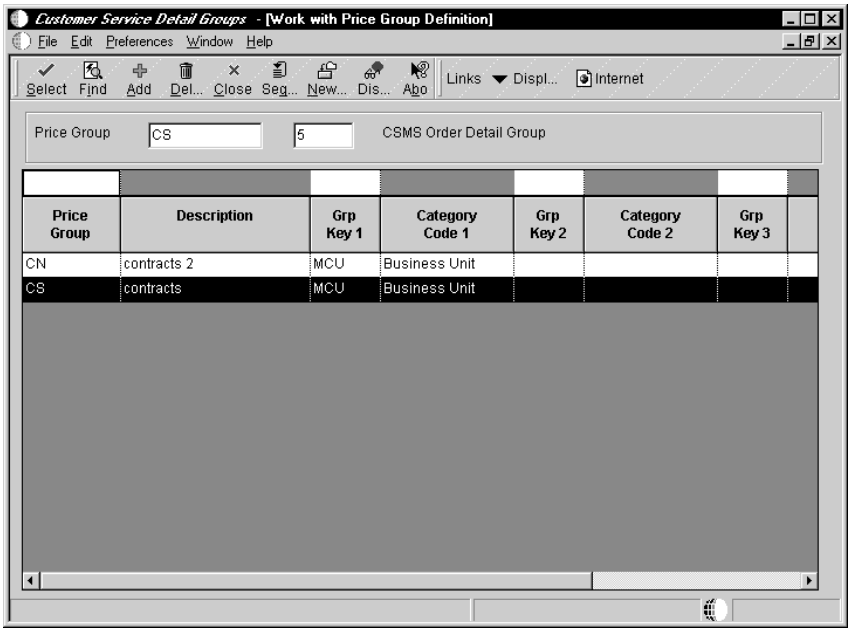
You can use order detail groups to create adjustments to the pricing line of a contract or service order based on information from the contract or service order. When you set up your system, you need to consider the information that is standard for each contract or service order. For example, if all contracts or all service orders contain a customer

number and model number, you can set up advanced pricing information based on the customer number and model number fields.

To set up customer service detail groups

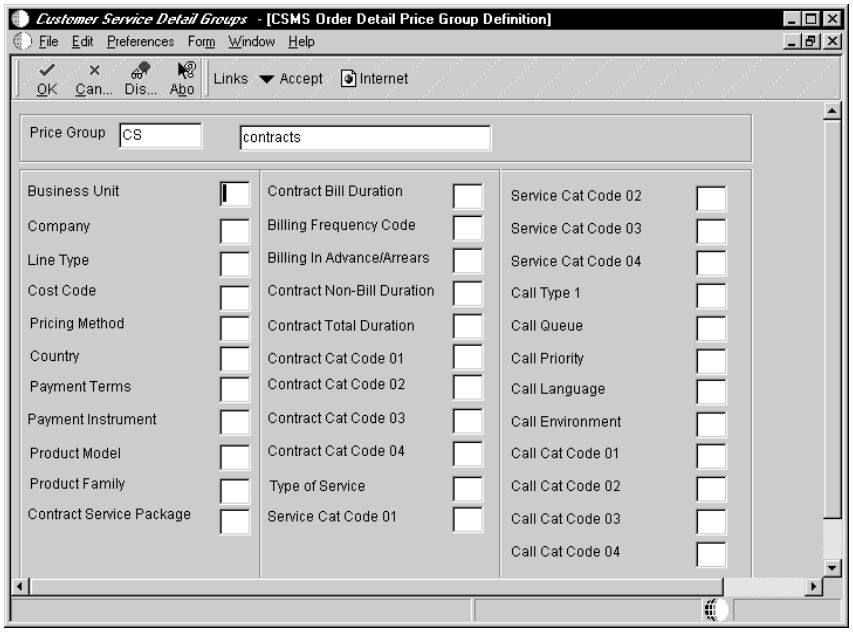
From Customer Service Advanced Pricing Setup (G1746), choose Customer Service Detail Groups.

On Work with Price Group Definition



1. Click Add.

   The system imports the price group type code based on your processing option selection. When you click Find, the system displays only those groups of that price group type code. To override the system default, type a new price group type code in the field and click Find or Add. The system retrieves the appropriate form based on this type code.



2. On CSMS Order Detail Price Group Definition, define a User Defined Code to complete the following field:

   - Price Group

   See *Setting Up User Defined Codes for CSMS*.

3. If the price group is for a service contract, indicate the fields that you want to use to price service contracts by typing the numbers 1 through 3 next to three of the following fields:

   - Business Unit
   - Company
   - Line Type
   - Country
   - Payment Terms
   - Payment Instrument
   - Product Model¿
   - Product Family
   - Contract Service Package
   - Contract Bill Duration
   - Billing Frequency Code
   - Billing In Advance/Arrears
   - Contract Non–Bill Duration¿

- Contract Total Duration
- Contract Cat Code 01
- Contract Cat Code 02
- Contract Cat Code 03
- Contract Cat Code 04

4. If the price group is for a service order, indicate the fields that you want to use to price service orders by typing the numbers 1 through 3 next to three of the following fields:
   - Business Unit
   - Company
   - Cost Code
   - Pricing Method
   - Country
   - Payment Terms
   - Payment Instrument
   - Product Model¿
   - Product Family
   - Type of Service
   - Service Cat Code 01
   - Service Cat Code 02¿
   - Service Cat Code 03¿
   - Service Cat Code 04¿

Field	Explanation
Price Group	A numerical value that specifies the sequence of category codes within Group Codes. The value must be equal to or between 1 and 4. Also, you cannot slip sequence values. For example, do not enter sequence 3 unless you have already entered sequence numbers 1 and 2.

Field	Explanation
Business Unit	An alphanumeric field that identifies a separate entity within a business for which you want to track costs. For example, a business unit might be a warehouse location, job, project, work center, branch, or plant. You can assign a business unit to a voucher, invoice, fixed asset, employee, and so on, for purposes of responsibility reporting. For example, the system provides reports of open accounts payable and accounts receivable by business units to track equipment by responsible department. Security for this field can prevent you from locating business units for which you have no authority. NOTE: The system uses the job number for journal entries if you do not enter a value in the AAI table.
Company1	A code that identifies a specific organization, fund, entity, and so on. The company code must already exist in the Company Constants table (F0010) and must identify a reporting entity that has a complete balance sheet. At this level, you can have intercompany transactions. NOTE: You can use Company 00000 for default values, such as dates and automatic accounting instructions (AAIs). You cannot use Company 00000 for transaction entries.
Line Type	A code that controls how the system processes lines on a transaction. It controls the systems with which the transaction interfaces, such as General Ledger, Job Cost, Accounts Payable, Accounts Receivable, and Inventory Management. It also specifies the conditions under which a line prints on reports and is included in calculations. Codes include the following: S Stock item J Job cost N Nonstock item F Freight T Text information M Miscellaneous charges and credits W Work order

Field	Explanation
Cost Code	A code that designates each element of cost for an item. An example of the coding structure is as follows: A1 Purchased raw material B1 Direct labor routing rollup B2 Setup labor routing rollup C1 Variable burden routing rollup C2 Fixed burden routing rollup Dx Usually used for outside operation routing rollup Xx Usually used for extra add-ons, such as electricity and water The optional add-on computations usually operate with the type Xx extra add-ons. This cost structure allows you to use an unlimited number of cost components to calculate alternative cost rollups. The system then associates these cost components with one of six user defined summary cost buckets.
Contract Bill Duration	The billing duration associated with a contract.
Billing Frequency Code	A user defined code (system 15, type BC) that indicates the billing cycle.
Billing In Advance/Arrears	A code to determine how a contract should be billed.
Contract Non–Bill Duration	The duration assoicated with a contract.
Contract Total Duration	The duration of sale or contract promotion.
Contract Cat Code 01	One of ten reporting codes that you can assign to a service contract detail line. Use these codes to identify contract lines for reports. Category codes are user defined (17/D1-D0).
Pricing Method	A code used to determine if this type of service should be priced based on a flat rate or based on actual Time and Materials. Valid values are: F Flat Rate. Charges for labor are based on one flat rate. Charges for parts are already included in the flat rate. T Time and Materials. Charges for labor are based on actual labor hours. Charges for parts are based on actual parts used. blank None. A blank value is only valid when defining the Method of Pricing for a service provider. It is used to indicate that the service provider is an internal service provider and should not be paid.
Type of Service	A user defined code (00/TY) that indicates the type classification of a work order or engineering change order. You can use work order type as a selection criteria for work order approvals.

Setting Up Price Adjustment Definitions

Once you have created CSMS order detail groups and defined pricing hierarchies, you can attach them to adjustments. An adjustment is a record that describes a special pricing situation, such as a pricing plan or promotion. Before you can add an adjustment to a schedule, you must create adjustment definitions to specify the characteristics of the adjustment. These characteristics determine the following:

- The sequence the system uses to search for prices
- Whether the adjustment is based on quantity
- Whether the adjustment is an override price, manual add/change, or a mandatory adjustment

Before You Begin

❑ Set up Price Adjustment Names (40/TY). See *Setting Up User Defined Codes for CSMS*.

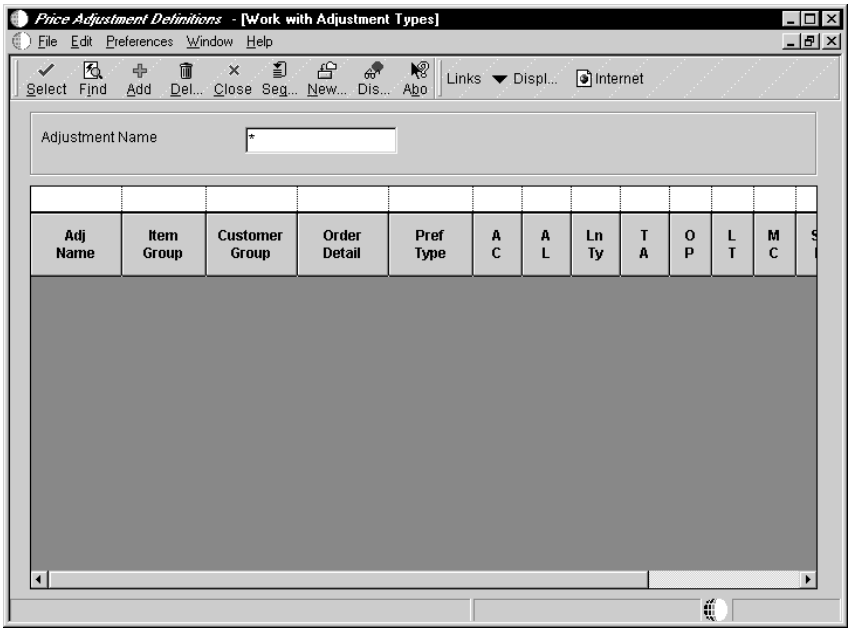
❑ Set up preference hierarchies. See *Setting Up Preference Hierarchies*.

❑ Set up customer service detail groups. See *Setting Up Customer Service Detail Groups*.

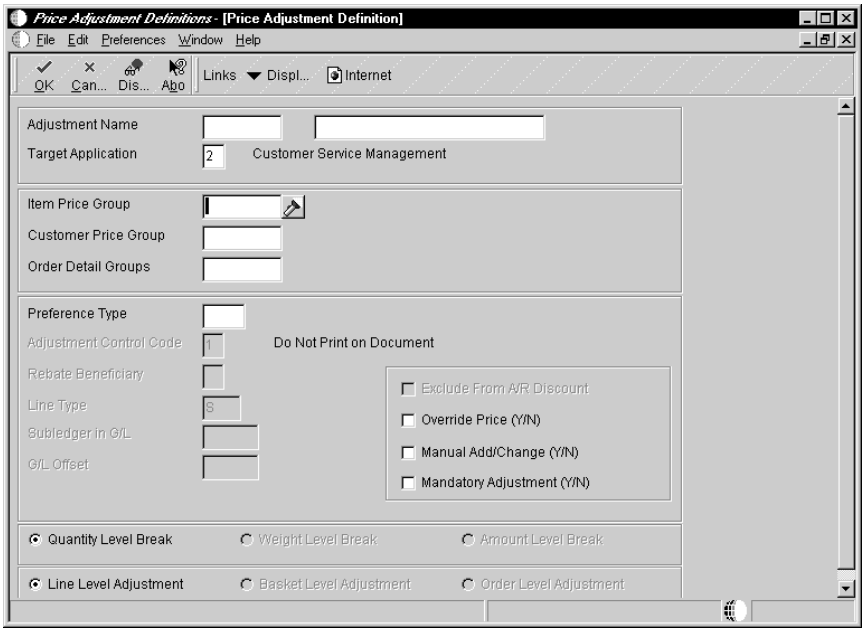
▶ **To set up price adjustment definitions**

From Customer Service Advanced Pricing Setup (G1746), choose Price Adjustment Definitions.

On Work with Adjustment Types



1. Click Add.



2. On Price Adjustment Definition, complete the following field:
   - Adjustment Name
3. Enter 2 in the following field to define it as being applicable to CSMS:
   - Target Application
4. To attach price groups, complete any of the following fields:
   - Item Price Group

- Customer Price Group
- Order Detail Groups

  This field is required for Advanced Pricing to work in CSMS.

5. To attach a price adjustment hierarchy, complete the following field:
   - Preference Type
6. Click any of the following applicable options:
   - Override Price (Y/N)
   - Manual Add/Change (Y/N)
   - Mandatory Adjustment (Y/N)
7. Click OK.

The following fields are not applicable to CSMS: Adjustment Control Code, Rebate Beneficiary, Line Type, Subledger G/L, G/L Offset, Exclude from A/R Discount, Weight Level Break, Amount Level Break, Basket Level Adjustment, and Order Level Adjustment.

Field	Explanation
Adjustment Name	A user defined code (system 40, type TY) that identifies an adjustment definition. You define adjustments on Price Adjustment Definitions.
Target Application	A user defined code that you enter to indicate the J.D. Edwards system, such as Sales Order Management and Procurement, that the price adjustment supports.
Item Price Group	A user defined code (40/PI) that identifies an inventory price group for an item. Inventory price groups have unique pricing structures that direct the system to incorporate discounts or markups on items on sales and purchase orders. The discounts or markups are based on the quantity, dollar amount, or weight of the item ordered. After you assign a price group to an item, the item uses the same pricing structure that was defined for the inventory price group. You must assign an inventory price group to the supplier or customer, as well as to the item, for the system to interactively calculate discounts and markups on sales orders and purchase orders.
Customer Price Group	A user defined code (40/PC) that identifies a customer group. You can group customers with similar characteristics, such as comparable pricing.

Field	Explanation
Order Detail Groups	A user defined code (40/SD) that identifies a sales order detail group. You use sales order detail groups to create pricing that is based on a field in the Sales Order Detail file (F4211). . . . . . *Form-specific information* . . . . . . If you enter a code in this field, the system uses this adjustment only for orders with details that match the criteria of the order detail group. For Agreement Penalty Schedules, a user defined code for Penalty must already be set up and defined as an order detail group. Enter Penalty or the correct user defined code that defines your penalty schedules.
Preference Type	A user defined code (40/PR) that identifies a preference type or a price adjustment hierarchy. In the user defined code table 40/PR, a 1 in the Special Handling Code field identifies a preference that J.D. Edwards supports. This field is hard coded for each preference. For Agreement Penalty Schedules, first set up a user defined code of PN (for penalty). Then enter it in this field.
Override Price (Y/N)	A code indicating how the adjustment affects the price of a sales order line. For WorldSoftware, valid codes are: Y The adjustment price overrides the base price. N The adjustment is used to calculate a discount or markup to the base price. For OneWorld, a checkmark indicates that the override price overrides the base price. No checkmark indicates that the adjustment is used to calculate a discount or markup to the base price. For Agreement Penalty Schedules: • For WorldSoftware, enter N. • For OneWorld, leave the override price turned off (no checkmark).
Manual Add/Change (Y/N)	Specifies whether the adjustment type can be manually added to or changed from the Price Adjustments form (P4074W) when you enter sales orders.
Mandatory Adjustment (Y/N)	A code you use to specify whether an adjustment is mandatory. Valid codes are: Y Yes, this adjustment is mandatory N No, this adjustment is not mandatory

Setting Up Adjustment Schedules

After you define a price adjustment, you attach it to a schedule. An adjustment schedule contains one or more price adjustment types for which a customer or an item might be eligible. An adjustment schedule consists of a price adjustment definition and an adjustment detail.

You assign customers to adjust schedules so the system can calculate prices. In the adjustment schedule, you specify the sequence that the system uses to apply price adjustment types to service contract prices.

Each adjustment schedule can contain an unlimited number of price adjustments. You can add adjustments at any time. You can override the adjustment schedule at the detail level line, if needed.

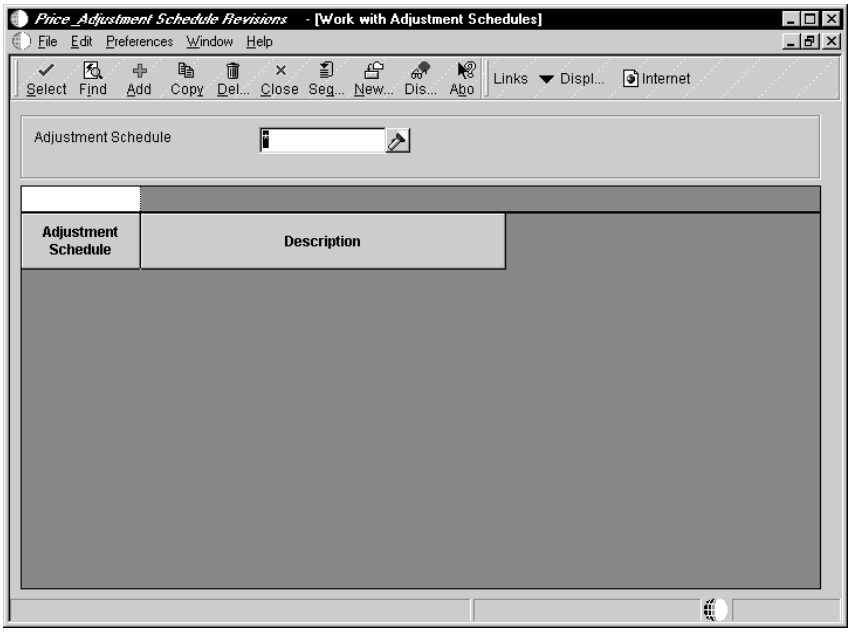
Before You Begin

- ❑ Set up Adjustment Schedule Names (40/AS). See *Setting Up User Defined Codes for CSMS*.
- ❑ Set up price adjustment definitions. See *Setting Up Price Adjustment Definitions*.

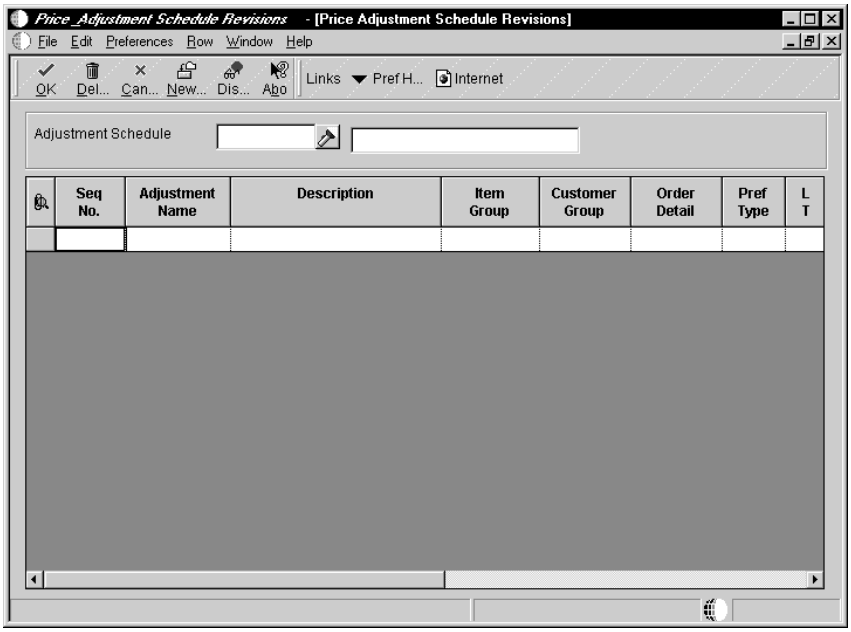
▶ To set up adjustment schedules

From Customer Service Advanced Pricing Setup (G1746), choose Price and Adjustment Schedule Revisions.

On Work with Adjustment Schedules



1. Click Add.



2. On Price Adjustment Schedule Revisions, complete the following fields:
   - Adjustment Schedule
   - Adjustment Name

Field	Explanation
Adjustment Schedule	A user defined code (40/AS) that identifies a price and adjustment schedule. A price and adjustment schedule contains one or more adjustment types for which a customer or an item might be eligible. The system applies the adjustments in the sequence that you specify in the schedule. You link customers to a price and adjustment schedule through the customer billing instructions. When you enter a sales order, the system copies the schedule attached to the sold to address into the order header. You can override this schedule at the detail line level. For Agreement Management, this is the Agreement Penalty Schedule. The information in the Agreement Penalty Schedule provides the system with the criteria for an agreement to have penalty conditions.

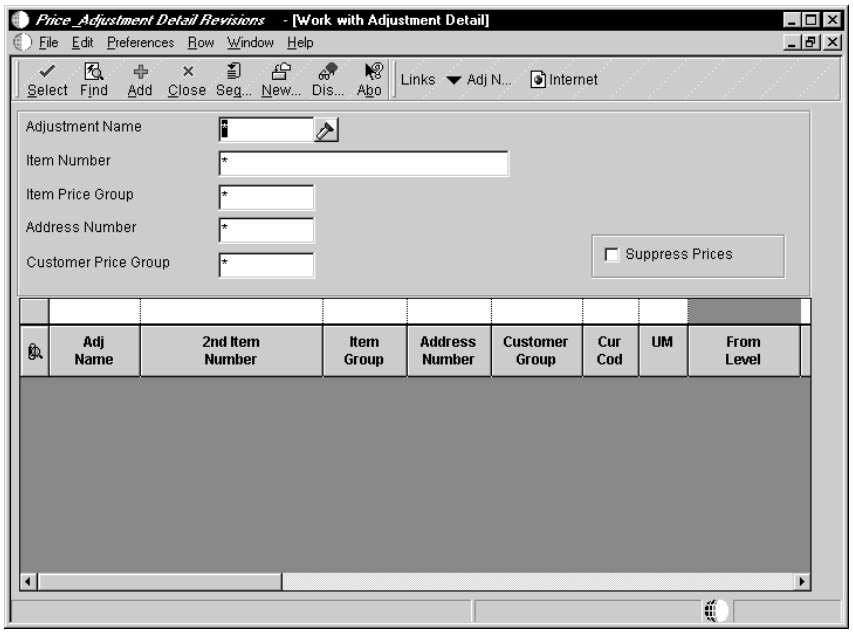
Setting Up Adjustment Details

Adjustment details allow you to define special processing such as free goods, pricing formulas, or variable tables. When you set up adjustment details, you set up prices for an adjustment name and not an adjustment schedule.

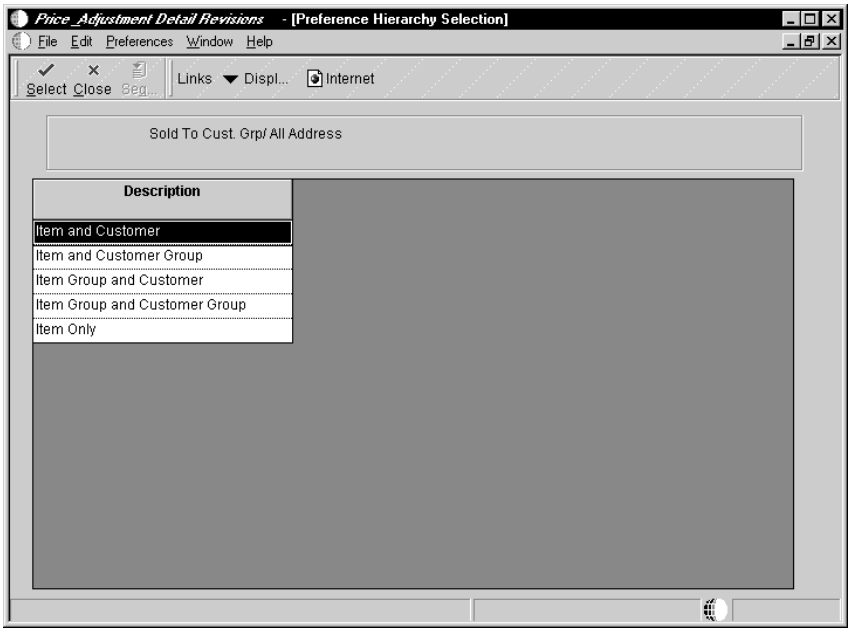
▶ To set up adjustment details

From Customer Service Advanced Pricing Setup (G1746), choose Price and Adjustment Detail Revisions.

On Work with Adjustment Detail

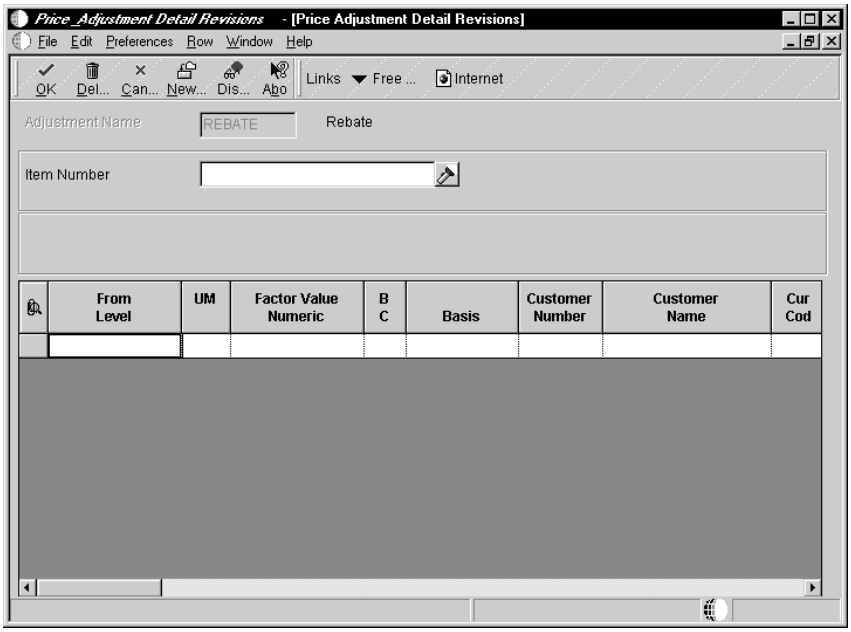


1. Complete the following field and click Find:
   - Adjustment Name
2. Click Add.



3. On Preference Hierarchy Selection, choose the appropriate description and click Select.

   Your choices on the Preference Hierarchy form and the selections within the price group determine the fields that appear on the Price and Adjustment Detail Revisions form (retrieved from the Order Detail group).



4. On Price Adjustment Detail Revisions, complete the following field:
   - Item Number
5. To enter quantity breaks, complete the following field:
   - From Level

   For service contracts, the unit of measure for an item, not duration, must match the unit of measure on the contract.
6. To define the adjustment price, enter a price or percentage in the following field:
   - Factor Value Numeric

   By entering a negative value in the Factor Value Numeric field, you can apply a discount.
7. For CSMS, you can enter either 2 (to mark a price up or down by a percentage) or 5 (to add or subtract from the current price) in the following field:
   - B C

   The first entry must be a 5 to indicate the start amount. CSMS does not use the base prices from Inventory.
8. To apply the price adjustment to a customer, complete the following field:
   - Customer Number
9. To specify the currency that applies to the amount entered in the Factor Value Numeric field, complete the following field:
   - Cur Cod
10. To override the price adjustment start and end dates, complete the following fields:
    - Effective Date
    - Expired Date

    The system uses the system date as the default value in the Effective Date field.
11. Enter N in the following field:
    - F G

    CSMS does not use the Free Goods field to associate the price adjustment with free goods. To define a free contract in CSMS, enter 0 in the Billable field on the Contract Revisions form or define the line type in the contract as a base warranty. To define a free part or routing for a service order, enter 0 in the Actual Billable Amount field on the Work Order Routing or Service Order Parts List form.

Depending on your selection in the Preference Hierarchy, the fields for your Order Detail Groups appear at the end of the detail grid.

See Also

- *Entering Service Contracts*
- *Entering a Service Order*

Field	Explanation
Item Number	A number that the system assigns to an item. It can be in short, long, or third item number format.
Factor Value Numeric	A code that indicates how the system adjusts an order line. The value in this field works in conjunction with the Basis field (BSCD). How you define the Basis field determines whether you enter a number or a code in this field. If your basis code is 1–5 Enter a positive number for markups, for example, 10. Enter a negative number for discounts, for example, 10–. 6 You want to base the adjustment on a variable table. Enter the code that identifies the variable table. 7 You want to use a formula to calculate the price. Enter the code that identifies the formula. 8 You want to calculate the adjustment using a custom program. Enter the program ID. For Agreement Penalty Schedules: Because the basis code for penalties is 5, enter a number as the factor value. Most agreement penalties are for a currency amount. The system multiplies the factor you enter by each unit of measure to calculate the penalty.

Field	Explanation
B C	A code that identifies how the system uses the factor value to calculate the adjustment or penalty schedule. The Basis Code field works in conjunction with the Factor Value field. Valid codes for this field are: 1 The system multiplies the base price by the factor value. The adjusted price is a percentage of the base price. 2 The system multiplies the current net price by the factor value. The adjusted price is a percentage of the current net price. 3 The system multiplies the item cost by the factor value. The adjusted price is a percentage of the item cost. You cannot use this basis code for a basket-level or order-level adjustment. 4 The system adds the factor value to the item cost. You cannot use this basis code for a basket-level or order-level adjustment. Note: If you use basis codes 3 or 4, identify the item cost you want to use in the calculation in the Cost Method field (LEDG) in the detail area of the Price Adjustment Detail form. 5 The system adjusts the price by the factor value. If the value is positive, it increases the price by that amount; if the value is negative, it decreases the price by that amount. 6 The system retrieves the adjustment amount from the variable table. You specify the variable table in the Factor Value field. 7 The system uses a formula to calculate the adjustment. You specify the name of the formula in the Factor Value field. 8 The system calls a user defined program to calculate the adjustment. You specify the program ID in the Factor Value field. Note: If you define an adjustment that uses a custom program, the program must be one that you have developed for this purpose and that you are prepared to support. J.D. Edwards is not responsible for providing custom programs or for supporting those programs that you have developed. For Agreement Penalty Schedules, enter 5 for all penalty schedules.
Cur Cod	A code that indicates the currency of a customer's or a supplier's transactions.
F G	If a price adjustment is associated with any free goods information, this flag will be set to Y. Moreover, the option field in the Price Adjustment Detail Revisions will be displayed in reverse image to signify that the record is associated with free good information.

Attaching Adjustment Schedules to Contracts and Service Orders

After you completed the set up tasks associated with advanced pricing, you can apply an adjustment schedule to a customer service contract or service order.

Attaching an adjustment schedule to a contract or service order includes the following tasks:

- Adding an adjustment schedule to a customer record
- Adding an adjustment schedule to a service provider record
- Activating an adjustment schedule for a contract
- Activating an adjustment schedule for a service order

Before You Begin

❑ Complete the following tasks:

- Set up preference hierarchies
- Set up customer service detail groups
- Set up price adjustment definitions
- Set up adjustment schedules
- Set up adjustment details

▶ To add an adjustment schedule to a customer record

From the Customer Service Setup menu (G1740), choose Address Book Revisions.

On Work with Addresses

1. Locate the customer record and click Select.
2. On Address Book Revision, choose CSMS from the Form menu.
3. On Customer Service Management Information, click Customer.
4. On Customer Information Revisions, in the Adjustment Schedules header, to add a schedule to a contract complete the following field and click OK:
   - Contracts
5. To add a schedule to a service order, complete the following field:
   - Service Orders

▶ To add an adjustment schedule to a service provider record

From the Customer Service Setup menu (G1740), choose Address Book Revisions.

On Work with Addresses

1. Locate the service provider record and click Select.
2. On Address Book Revision, choose CSMS from the Form menu.
3. On Customer Service Management Information, click Service Provider.
4. On Service Provider Revisions, click the Adjustment Schedules tab.
5. Complete the following field and click OK:
    - Claims

▶ To activate an adjustment schedule for a contract

From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

On Work with Contracts

1. Locate the contract and click Select.
2. On Contract Revisions, choose Contract Detail from the Row menu.
3. On Contract Detail, click the Pricing Data tab.
4. Complete the following field:
    - Adjustment Schedule
5. Click the following option:
    - Advanced Price

See Also

- *Setting Up Customers and Service Providers*
- *Entering Service Contracts*

▶ To activate an adjustment schedule for a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders

1. Locate the service order and choose Parts List from the Row menu.
2. On Service Order Parts List, complete the following fields if necessary:
   - Bill Adj Schedule

     The system retrieves this value from the CSMS Customer information in Address Book.

   - Pay Adj Schedule

     The system retrieves this value from the CSMS Service Provider information in Address Book.

See Also

- *Setting Up Customers and Service Providers*
- *Entering a Service Order*

Appendix B – Billing for CSMS

Customer Service Management uses the billing engine from the Service Billing system as the primary billing engine.

Billing for CSMS includes the following tasks:

- ❑ Generating the invoice workfile
- ❑ Printing invoices
- ❑ Working with A/R and G/L entries

Generating the Invoice Workfile

Run the Invoice Generation program to group workfile transactions and assign invoice numbers. If your system constants are set up to renumber invoices, the system assigns preliminary numbers to the invoices during invoice generation. When you create the G/L and A/R entries for the final invoices, the system reassigns the numbers and document types.

When you run the Invoice Generation program, the system creates pay item records. Pay items are the billing lines that summarize one or more workfile transactions. The pay items for a specific invoice make up the total amount of the invoice. The system stores pay item information in the Invoice Summary Workfile (F4822). The program also updates the workfile transaction records with the new invoice information and the sequence/summarization key information.

After you run the Invoice Generation program, the system generates a report that includes the following information:

- Invoice number and related pay items
- Totals by invoice
- Batch number
- Any applicable tax information
- Sequence and summarization code

Before You Begin

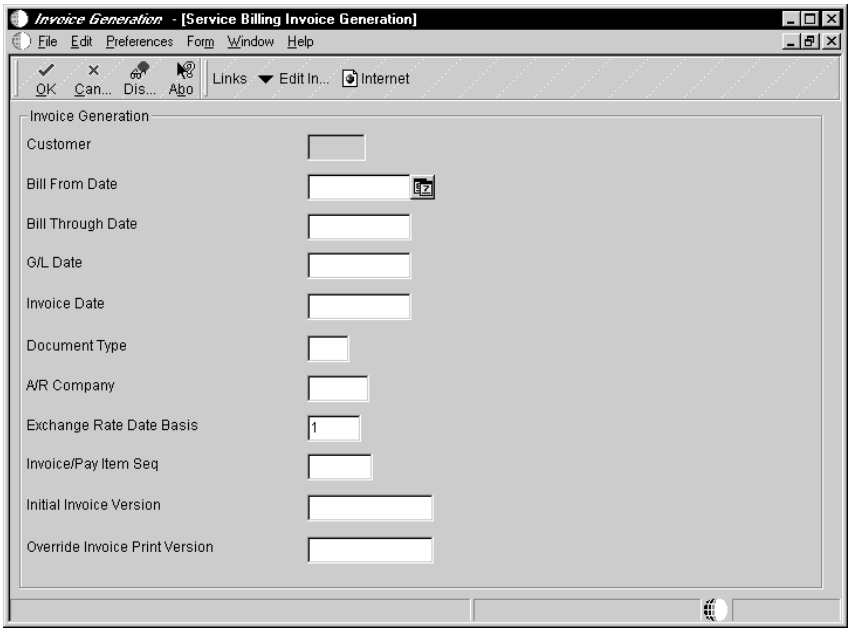
- ❑ Generate workfile transactions.

- ❑ Define the sequence and summarization of the invoice information.
- ❑ If you want to print invoices during generation, define an invoice format. See Understanding Invoice Format Revisions in the *Service Billing Guide*.

▶ To generate the invoice workfile

From the Invoice Processing menu (G48S21), choose Invoice Processing.

On Service Billing Invoice Generation



1. Complete the following fields:
   - G/L Date
   - Document Type
   - A/R Company
   - Exchange Rate Date Basis
   - Invoice/Pay Item Seq
   - Initial Invoice Version
   - Version of Invoice Print
2. Complete the following optional fields:
   - Bill From Date
   - Bill Through Date
   - Invoice Date

3. Click OK.

   The system prompts you to submit the batch.

4. On Report Output Destination, choose to view the output on screen or to print the results, and click OK.

   After you run the generation, the system saves the values in the fields.

Field	Explanation
G/L Date	A date that identifies the financial period to which the transaction is to be posted. The general accounting constants specify the date range for each financial period. You can have up to 14 periods. Generally, period 14 is used for audit adjustments. The system edits this field for PBCO (posted before cutoff), PYEB (prior year ending balance), and so on.
Document Type	A user defined (00/DI) document type for invoice entry. Any document type set up for invoice-only entry should begin with the letter R (receivables). The default is RI, RR, or RM. Reserved document types have been defined for vouchers, invoices, receipts, and time sheets. The reserved document types are: P_ Accounts Payable Documents R_ Accounts Receivable Documents T_ Payroll Documents I_ Inventory Documents O_ Order Processing Documents NOTE: For invoice entry, if you are using document type DI, you must also set up document type DT in user defined codes.
A/R Company	Invoice Document Company.
Exchange Rate Date Basis	This value controls which date the system uses to retrieve the exchange rate for the invoice. Valid values are: 1 Use the invoice date (default). 2 Use the G/L date of the invoice.
Invoice/Pay Item Seq	The table key that identifies how the system summarized the service billing invoice. Within each table that is identified by the table key, there are multiple associated key fields to specify the level and method for sorting and summarizing the service billing detail transactions.
Initial Invoice Version	The DREAM Writer Version number for executing the Initial Invoice Generation.
Override Invoice Print Version	The DREAM Writer Version number the system uses for the Invoice Print.

Field	Explanation
Bill From Date	The from date used to determine if a transaction is billed. The transaction is billed if the general ledger date falls between the from date and the through date.
Bill Through Date	This field will be used in the Recurring Billing module as part of a date- oriented billing method, as opposed to period-oriented billing. This field will contain the latest date for which billings have been generated for the associated billing line.
Invoice Date	The date the invoice was printed. The system updates this date when you run the invoice print program in the Sales Order Processing System.

Printing Invoices

From the Invoice Processing menu (G48S21), choose Invoice Print.

After you generate and review invoices, you can print invoices for your customers.

Processing Options for Invoice Print Selection

```
Version

Enter the override version of the
    Invoice Print to use for the
    invoices selected.

      Version                                    _____________

Enter the override invoice type to use
    for the invoices selected.  Enter
    “D” to print domestic amounts and
    enter “F” to print Foreign amounts.

      Invoice Type                               _____________
```

Working with A/R and G/L Entries

You complete the billing process by creating the following journal entries related to a batch of invoices:

- The credit for the account you specify in the account derivation rules you define for your system. The system stores the credit entry temporarily in the Compressed Journal Entries (F489111).
- The debit for the account you specify in the G/L offset rules you define for your system. The system stores the debit entry in the Invoice Summary Workfile (F4822).

Working with A/R and G/L entries consists of the following tasks:

- ❑ Creating preliminary A/R and G/L entries
- ❑ Reviewing preliminary A/R and G/L entries
- ❑ Creating final A/R and G/L entries
- ❑ Reviewing and posting journal entries

J.D. Edwards strongly recommends that you create and carefully review preliminary G/L entries before you create the final entries that post to the general ledger. If you post out of balance records to the general ledger, the only way to correct these balances is to void and regenerate the invoice.

Before You Begin

- ❑ Generate invoices
- ❑ Define account derivation rules

Creating Preliminary A/R and G/L Entries

You complete the billing process by creating journal entries. You first create preliminary A/R and G/L entries. When you create the entries, the system prints the Invoice Journal Generation report. You can also set a processing option to print the Service Billing Journal Register. You should carefully review these reports to ensure that you do not create final journal entries that create out-of-balance records in the general ledger.

When you run Invoice Journal Generation, the system:

- Creates preliminary journal entries from the transactions in the Billing Workfile. The account derivation rules you define on the Account Derivation Table form determine which accounts the system assigns to the credit side of the journal entries.
- Updates the batch status description for the batch.
- Prints the Invoice Journal Generation report with accounting rule information and journal entry detail.
- Compresses the detail journal workfile information and stores it temporarily in the Compressed Journal Entries (F48911).
- Prints the Service Billing Journal Register with the compressed information as a summary of the journal entry detail.

See Also

- *Printing Invoices Manually* in the *Service Billing Guide* for information about locating a batch of invoices
- *Defining Account Derivation Rules* in the *Service Billing Guide*

▶ To create preliminary A/ R and G/L entries

From the Invoice Processing menu (G48S21), choose Invoice Journal Generation.

On Work With Batch Versions

1. Select the version you want.
2. Select from the following optional selections:
   - Data Selection
   - Data Sequencing
3. From the Form menu, choose Submit.
4. Revise the Processing Options or accept the default and click OK.
5. On Print Selection, choose from the following orientations:
   - Portrait
   - Landscape
6. Click OK.

Field	Explanation
Data Selection	Turn this option on to change the data selection before submitting the report.
Data Sequencing	Turn this option on to change the data sequencing before submitting the report.

Reviewing Preliminary A/R and G/L Entries

From the Invoice Processing menu (G48S21), choose Batch Review.

When the system creates preliminary A/R and G/L entries, you can review the batch status on Batch Review to determine whether the entries were generated with errors. To verify the information for the general ledger journal before you create the final A/R and G/L entries, you can review the following reports:

- Invoice Journal Generation Report, to review the detail of all cost transactions that make up the pay items for your invoices, and the accounting rules for the transactions
- Billing Journal Register, to review journal entry details summarized by business unit, object, subsidiary, and subledger

Review the Billing Journal Register first for errors and warnings. You can also run the Billing Journal Register to print additional copies of the journal register after you have created preliminary G/L entries.

Use the Invoice Journal Generation Report to locate errors resulting from the account derivation rules.

If you find errors on the reports, you do not always need to delete the batch and regenerate the invoices. Once you identify the errors, you can correct them and run Invoice Journal Generation again. Common errors include:

- Incorrect dates or invalid accounts related to the general ledger
- Incorrect table types or invalid accounts related to the rules you define on the Account Derivation Table form

Creating Final A/R and G/L Entries

From the Invoice Processing menu (G48S21), choose Create A/R Entries.

You complete the billing process within the billing system when you create the final A/R and G/L entries. To complete the overall invoice process, you then post the journal entries to the general ledger and accounts receivable.

When you create final A/R and G/L entries for a batch of invoices, the system:

- Changes the journal status for the related workfile transactions
- Moves the transactions out of the active Billing Workfile table (F4812) and into the Billing Workfile – History table (F4812H)
- Removes the batch header number for the invoice journals
- Deletes the records in the Detail Journal Workfile and Compressed Journal Workfile

Before you create final A/R and G/L entries, ensure that the invoice amounts and journal transactions are correct. To make any changes after you create A/R and G/L entries, you must either void the invoices or create an adjusting invoice batch.

When you choose Create A/R and G/L Entries, from the menu, the system displays processing options before submitting the job for processing. Use processing options to specify the batch of invoices for which you want to create.

See Also

- *Printing Invoices Manually* in the *Service Billing Guide* for information about locating a batch of invoices
- *Defining Account Derivation Rules* in the *Service Billing Guide*

Processing Options for A/R and G/L Journal Generation

```
Batch Number

BATCH NUMBER SELECTION

      1. Enter Batch Number                          _____________

Print Report

PRINT REPORT SELECTION

      2. Enter the version of the                    _____________
      Invoice Journal      Generation
      Report      (R48131) to submit.
```

Reviewing and Posting Journal Entries

From the Invoice Processing menu (G48S21), choose Post Invoices to G/L.

After you create the final A/R and G/L entries, you complete the overall billing process by reviewing, approving, and posting the journal entries.

The journal review and post programs are the same programs you use in the Accounts Receivable and General Accounting systems.

See Also

- *Working with Final Invoices* in the *Service Billing Guide*
- *Reviewing Invoices* in the *Accounts Receivable Guide*
- *Posting Invoices* in the *Accounts Receivable Guide*

Appendix C – Working with Prepayments

To track your customer's payments that are made up-front, you can use prepayment processing. Customers can prepay by using cash, check, or credit card. If a customer has already paid for a service contract or service order, the invoice reflects that the contract has been prepaid.

Working with prepayments includes the following tasks:

- ❑ Authorizing prepayment transactions
- ❑ Working with prepayment transactions
- ❑ Settling prepayment transactions
- ❑ Running the A/R Draft Collection for Prepayments program
- ❑ Reviewing prepayment journal entries
- ❑ Running the Prepayment Transaction report

There are two types of prepayment transactions:

Two-party prepayment	Two-party prepayments are typically cash or check transactions, which occur between you and your customer. When an order is prepaid with cash or a check, the system indicates the prepayment form, transaction and total on the invoice.
Three-party prepayment	Three-party prepayments are typically credit card transactions, which occur between you, your customer, and the credit card company. In the system, the transaction is an electronic transmission of transaction information between your bank, the credit card company, and the credit card processor.

The prepayment processing system provides an interface between OneWorld applications and a seller's designated credit card processor. With the prepayment processing system, you can integrate credit card authorizations and final settlements with your business processes.

For three-party payment transactions, J.D. Edwards does not provide middleware or credit card transaction processors. In order to complete credit card prepayment processes, you must select a credit card processor, a third party vendor or a middleware solution, with which you can transmit information between OneWorld, the credit card company, and your bank.

See Also

- *Setting Up Prepayment Processing* in the *Sales Order Management Guide* for information about setting up status flow, prepayment types, and authorization and settlement codes
- *Building Contract Prepayment Transactions*
- *Building Service Order Prepayment Transactions*

Authorizing Prepayment Transactions

From the Prepayment Processing menu (G1726), choose Authorize Prepayment Transactions.

When you enter a prepayment on a service order or contract, you capture the customer's credit card transaction information and transmit the order amount through your middleware solution, a credit card processor. The processor then checks the cardholder's accounts for available funds and places a hold equivalent to the prepayment amount on the customer's credit line. The credit card processor the returns the authorization code to you.

When you run the transaction authorization program, the system reads over the transaction table and groups into a batch all of the prepayment transactions that are at Ready to Authorize status. The system assigns each batch a number, and each transaction within the batch has the Batch Number field on the Prepayment Transaction table. If the authorization is successful, the system updates the transactions status in the Prepayment Transaction table.

When the batch is settled, the system updates the Batch Header record and the individual prepayment transaction records to Authorized status. Settled transactions are not eligible for changes and updates.

Processing Options for Authorize Prepayment Transactions

```
Defaults

Enter the Next Status Override Code
    for:

      1. Authorized Lines                          _____________

Holds

      1. Authorization Hold for                    _____________
```

Prepayment Processing

Working with Prepayment Transactions

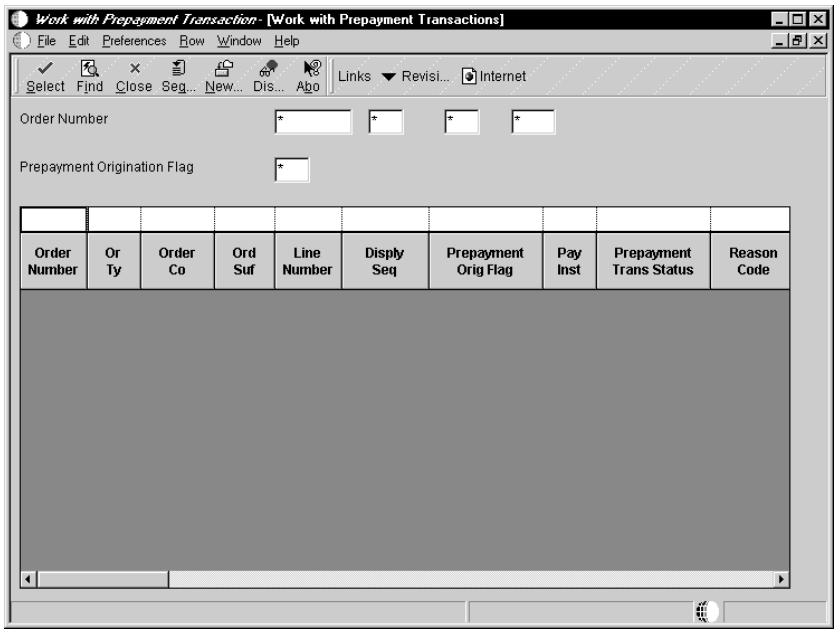
After you enter a prepayment for a contract or service order, you can access the Prepayment Transaction Revisions program to enter check number or credit card information. The system retrieves the order amount, plus the calculated taxes as the prepayment amount. When you enter prepayment information, the system creates a record in the Prepayment Transaction table.

You can review prepayment status for a particular customer or status.

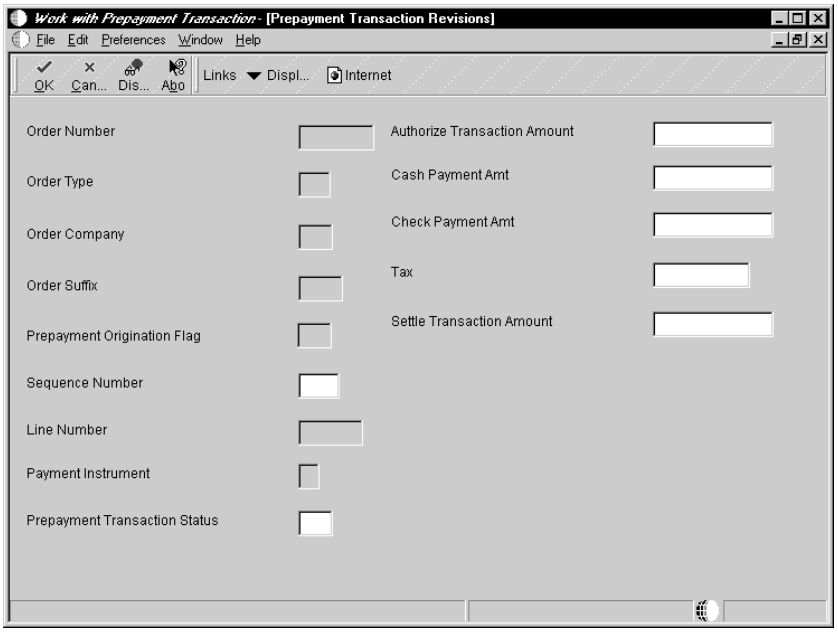
▶ To work with prepayment transactions

From the Prepayment Processing menu (G1726), choose Work with Prepayment Transaction.

On Work with Prepayment Transactions



1. To locate prepayment transactions, complete the following fields and click Find:
   - Or Ty
   - Order Number
   - Order Suffix
   - Program ID
2. Select the transaction and choose Revisions from the Row menu.



3. On Prepayment Transaction Revisions, review the transaction information.
4. To manually update the prepayment status, complete the following field:
   - Prepayment Transaction Status

Field	Explanation
Or Ty	A user defined code (00/DT) that identifies the type of document. This code also indicates the origin of the transaction. J.D. Edwards has reserved document type codes for vouchers, invoices, receipts, and time sheets, which create automatic offset entries during the post program. (These entries are not self-balancing when you originally enter them.) The following document types are defined by J.D. Edwards and should not be changed: P Accounts Payable documents R Accounts Receivable documents T Payroll documents I Inventory documents O Purchase Order Processing documents J General Accounting/Joint Interest Billing documents S Sales Order Processing documents
Order Number	A number that identifies an original document. This can be a voucher, an order number, an invoice, unapplied cash, a journal entry number, and so on.

Field	Explanation
Order Suffix	In the A/R and A/P systems, a code that corresponds to the pay item. In the Sales Order and Procurement systems, this code identifies multiple transactions for an original order. For purchase orders, the code is always 000. For sales orders with multiple partial receipts against an order, the first receiver used to record receipt has a suffix of 000, the next has a suffix of 001, the next 002, and so on.
Program ID	The name of the OneWorld batch or interactive application (interactive or batch object). For example, the name of the Sales Order Processing interactive application is P4210, and the name of the Print Invoices batch process report is R42565. The name of the program ID is a variable length value. This value is assigned according to a structured syntax in the form TSSXXX where: T – The first alphabetic character of the program name identifies the type such as P for Program, R for Report, and so on. For example, the value 'P' in the name P4210 indicates that this is a program. SS – The second and third numeric characters of the program name identifies the system code. For example, the value '42' in the name P4210 indicates that this program belongs to System 42, which is the Sales Order Processing system. XXX – The remaining numeric characters of the program name identify a unique program or report. For example, the value '10' in the name P4210 indicates that this is the Order Entry application.
Prepayment Transaction Status	This field indicates the status of the prepayment transaction.

Settling Prepayment Transactions

From the Prepayment Processing menu (G1726), choose Settle Prepayment Transactions.

Final settlement occurs between you and the credit card company by way of your selected middleware software solution. At this time, you transmit all authorized transactions to the credit card processor requesting funds.

For contracts, the transaction can be moved to settled status when the authorization is received. For service orders, the transaction can be moved to settled status when the approval is received.

When you run the transaction settlement program, the system reads over the the transaction table and groups into a batch all of the prepayment transactions that are at

Ready to Settle status. The system assigns each batch a number, and each transaction within the batch has the Batch Number field on the Prepayment Transaction table.

When the batch is settled, the system updates the Batch Header record and the individual prepayment transaction records to Settled status. Settled transactions are not eligible for changes and updates. You can set up your processing options to purge all settled transactions from the Prepayment Transaction History table.

Processing Options for Settle Prepayment Transactions

```
Defaults

Enter a Next Status Override Code for:

      1. Settled Lines                                    _____________

Holds

      1. Settlement Hold for Prepayment                   _____________
      Processing
```

Running the A/R Draft Collection for Prepayments Program

From the Prepayment Processing menu (G1726), choose A/R Draft Collection for Prepayments.

After the settlement process occurs successfully, you can generate drafts for receivables from the credit card company's bank.

Your bank collects the funds for the draft from the credit card company's bank on the due date of the draft. On or after the due date, both you and the credit card company recognize the transfer of cash. You update the status of the draft in your records to show that it has been collected.

Some companies prefer to close the draft on the settlement date, while others wait until the payment appears on the bank statement. Depending on your company policy, use the A/R Draft Collection for Prepayments to do one of the following:

Run Status Update with Journal Entries on the draft due dates to create journal entries.

Run Status Update without Journal Entries on the draft due dates using a pay status code of something other than P (paid). After you verify that payments have been collected, run Status Update with journal Entries.

Additionally, the credit card company might assess fees for authorizations. You account for all fees by creating a separate journal entry in the Journal Entries Fee program (P0911).

You can run the batch process in either proof or final mode.

Proof mode

In proof mode, the system:

- Selects drafts with a remitted to bank status. That is, drafts that have been remitted but not yet collected.
- Prints a report that shows the drafts to be updated. It shows all drafts that have a payment status of G (drafts deposited not due) with a due date that you specify in a processing option.

Final mode

In final mode, the system works in the same way as proof mode except that it also:

- Changes the pay status of drafts to P (paid) or to another value that you choose.
- Closes your drafts and creates a journal entry to debit a cash account and credit drafts remitted.
- Clears the account of drafts created with a contingent liability.

The process updates records in the A/R Ledger, Receipts Register, and Receipts Application Detail tables, and creates records in the Receipts Application Detail table.

Processing Options for A/R Draft Collection

```
Proof / Final

1.  Enter a '1' to run in the Final
    Mode.  Default of blank will print
    the report only.
```

_____

```
As Of Date

2. Enter the "As of" date to
    process.
        All drafts due on or before this
    date
        will be processed.  If left
    blank,
        the current system date will be
    used.
```

_____

```
G/L Date

3. Enter the G/L date for the
    Journal
         Entries.  If left blank, the
    system
         date will be used.
```

_____

```
4.  Enter a '1' to calculate the G/L
```

Date
by adding the Float Days for the bank account to the Net Due Date. Leave blank to use the option above to calculate GL Date

5. Enter a “1”, if you want to calculate G/L Date entering Float days and to select drafts by pay instruments. If you use this option, all of the option above will be ignored.

6.Enter number of float days to add the the Drafts Due Date to calculate G/L Date.If you select option above, you must enter number of float days.

7.Enter payment instrument type to select drafts by Pay Instruments. If option ’5’ is selected, you must enter a valid Pay Instruments Type.

Payment Instrument

Pay Status

8. Enter the Pay Status to update the
the draft records. If left blank, the pay status will be updated with ’P’ (Paid).

Pay Status Code

9. Enter a ’1’ to update the pay status of the draft in the Journal Ledger File without closing the Drafts. A blank would close the Draft.

Exchange Rate

10. Enter the currency exchange rate to be used. This rate is between the currency being processed and the currency of the bank account. If left blank, the rate will be derived from the exchange rate information.

Exchange Rate Override

Reviewing Prepayment Journal Entries

From the Prepayment Processing menu (G1726), choose Journal Entries.

After you create the final prepayment journal entries, you complete the overall billing process by reviewing, approving, and posting the journal entries.

The journal review and post programs are the same programs you use in the General Accounting system.

See Also

- *About Basic Journal Entry Processing* in the *General Accounting Guide*

Running the Prepayment Transaction Report

From the Prepayment Processing menu (G1726), choose Prepayment Transaction Report.

When you run the Prepayment Transaction Report, you can determine the statuses of your transactions. Based on your data selection, you can view prepayments that are authorized but not settled or transactions that are in error.

Processing Options for Prepayment Transaction Report

```
Purge

      1. Purge Prepayment Transactions
           Blank  = Prepayment
transactions will
                        not be purged.
                 ’1’ = Settled
Prepayment
                       Transactions
will be purged.
```

Appendix D: Vertex Quantum for Sales and Use Tax

If your company wants to apply sales taxes automatically, you can use the Vertex Quantum for Sales and Use Tax system (Quantum) with the following J.D. Edwards systems:

- General Accounting
- Accounts Receivable
- Accounts Payable
- Sales Order Management
- Procurement
- Customer Service Management System (CSMS)

If you are using the J.D. Edwards Payroll system, you are required to use the Quantum for Payroll Tax System. See *Setting Up Tax Information* in the *Payroll Guide*.

Quantum software integrates with the J.D. Edwards OneWorld tax calculation software, which means that you can perform tax calculations using either the Quantum software or the J. D. Edwards tax calculation software or both of them. However, if you want to perform a tax-only calculation, you must use the J.D. Edwards software.

Working with Quantum consists of:

- ❑ Setting up the J.D. Edwards/Quantum interface
- ❑ Assigning GeoCodes to address book records
- ❑ Working with Quantum taxes
- ❑ Processing Quantum tax information

When tax laws change, the Quantum software accesses the new requirements for each taxing authority so that you can apply the taxes correctly. Quantum software:

- Reduces the setup required for multiple tax rate areas
- Reduces processing time and rate maintenance
- Creates tax compliant records
- Allows exceptions and overrides to the default tax rates

Quantum calculates tax based on the standard rates and rules for the U.S., its territories and possessions, and Canada. To perform all other foreign tax calculations, you have two options:

- Use the J.D. Edwards tax calculation software
- Use the Quantum system, but maintain tax rates for foreign locations using the Quantum Tax Decision Maker

Before You Begin

❑ Verify that you have access to the following Vertex documentation for Quantum for Sales and Use Tax for additional information:

- *Quantum for Sales and Use Tax Reference Manual*
- *Quantum for Sales and Use Tax GeoCoder Master List*
- *Quantum for Sales and Use Tax National Tax Rate Directory*
- *Quantum for Sales and Use Tax Tax Decision Maker Taxability Guide*
- *Quantum for Sales and Use Tax User's Guide*
- *Quantum for Sales and Use Tax Training Guide for Tax Professionals*
- *Quantum for Sales and Use Tax Returns User's Guide.*

J.D. Edwards Components

The interface between J.D. Edwards systems and Quantum software transfers selected J.D. Edwards parameters to Quantum and then returns tax information to J.D. Edwards systems.

The standard J.D. Edwards tax calculation software components can be used with Quantum in the following ways:

Tax authorities

You use tax authorities within J.D. Edwards software to define the government agencies that assess and collect taxes. You define tax authorities in the J.D. Edwards Address Book system only for international tax authorities because those for the U.S. and Canada are stored by Quantum.

Tax rates and tax areas

For U.S. and Canadian taxes, you specify a GeoCode for each tax rate and tax area to allow Quantum to identify the correct taxing jurisdictions.

Automatic Accounting Instructions (AAIs)

For U.S. and Canadian taxes, you use the AAI code PT_____ for the company.

For non-United States and non-Canadian taxes, you assign an AAI to each taxing authority within each tax rate/area.

Tax rules by company

You can define tax rules for the Accounts Receivable, Accounts Payable, Sales Order Management, Procurement, CSMS, and General Accounting systems. When you enter transactions for these systems, taxes are calculated according to these rules. The system uses these tax rules to:

- Calculate discounts on a gross amount that already includes tax.
- Calculate tax on a gross amount that includes the discount amount.
- Control when the system displays a warning message (or rejects a transaction altogether) when someone enters a tax that differs from the system-calculated tax. This does not apply to E, S, and U tax types.

This feature applies to taxes for all countries.

Tax explanation codes

Tax explanation codes control how a tax is assessed and how it is distributed to the general ledger revenue and expense accounts. J.D. Edwards software provides a number of tax explanation codes. Tax codes E, S, and U are pre-defined for Quantum software. Because the tax explanation code is a user defined code (00/EX), you can set up additional codes to meet specific business needs; however, Quantum only recognizes tax codes E, S, and U.

In Quantum software, you can use the tax explanation code to make a customer or a specific transaction tax exempt. For example, a customer with a tax explanation code of E is exempt. Any purchase or sales order, accounts receivable invoice, CSMS service order part or CSMS contract line item can be coded with E to make that specific transaction exempt. Currently, CSMS service order routings are taxable and cannot be overridden.

Other available codes are U (use) for use in the Procurement, Accounts Payable, and CSMS systems, and S (sales) for use in Sales Order Management, Accounts Receivable, and CSMS systems.

Quantum Components

The Quantum for Sales and Use Tax system includes the following components:

Rate and GeoCode Data Modules

The data modules store tax rates and other pertinent jurisdictional tax data for all U.S. and Canadian tax authorities, which include over 66,000 locations. All states and counties are on file, as well as all cities with populations over 250. If a city has a population less than 250 and levies a tax, that city is also included in the data modules.

Quantum researches and maintains the data contained in the file by remaining in constant contact with all jurisdictions that levy a tax. Every month, Quantum updates its internal databases and issues new data module files to its subscribers.

Tax Decision Maker

You can customize the Quantum system for your special needs. You use the Tax Decision Maker Engine in conjunction with the Tax Decision Maker (TDM) to automate (separately or in combination) product, customers, or jurisdictional tax exceptions. TDM lets you set up and maintain tax exceptions. You can also override customer and product exemptions from service order and contract entry, sales order entry and purchase order entry. You can access the TDM from Quantum menus.

Tax Decision Maker Engine

The Tax Decision Maker Engine interfaces with J.D. Edwards Sales Order Management, Procurement, Accounts Receivable, Accounts Payable, and CSMS systems.

When a J.D. Edwards program calls the Tax Decision Maker Engine, the Tax Decision Maker Engine determines the following:

- Whether the transaction is interstate or intrastate
- The transaction's taxing jurisdiction
- The appropriate tax rate
- The maximum tax base
- Excess amounts, if applicable
- Tax exceptions, if applicable

The Tax Decision Maker Engine then:

- Retrieves the appropriate tax rate
- Calculates tax amounts
- Returns the amount to the calling program

The module can also store tax history for an audit trail and for management reports and returns preparation (as an independent function outside the scope of J.D. Edwards generated reports). Because the Data Module isolates the state, county, city, and district rates, Quantum can calculate the four levels individually.

Sales Tax Register file

From the Sales Tax Register file, the Tax Decision Maker Engine produces detail and summary sales tax register reports sequenced by state, county, and city for any billing period. You generate these reports from Quantum menus.

Returns Module

If you purchase the Returns Module in addition to the Quantum for Sales and Use Tax system, the Returns Module completes the sales tax cycle by automating state and local returns preparation. After calculating the amount to be paid to the appropriate tax authorities, the system automatically generates signature-ready sales and use tax forms and check requests.

Interface Considerations

Before you set up the J.D. Edwards/Quantum Sales Tax Interface to reflect your environment, carefully consider the specific conditions and requirements of the company, the product, the customer or supplier, and international tax obligations.

Company and Divisional Considerations

You should understand any special dispensations that the company has arranged with state or local jurisdictions for collecting sales and use taxes at a reduced rate. Then, consider if tax returns are filed for just one company or for multiple companies.

Product Considerations

You should understand the business and how products fit into appropriate tax categories. For example, rebuilt machinery might be taxed differently than spare parts for the same machinery. Decide how the company intends to set up the taxing policies for J.D. Edwards and Quantum software.

Customer and Supplier Considerations

You must properly identify the tax category to which customers and suppliers belong. For example, a customer might be a provider of goods or services, a reseller, a charitable organization, or other tax group. Decide how you will set up customers and suppliers into both the J.D. Edwards and Quantum software modules.

International Tax Considerations

Be aware of international tax obligations. Know whether to use the J.D. Edwards Tax Calculation software or Quantum to manage and process non-U.S. and non-Canadian tax transactions.

Co-existence Considerations

Although you can work with OneWorld and WorldSoftware in a coexistent environment, the Vertex Sales and Use Tax for J.D. Edwards WorldSoftware and Quantum for Sales and Use Tax for OneWorld do not co-exist with each other. For coexistent customers, the system creates two Tax Registers depending on the system that is writing to the Register, either WorldSoftware or OneWorld. While the two systems do not share the Tax Decision Maker (TDM) table, you can copy the Tax Decision table between the two systems. For the Quantum Tax Returns table, you can merge the two Register tables.

Setting Up the J.D. Edwards/Quantum Interface

If your company wants to apply sales taxes automatically, you can use Quantum software along with the J.D. Edwards system. Quantum software can co-exist with the J.D. Edwards tax calculator software, which means that you can perform tax calculations using either system or both of them. However, if you want to perform a tax-only calculation, you must use the J.D. Edwards software.

Setting up Quantum consists of:

- ❑ Activating Quantum
- ❑ Setting up automatic accounting instructions for Quantum
- ❑ Assigning non-stock product categories to order types
- ❑ Defining tax information for items

Before You Begin

- ❑ Review order line types. See *Setting Up Order Line Types.*
- ❑ Review order activity rules. See *Setting Up Order Activity Rules.*
- ❑ Verify that each customer address book record has a corresponding record in customer master information,and that all suppliers have a record in supplier master information.

What You Should Know About

Tax only calculations	For tax only calculations, use tax types ST (sales tax) and UT (use tax) along with the J.D. Edwards tax rate/area code. You cannot use these tax types with a Quantum GeoCode. For records with ST and UT tax types, records are not to be written to the Quantum Tax Register file, even if Quantum is active.
Returns Module	If you plan to use the Quantum Sales Tax Returns Module, you should install it after performing all other setup steps.

Activating Quantum

You must activate the Quantum feature before you can use GeoCodes to perform tax calculations.

Before You Begin

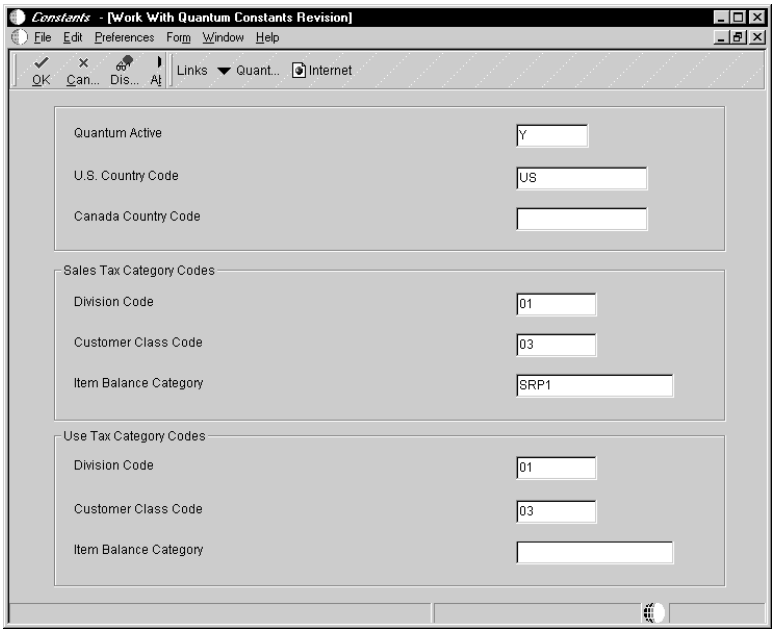
- ❑ You must set up database connections to establish communication to the Quantum databases, both Quantum for Sales and Use Tax and Quantum for Payroll.

  See *Setting Up Database Connections* in the *OneWorld Installation Guide* for more information.

▶ To activate Quantum

From the Complementary Products menu (G73), choose Quantum Sales and Use Tax. From the Vertex Quantum Sales and Use Tax menu (G731), choose Constants.

On Work with Quantum Constants Revisions



1. Complete the following fields:
   - Quantum Active
   - U.S. Country Code
   - Canada Country Code
2. Complete the following fields for sales tax category codes:

- Division Code
- Customer Class Code
- Item Balance Category

3. Complete the following fields for use tax category codes and click OK:
   - Division Code
   - Customer Class Code
   - Item Balance Category

Field	Explanation
Quantum Active	This flag determines whether to use the Vertex Tax Compliance system for tax calculations. Y Use Vertex system to calculate taxes. N Do not use Vertex system to calculate taxes. Instead, use JDE tax calculations.
U.S. Country Code	The code used to indicate to the Vertex Sales and Use Tax system that you choose to represent the United States.
Canada Country Code	The code used to specify Canada to the Vertex Sales and Use Tax System.
Division Code	This field tells the Vertex Tax Interface the Address Book Category Code to use for Division/Store Code for Sales Tax. The Division/Store Code is used by the Vertex Tax Decision Maker module. The interface will use the corresponding category code based on the value specified in this field.
Customer Class Code	This field tells the Quantum Tax Interface the Address Book Category Code to use for Customer Class Code for Sales Tax. The Customer Class Code is used by the Quantum Tax Decision Maker module. The interface will use the corresponding category code based on the value specified in this field.
Item Balance Category	This field tells the Vertex Tax interface the Item Branch/Plant category code to use for Product Category for Sales Tax. The Product Category code is used by the Vertex Tax Decision Maker module. The interface will use the corresponding category code from the Item Branch/Plant file based on the value specified in this field.
Division Code	This field tells the Vertex Tax Interface the Address Book Category Code to use for Division/Store Code for Use Tax. The Division/Store Code is used by the Vertex Tax Decision Maker module. The interface will use the corresponding category code based on the value specified in this field.

Field	Explanation
Customer Class Code	This field tells the Quantum Tax Interface the Address Book Category Code to use for Customer Class Code for Use Tax. The Customer Class Code is used by the Quantum Tax Decision Maker module. The interface will use the corresponding category code based on the value specified in this field.
Item Balance Category	This field tells the Vertex Tax interface the Item Branch/Plant category code to use for Product Category for Use Tax. The Product Category code is used by the Vertex Tax Decision Maker module. The interface will use the corresponding category code from the Item Branch/Plant file based on the value specified in this field.

Setting Up Automatic Accounting Instructions for Quantum

You must create AAIs for each unique combination of company, transaction, document type, and G/L class (G/L offset account) that you want to use. Each AAI is associated with a specific G/L account that consists of a business unit, an object, and optionally, a subsidiary.

If you are required to collect taxes on customer invoices, you must distribute the tax amounts to the correct G/L accounts. When you set up AAIs for a specific type of tax, such as VAT or use tax, you designate the accounts to debit and credit for an invoice tax amount. The AAIs, PT_ _ _ _ (for payables) and RT_ _ _ _ (for receivables), are used only for taxes. The system is hard coded to look at the tax AAIs for the company. The system uses the state code prefix of the GeoCode as a subsidiary to search the Account Master (F0901) for the appropriate G/L account. If none is found, the system uses the business unit and object account in the company.

When you set up AAIs to use Quantum, you can set up G/L accounts by state. You must add the state code value as the subsidiary of the base account. During the post process, the system verifies the state code against the GeoCodes to search for the proper account.

See Also

- *Understanding AAIs for General Accounting* in the *General Accounting Guide*

Assigning Non-Stock Product Categories to Order Types

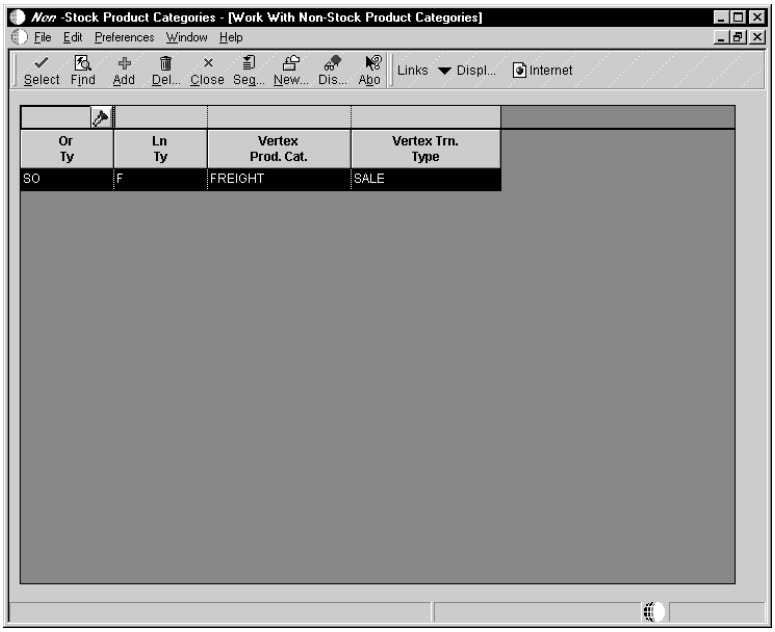
For non-stock order lines (such as lines for freight charges or other miscellaneous charges), you must define non-stock product categories within the Quantum system. The J.D. Edwards/Quantum interface uses these codes when you enter order lines to determine tax information.

You can specify a Quantum product category or a Quantum transaction type for each order type and line type combination. The Quantum product category is used for product exceptions in TDM. The Quantum transaction type indicates to Quantum the type of transaction that is being processed (for example, sales, purchase, rental, or service) so Quantum can apply the appropriate tax type. You define tax types on the Quantum TDM Override Subtable form.

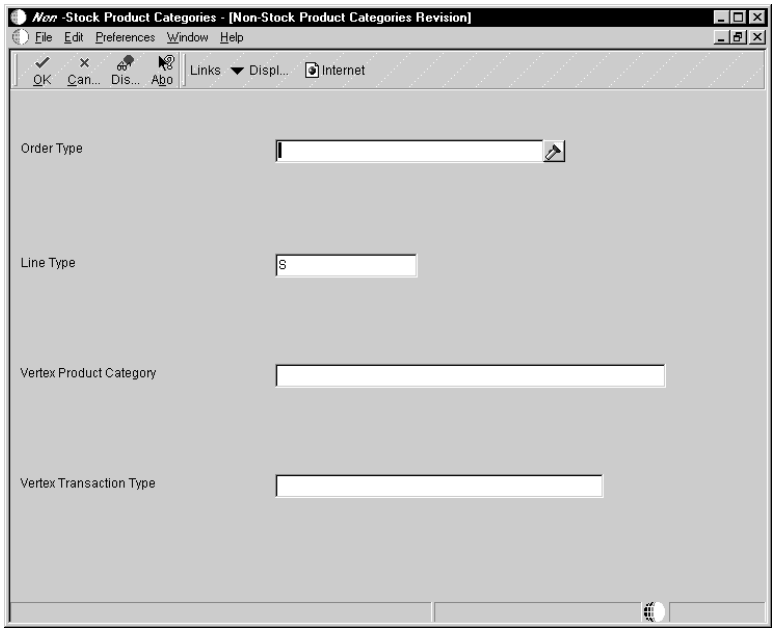
▶ To assign non-stock product categories to order types

From the Complementary Products menu (G73), choose Vertex Quantum Sales and Use Tax. From Vertex Quantum Sales and Use Tax menu (G731), choose Non-Stock Product Categories.

On Work with Non-Stock Product Categories



1. Click Add.



2. Complete the following fields:
   - Order Type
   - Line Type
   - Vertex Product Category
   - Vertex Transaction Type

Defining Tax Information for Items

To apply tax to the sales or purchase of an item, you perform two tasks to specify that the item is taxable:

- Activate the tax fields for the item on Item Branch/Plant Information to yes
- Assign the item to a tax category

In Quantum, the tax category corresponds to product categories that you define in Tax Decision Maker (TDM) for any special tax exceptions or overrides. For example, when you sell a stock item, the J.D. Edwards Sales Order Management system passes the tax category code to the Quantum system.

Before Quantum calculates the tax, it compares the tax category code to TDM product categories. If it finds a match (for example, the TDM setting for the category) taxable, exempt, or otherwise, it dictates how Quantum specifies a tax. If it does not find a match, Quantum taxes the item at the standard rate for that jurisdiction.

Taxes are calculated for items only if the customer is also taxable. If the value in the taxable field is No, the system writes the transaction to the Quantum Tax Register as exempt.

▶ To define tax information for items

From the Inventory Management menu (G42), choose Inventory Master/Transactions. From the Inventory Master/Transactions menu (G4111), choose Item Branch/Plant.

On Item Branch/Plant Information

1. Locate the item whose tax information you want to define.
2. Complete the following fields:
   - Sales Taxable
   - Purchasing Taxable
3. Access Item Branch Class Codes.
4. On Item Branch Class Codes, complete fields as follows:
   - For sales tax, the field that corresponds to the value that you specified in the Item Balance Category field under Sales Tax Category Code on the Quantum Tax System Constants form.
   - For use tax, the field that corresponds to the value you specified in the Item Balance Category field under Use Tax Category Code on the Quantum Tax System Constants form.

Assigning GeoCodes to Address Book Records

After you activate the Vertex Quantum for Sales and Use Tax system, you must assign GeoCodes to existing address book records. That is, you must set up GeoCodes for every customer, supplier, Ship To, Ship From, warehouse, or branch/plant in the address book. The Tax Decision Maker Engine uses GeoCodes to calculate sales and use taxes for each customer and specific location.

A GeoCode is a nine-digit code that represents a taxing jurisdiction. All GeoCodes are defined and maintained by Vertex. Each GeoCode has the following format:

XXYYYZZZZ

where

XX = State

YYY = County

ZZZZ = City

You can assign GeoCodes to address book records manually or by using a batch program. You should start with the batch program to complete as many address book records as possible. Then, after reviewing the resulting report, you can use the manual process to change GeoCodes, if necessary. You can also use the manual process to assign a GeoCode to a new address book record.

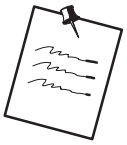
Complete the following tasks:

- ❑ Assigning GeoCodes globally to address book records
- ❑ Assigning GeoCodes manually to address book records
- ❑ Calculating taxes for related addresses

If you use Quantum for Sales and Use Tax, the Tax Rate/Area field in the J.D. Edwards master and transaction tables are used to store the assigned GeoCode. However, a client can choose to use the Quantum tax system as well as the J.D. Edwards tax system.

To distinguish GeoCodes from J.D. Edwards tax area codes, each GeoCode is prefixed with V, M, or O within J.D. Edwards systems:

V (Vertex GeoCode)	A V prefix to the nine-digit GeoCode identifies the code as a literal Vertex GeoCode.
M (Multi-County Situation)	The system assigns M as the prefix to the GeoCode when you run the batch assignment program and it finds postal codes that cross two or more county boundaries. When this occurs, you must review the records and manually assign the appropriate GeoCode based on the county.
O (Outside City Limits)	If an address that is specified in the address book record is not physically located within the city limits and therefore is not subject to city tax, you must manually change the first character of the GeoCode from V to O. This indicates to Quantum not to calculate the city tax for that GeoCode.



Vertex has not defined GeoCodes for non-U.S. or non-Canadian jurisdictions and does not maintain tax rates for these jurisdictions. However, you can create GeoCodes, beginning each GeoCode with “77” (in the state field), which lets you create records in TDM for each non-U.S. or non-Canadian jurisdiction.

Additionally, you can set up the Quantum Override table to maintain tax rates for each non-U.S. or non-Canadian taxing authority.

Before You Begin

- ❑ Verify that you have set up the address book search types in the user defined code table (73/ST) for GeoCode assignments. When you update GeoCodes, the system determines which address book records to update with GeoCodes based on the search type.

Assigning GeoCodes Globally to Address Book Records

You can use the following batch processes to update GeoCode information in multiple address book records:

- Update Address Book GeoCodes (R730101)
- Effective Address Update (R01840)

Update Address Book GeoCodes

From the Vertex Quantum Sales and Use Tax menu (G731), choose Update Address Book GeoCodes.

Use the Update Address Book GeoCodes (R730101) program to add GeoCodes to existing address book records. The system stores the GeoCode in the Tax Rate/Area field of either the Customer Master Information (F03012) table or the Supplier Master Information (F0401) table.

When you perform a batch address book record update, the system populates the Tax Rate/Area field with the appropriate GeoCode.

If there is not enough information to assign a GeoCode, or if an address book record crosses multiple tax jurisdictions, the system does not enter a value in the field.

The system produces reports that show both unmatched records and records that you might want to match. Additionally, the system sends e-mail messages to the Work Center that identify unmatched records. Messages in the Work Center are sent to the person that is processing the batch report, based on the User ID. For example, when an address book record can have more than one GeoCode assigned to it, the system does not match the address book record with a GeoCode. Use these reports and messages to identify any address book records that were not updated with GeoCodes. You will need to manually update those records.

Effective Address Update

From the A/B Advanced and Technical Operations menu (G0131), choose Effective Address Update.

When you run the Effective Address Update, the system verifies effective dates of addresses and updates corresponding supplier and customer records accordingly. The system stores the GeoCode in the Tax Rate/Area field of either the Customer Master Information (F03012) or the Supplier Master Information (F0401) tables.

When you perform a batch update based on effective dates, the system populates the Tax Rate/Area field with the appropriate GeoCode. If a value exists in the field that is not a GeoCode, the system does not update the Tax/Rate Area field.

If there is not enough information to assign a GeoCode, or if an address book record crosses multiple tax jurisdictions, the system does not enter a value in the field.

The system produces reports that show both unmatched records and records that you might want to match. Additionally, the system sends e-mail messages to the Work Center that identify unmatched records. Messages in the Work Center are sent to the person that is processing the batch report, based on the User ID. For example, when an address book record can have more than one GeoCode assigned to it, the system does not match the address book record with a GeoCode. Use these reports to identify any address book records that were not updated with GeoCodes. You will need to manually update those records.

Assigning GeoCodes Manually to Address Book Records

The system assigns a GeoCode to the Business Unit Master, Supplier Master, and Customer Master records based on the following fields in the mailing address for the corresponding address book record:

- City
- State
- Postal Code
- County

You might have to manually change or assign GeoCodes for the following reasons:

- A multi-county situation exists for an address book record
- The address falls outside city limits
- You have added a new address book record for a customer or supplier

When an address book record can have more than one GeoCode assigned to it, you use the Search and Select form to choose a GeoCode. The Quantum GeoCode Select form lists all possible GeoCodes that correspond to county names and postal code ranges.

When you change an address, the system updates any existing GeoCodes. If the address change results in a different GeoCode, the system also updates the Tax Rate/Area field on the Customer Master Information (F03012) and Supplier Master Information (F0401) tables.

Depending on the type of address book record, perform the following tasks to assign GeoCodes to business units, suppliers, and customers:

- Manually assigning GeoCodes to business units

- Manually assigning GeoCodes to suppliers
- Manually assigning GeoCodes to customers

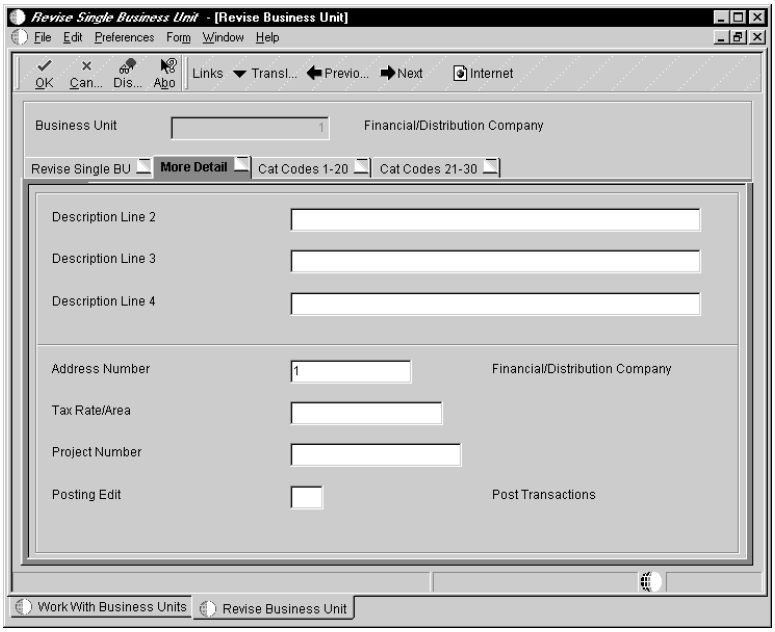
When you access the Search and Select Window from the visual assist for the Tax Rate/Area field in any form, the system verifies whether Quantum is active in the Quantum Constants. If so, the system first displays GeoCodes from which you can review and select appropriately. To review J.D. Edwards tax rates/areas, click Cancel on the GeoCode inquiry form. The system then displays J.D. Edwards tax rates.

To manually assign GeoCodes to business units

From the Organization and Account Setup menu (G09411), choose Revise Single Business Unit.

On Work with Business Units

1. Locate the business unit and click Select.
2. On Revise Business Unit, click the More Detail tab.



3. Complete the following field:
   - Tax Rate/Area

If you try to access GeoCode information using the Visual Assist in the Tax Rate/Area field, you must ensure that the business unit is assigned to an address book number.

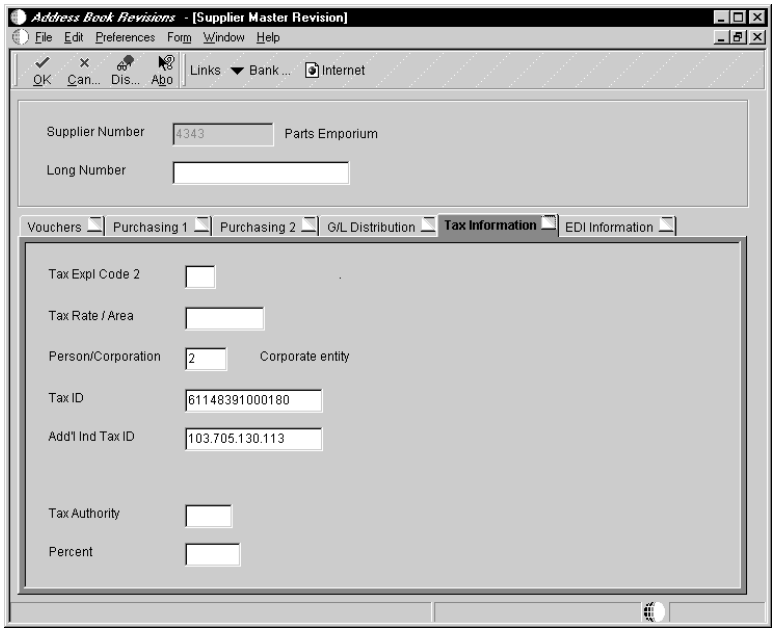
Because there is no tax explanation code, if you are working with CSMS, the business unit tax explanation code is always a sales tax (S).

To manually assign GeoCodes to suppliers

From the Address Book menu (G010), choose Daily Processing. From the Daily Processing menu (G01), choose Address Book Revisions.

On Work with Addresses

1. Locate the address book record whose GeoCode you want to change or add.
2. Choose A/P from the Row menu.



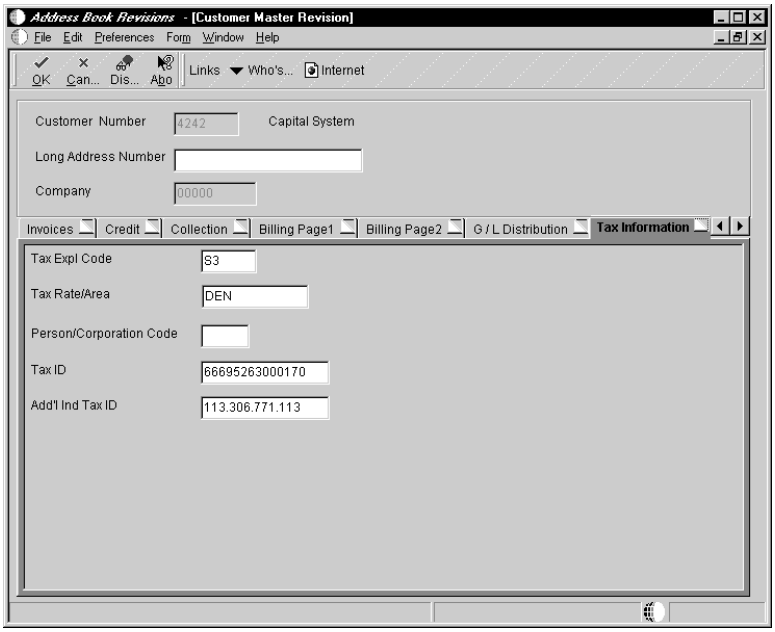
3. On Supplier Master Revision, click the Tax Information tab and complete the following fields:
   - Tax Explanation Code
   - Tax Rate/Area

To manually assign GeoCodes to a customer

From the Address Book menu (G010), choose Daily Processing. From the Daily Processing menu (G0010), choose Address Book Revisions.

On Work with Addresses

1. Locate the address book record whose GeoCode you want to change or add.
2. Choose A/R from the Row menu.



3. On Customer Master Revision, click the Tax Information tab and complete the following fields:

   - Tax Explanation Code
   - Tax Rate/Area

Calculating Taxes for Related Addresses

In order for Quantum to calculate taxes for various jurisdictions laws and regulations, the GeoCodes might be based on one of the following three parameters:

Ship To

The Ship To location is generally the customer's location in a sales or purchase transaction. For example, your cost center, office, or plant location for the customer might be the Ship To. The system calculates Consumer's Use Tax if you are the customer for the purchase.

Ship From

The Ship From location is generally the seller's plant or warehouse that is delivering the product or service. It is crucial to a sales tax calculation, because different rules might apply for intrastate (Ship To and Ship From are in the same state) or interstate (Ship To and Ship From are in different states) transactions.

Order Acceptance

The Order Acceptance location is the place where the seller accepts, acknowledges, or receives the actual order. This is crucial for determining the correct tax on an interstate or intrastate transaction.

When you enter an address book number to represent a customer (Sold To, Ship To), supplier or branch/plant (Ship From), the system uses the following rules for each system:

Vertical	Tax Type	Reason	Ship To	Ship From	Order Acceptance
A/P	Use or Exempt	Accrue Use Tax	Based on a hierarchy: • Business Unit GeoCode • Business Unit Address Number GeoCode • Business Unit Company Address Number GeoCode		Same as Ship To
A/P	Sales	Verify Sales Tax	Based on a hierarchy: • Business Unit GeoCode • Business Unit Address Number GeoCode • Business Unit Company Address Number GeoCode	GeoCode associated with Supplier's address	Same as Ship From
A/R	Sales	Accrue Sales Tax	GeoCode associated with Customer's Address	Based on a hierarchy: • Business Unit GeoCode • Business Unit Address Number GeoCode • Business Unit Company Address Number GeoCode	Same as Ship From
Sales Order Management	Sales	Accrue Sales Tax	Geocode associated with Customer's Ship To address on order detail line	Based on a hierarchy: • Order Detail Line Branch/Plant GeoCode • Order Detail Line Branch/Plant GeoCode Address Number GeoCode • Order Detail Line Branch/Plant Company Address Number GeoCode	Same as Ship From

Vertical	Tax Type	Reason	Ship To	Ship From	Order Acceptance
Procurement	Use	Accrue Sales Tax	Based on a hierarchy: • Order Header Branch/Plant GeoCode • Order Header Branch/Plant Address Number GeoCode • Order Header Branch/Plant Company Address Number GeoCode	GeoCode associated with Supplier's Address on Order Header	Same as Ship To
CSMS	Sales	Accrue Contract Tax	GeoCode on the contract detail line. (This is based on the Site Address Number on the contract detail line.)	GeoCode associated with business unit on the contract detail line. If no GeoCode is assigned, the system retrieves the GeoCode from the Supplier Master, using the address number of the business unit on the contract detail line.	GeoCode associated with Business Unit Address Number on the contract header. If no GeoCode is assigned, the system retrieves the GeoCode from the Supplier Master, using the address number of the business unit on the contract header.
CSMS	Sales	Accrue Service Order Sales Tax	GeoCode on the service order. (This is based on the Site Address Number on the service order.)	GeoCode associated with the Responsible Business Unit on the service order. If no GeoCode is assigned, the system retrieves the GeoCode from the Supplier Master, using the address number of the responsible business unit on the service order.	Same as Ship From
CSMS	Use	Accrue Service Order Use Tax	GeoCode associated with the Responsible Business Unit on the service order. If no GeoCode is assigned, the system retrieves the GeoCode from the Supplier Master, using the address number of the responsible business unit on the service order.	GeoCode associated with Service Provider Address Number on the service order.	Same as Ship To

Working with Quantum Taxes

After you assign GeoCodes to address book records, you might need to override a GeoCode on an invoice, voucher, sales order, purchase order, service order, or contract.

Complete the following tasks:

- ❑ Overriding GeoCodes on an invoice
- ❑ Overriding GeoCodes on a voucher
- ❑ Overriding GeoCodes on a sales order
- ❑ Overriding GeoCodes on a purchase order
- ❑ Overriding GeoCodes on a contract
- ❑ Overriding GeoCodes on a service order

When you enter a sales or purchase order, invoice, service order quote, or voucher, you can inquire on the order and review product information as well as calculated taxes. The system retrieves the tax information from the Tax Rate/Area field in the J.D. Edwards master and transaction tables, which are used to store the assigned GeoCode or J.D. Edwards tax code.

The Tax Decision Maker interfaces with the following programs in the J.D. Edwards systems:

Accounts Payable	• Supplier Master • Multi-Company Voucher Entry (P041016) • Multi-Voucher Entry (P041017) • Standard Voucher Entry (P0411) • Speed Voucher Entry (P0411SV)
Procurement	• Purchase Order Entry (P4310) • Purchase Order Workbench (P43101) • Voucher Match (P4314) • Order Revision History (43205) • Release Open Quotes (P43360)

Accounts Receivable	• Customer Master (P03013) • Standard Invoice Entry (P03B11) • Speed Invoice Entry (P03B11SI) • Speed Status Change (P03B114)
Sales Order Management	• Sales Order Entry (P4210) • Online Invoice Inquiry (P42230)
Customer Service Management System (CSMS)	• Contract Revisions (P1721) • Service Order Entry (P17714) • Service Order Quote (R17711) • Online Service Order Quote (P17717)

When a J.D. Edwards program calls the Tax Decision Maker, the Tax Decision Maker Engine determines the following information:

- Whether the transaction is interstate or intrastate
- The transaction's taxing jurisdiction
- The appropriate tax rate
- The maximum tax base
- Excess amounts, if applicable

The Tax Decision Maker then:

- Retrieves the appropriate tax rate
- Calculates tax amounts
- Returns the amount to the calling program

In CSMS, the system does not calculate taxes until you run Service Contract Workfile Generation (R1732) or the Service Order Workfile Generation (R1775) in final mode. However, the system does calculate taxes when you create a service order quote.

See Also

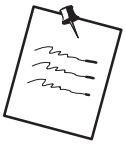
- *Working with Vouchers* in the *Accounts Payable Guide* for more information about reviewing voucher information
- *Working with Invoices* in the *Accounts Receivable Guide* for more information about invoice information
- *Managing Service Contracts* and *Working with Service Orders* in the *Customer Service Management System (CSMS)*
- *Reviewing Sales Order Information* in the *Sales Order Management Guide* for more information about reviewing sales orders

- *Working with Purchase Order Information* in the *Procurement Guide* for more information about reviewing purchase orders

Overriding GeoCodes on an Invoice

After you assign GeoCodes to your customers, the system uses the GeoCode to supply default tax information when you enter an invoice. If you want to override the tax information supplied by the system, you can do so when you enter the invoice.

The system makes accounting entries for sales taxes when you post the invoice based on the AAI item RT _ _ _ _ , which points to the sales tax account.



You can also override tax information during Speed Invoice Entry and Multi-Invoice Entry.

▶ To override a GeoCode on an invoice

From the Accounts Receivable menu (G03), choose Daily Processing. From the Daily Processing menu, choose Customer and Invoice Entry. From Customer and Invoice Entry (G03B11), choose Standard Invoice Entry.

On Standard Invoice Entry

1. Toggle to the alternate tax format, if necessary.
2. Follow the steps to enter an invoice with taxes.

   See *Entering an Invoice with Taxes (P03105)* in the *Accounts Receivable Guide*.

3. Complete the following fields:
   - Tax Amount (optional)
   - Tax Explanation Code (optional)
   - Taxable Amount

Field	Explanation
Tax Expl Code 1	A user defined code (00/EX) that controls how a tax is assessed and distributed to the general ledger revenue and expense accounts. You assign this code to a customer or supplier to set up a default code for their transactions. Do not confuse this with the taxable, non-taxable code. A single invoice can have both taxable and non-taxable items. The entire invoice, however, must have one tax explanation code.
Amount – Taxable	The amount on which taxes are assessed.

Overriding GeoCodes on a Voucher

After you assign GeoCodes to your suppliers, the system uses the GeoCode to supply default tax information when you enter a voucher. If you want to override the tax information supplied by the system, you can do so when you enter the voucher.

The system makes accounting entries for use taxes when you post the voucher. AAI item PT_ _ _ _ (no G/L offset) points to the use tax account.

You can also override tax information during Multi-Company Voucher entry, Multi-Voucher Entry, and Speed Voucher Entry.

▶ To override a GeoCode on a voucher

From the Accounts Payable menu (G04), choose Daily Processing. From the Daily Processing menu, choose Supplier and Voucher Entry. From Supplier and Voucher Entry (G0411), choose Standard Voucher Entry.

On Standard Voucher Entry

1. Toggle to the alternate tax format, if necessary.
2. Follow the steps to enter basic information for a standard voucher.

   See *Entering Standard Vouchers* in the *Accounts Payable Guide*.

3. Complete the following fields:
   - Tax Amount (optional)
   - Tax Explanation Code (optional)
   - Taxable Amount

Field	Explanation
Tax Explanation 2	A user defined code (00/EX) that controls how a tax is assessed and distributed to the general ledger revenue and expense accounts. You assign this code to a customer or supplier to set up a default code for their transactions. Do not confuse this with the taxable, non-taxable code. A single invoice can have both taxable and non-taxable items. The entire invoice, however, must have one tax explanation code.
Amount – Taxable	The amount on which taxes are assessed.

Overriding GeoCodes on a Sales Order

When you enter a sales order, you can inquire on the order and review product information as well as calculated taxes. The system retrieves the tax information for the order from the Tax Rate/Area field in the J.D. Edwards master and transaction tables that are used to store the assigned GeoCode or J.D. Edwards tax code.

You can enter tax information that is specific to a detail line. This information determines whether taxes apply to the items or services on the detail line and how the system calculates the taxes.

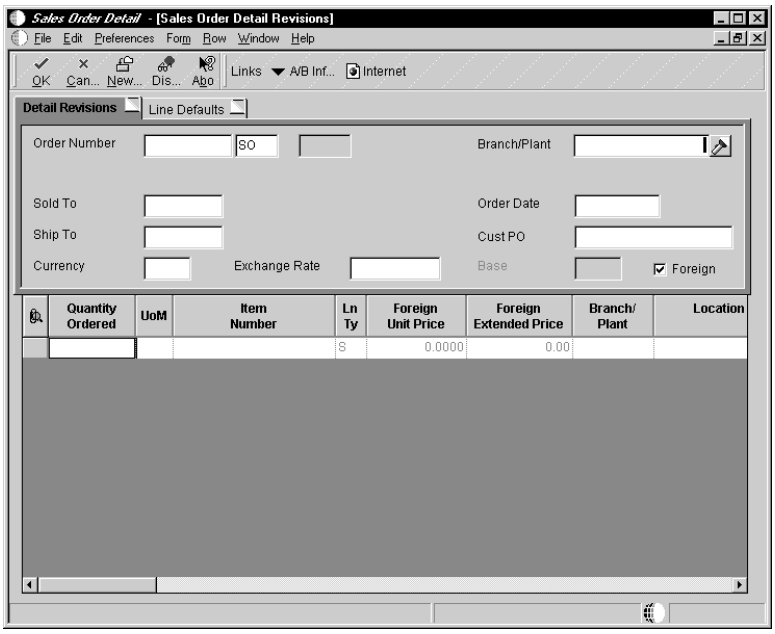
▶ To override GeoCodes on a sales order

From the Sales Order Management menu (G42), choose Sales Order Processing. From the Sales Order Processing menu (G4211), choose Enter Orders Detail.

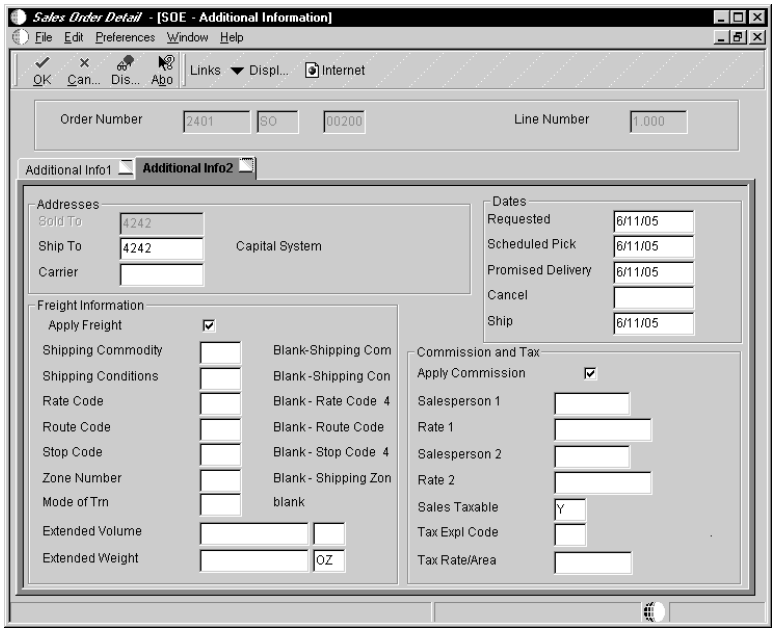
On Work with Sales Order Detail

1. Complete the steps to enter an order.

   To enter sales orders, see *Working with Detail Information* in the *Sales Order Management Guide*.



2. On Sales Order Detail Revisions, select the order detail line and choose SOE – Additional from the Row menu.



3. Click the Additional Info 2 tab and complete the following fields:
   - Tax Rate/Area
   - Tax Expl Code

Overriding GeoCodes on a Purchase Order

When you enter a purchase order, you can inquire on the order and review product information as well as calculated taxes. The system retrieves the tax information for the order from the Tax Rate/Area field in the J.D. Edwards master and transaction tables that are used to store the assigned GeoCode or J.D. Edwards tax code.

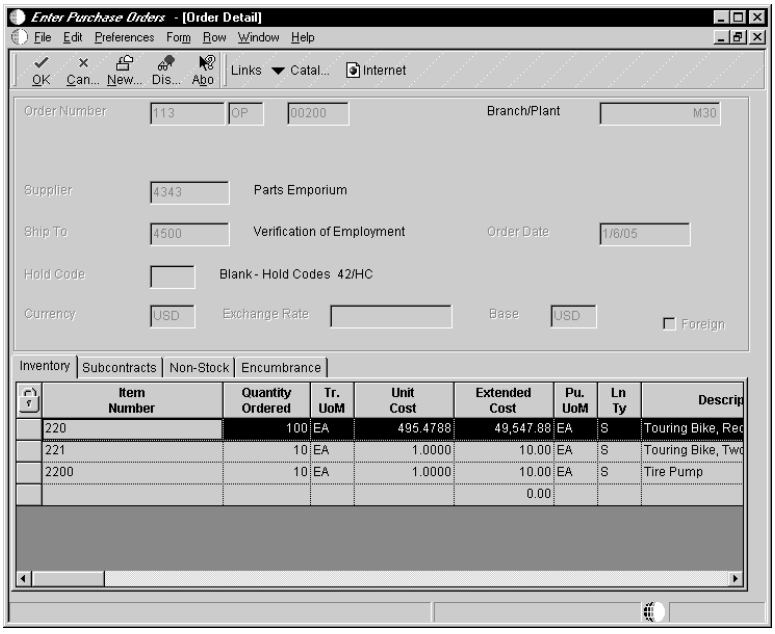
You can enter tax information that is specific to a detail line. This information determines whether taxes apply to the items or services on the detail line and how the system calculates the taxes.

You can review and change tax information on the Purchase Order Workbench and Voucher Match.

▶ To override GeoCodes on a purchase order

From the Procurement menu (G43), choose Daily Processing. From the Daily Processing menu (G4310), choose Stock Based. From Stock Based (G43A), choose Purchase Order Processing. On Purchase Order Processing (G43A11), choose Enter Purchase Orders.

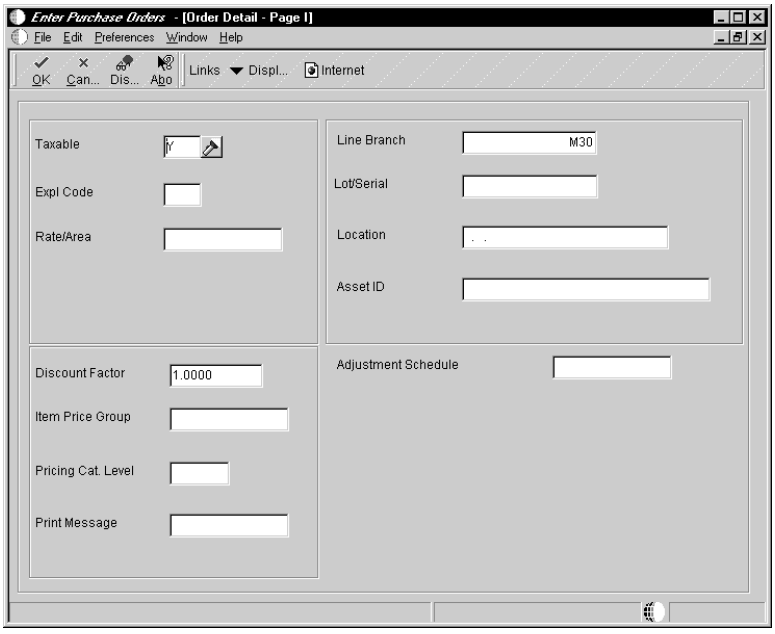
On Work with Purchase Order Detail



1. Complete the steps to enter an order.

   See *Entering Purchase Order Detail Information* in the *Procurement Guide*.

2. On Purchase Order Detail Revisions, select the order detail line and choose Tax/Terms from the Row menu.



3. On Order Detail – Page 1, complete the following fields:

   - Tax Rate/Area
   - Tax Expl Code

Overriding GeoCodes on a Contract

When you enter a service contract, you are accessing the starting point of the contract programs. When you enter service contracts, you can review and override detail information about the contract such as customer entitlements, service packages, item numbers, and billing information, as necessary.

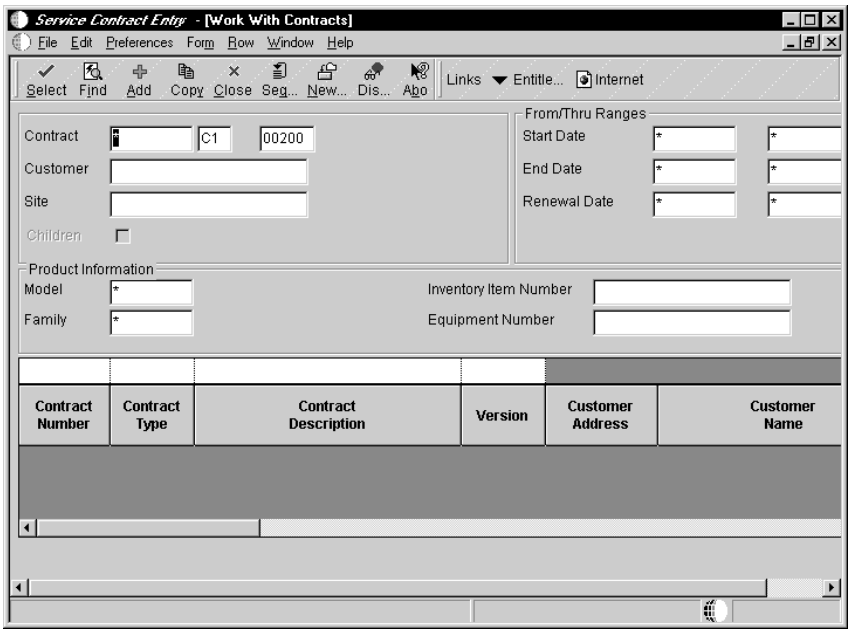
You can override tax information on a contract when you create a contract using direct entry.

In CSMS, the system does not calculate taxes until you run Service Contract Workfile Generation (R1732) in final mode.

▶ To override GeoCodes on a contract

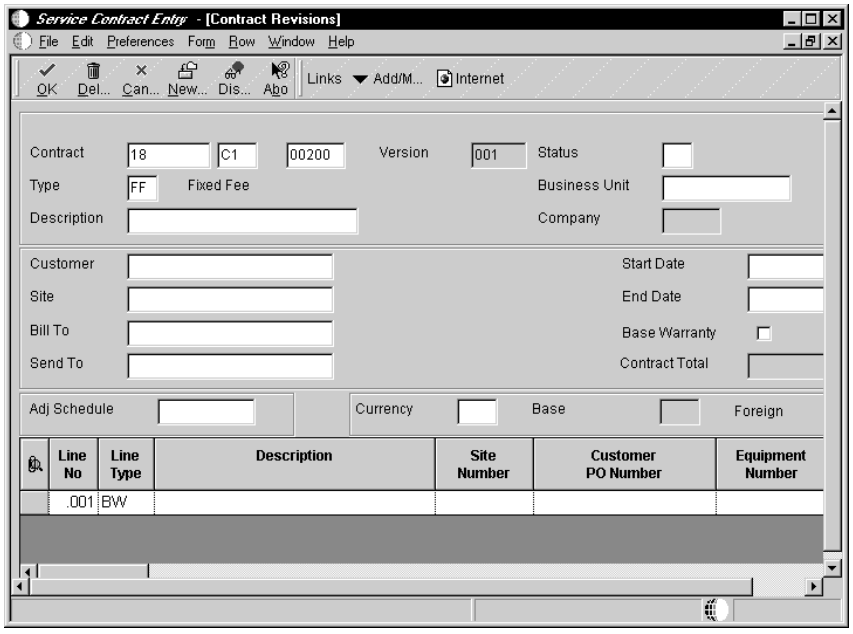
From the Daily Service Contract Processing menu (G1714), choose Service Contract Entry.

On Work with Contracts



To review service contract entry, see *Entering Service Contracts* in the *Customer Service Management Systems Guide.*

1. Click Find.



2. On Contract Revisions, review the value in the following field and override if necessary:
    - Tax Explanation Code
    - Tax Rate/Area

Overriding GeoCodes on a Service Order

You can override tax information when you enter or modify a service order. You must enter a service order under the following circumstances:

- You need to bill for the parts required to fix a piece of equipment
- You need to send a technician to the site to repair the problem
- You use a service provider to resolve the problem and you need to create a voucher for payment

You can retrieve numerous default values from a parent service order. For example, you can use values from a parent service order to retrieve the following information:

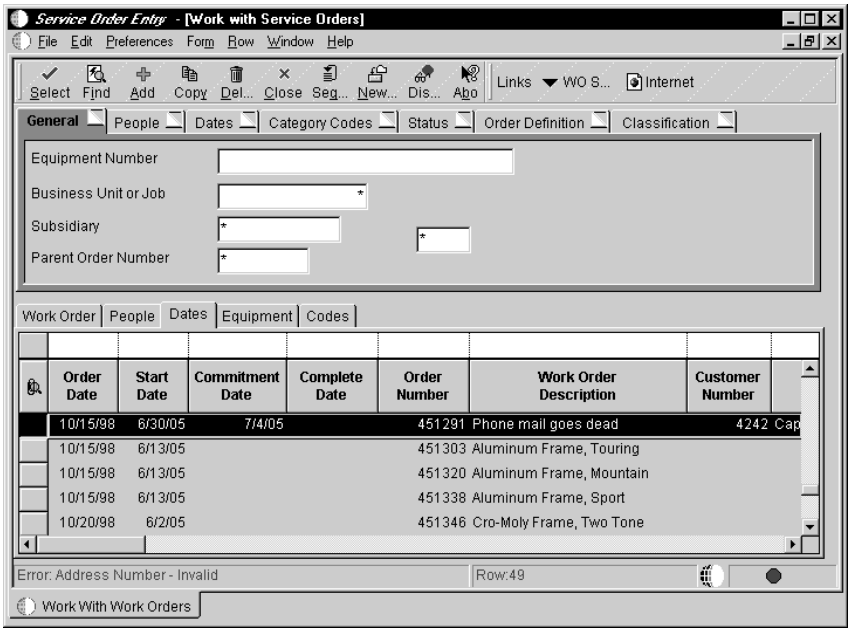
- Service type
- Start date
- Planned completion date

In CSMS, the system calculates taxes when you create a service order quote.

To override a GeoCode on a service order

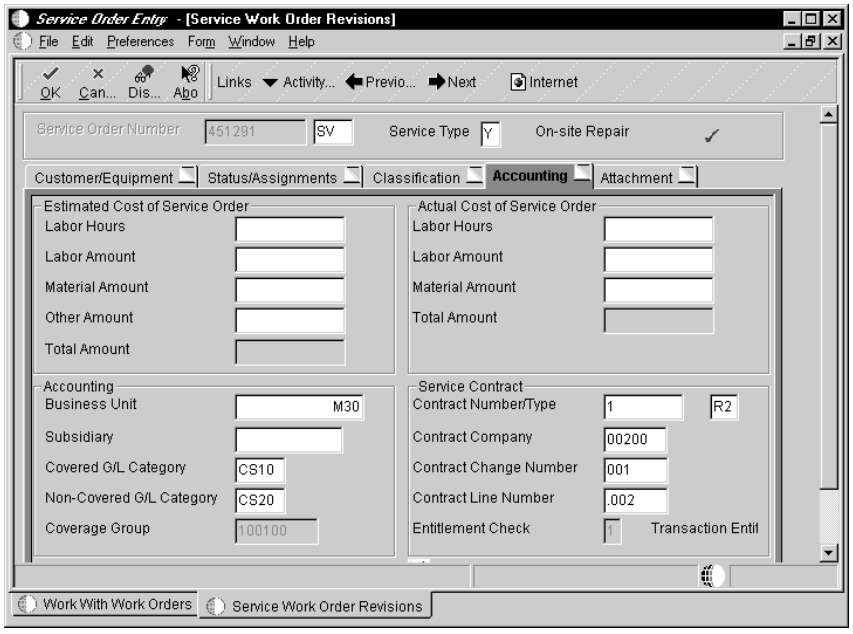
From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

On Work with Service Orders



To review service order entry, see *Working with Service Order Entry* in the *Customer Service Management System Guide.*

1. Click Find.
2. Click the Accounting tab.



3. Review the value in the following field and override if necessary:
   - Tax Explanation Code
   - Tax Rate/Area

Processing Quantum Tax Information

During transaction processing, you can choose to print tax information when you print documents for your customers. When you post accounts payable and accounts receivable information to the general ledger, the system posts Quantum tax information to the Quantum Tax Register and J.D. Edwards tax information to the J.D. Edwards tax table (F00018). You can specify the G/L accounts to which the system posts the taxes.

Complete the following tasks:

- ❑ Printing tax information
- ❑ Posting tax information

Printing Tax Information

You can print calculated taxes when you print a contract, sales order, purchase order, invoice, or voucher in the following J.D. Edwards programs:

Accounts Payable	• Print Voucher Journal (R04305)
Procurement	• Print Purchase Orders (R43500) • Print Order Detail (R4401P)
Accounts Receivable	• Invoice Print (R03B505)
Sales Order Management	• Print Invoice (R42565) • Open Orders by Item Report (R42632) • Open Orders by Customer Report (R42620) • Held Orders Report (R42640)
CSMS	• Service Order Quote (R17711) • Invoice Print (R48504)

Posting Tax Information

In the standard J.D. Edwards tax processing system, the system calculates any taxes that have not been previously calculated and posts financial record information to the J.D. Edwards tax table (F0018).

In the Quantum for Sales and Use Tax system, the system taxes based on the GeoCode and posts financial record information Quantum Tax Register.

If you use Quantum in conjunction with the J.D. Edwards tax processing system, the system writes GeoCode tax information to the Quantum Tax Register and J.D. Edwards tax information to the J.D. Edwards tax table (F0018). For example, if you post transactions with VAT taxes, identified in the system with a user defined tax code, the system writes VAT taxes to the J.D. Edwards tax table (F0018). If you post U.S. taxes, identified by a GeoCode, the system writes taxes to the Quantum Tax Register. If you post U.S. taxes that are by a user defined code, the system writes the U.S. taxes to the J.D. Edwards tax table (F0018).

When you run the Post process (R09801), the following pre-post business functions are responsible for creating and maintaining a workfile to store all the tax information for each detail record that it is processed for the appropriate batch:

- A/P Voucher Pre-Post (B0400115) based on the Supplier Ledger (F0411)
- A/R Invoice Pre-Post (P03B0025) based on the Customer Ledger (F03B11)

During the post process, the system reads the values in the Tax Rate/Area table (F4008) to determine the breakdown of taxes for each transaction. For example, if you have multiple tax authorities and corresponding tax rates, the system computes the tax for each Taxing Authority and creates a G/L record in the Account Ledger (F0911) for each tax authority.

When you create financial records in the Accounts Receivable Ledger (F03B11), Accounts Payable Ledger (F0411), and General Ledger (F0911) in the J.D. Edwards General Business systems (General Accounting, Accounts Receivable, Accounts Payable), the system writes the information to the Quantum Tax Register and J.D. Edwards tax table.

If the financial information was created in the J.D. Edwards Manufacturing and Distribution systems, the system writes the tax information to the Quantum Tax Register when you create records in the Accounts Receivable (F03B11) and General Ledger (F0911) tables. This occurs, for example, at Sales Update or Voucher Match. Unlike tax processing in the J.D. Edwards General Business systems, the system does not write the tax information when you post the resulting batches.

With the Customer Service Management System (CSMS), the system writes the tax information to the Quantum Tax Register when you create records in the Service Billing system. This occurs, for example, when you run the Service Contract Workfile Generation or Service Order Workfile Generation program. Unlike tax processing in

the J.D. Edwards General Business systems, the system does not write the tax information when you post the resulting batches.

See Also

- *Voucher Processing* in the *Procurement Guide*
- *Updating Sales Information* in the *Sales Order Management Guide*
- *Billing Contracts* in the *Customer Service Management Guide*
- *Posting Journal Entries* in the *General Accounting Guide*
- *Posting Vouchers* in the *Accounts Payable Guide*
- *Posting Invoices* in the *Accounts Receivable Guide*
- *Setting Up Automatic Accounting Instructions for Quantum*

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