



EnterpriseOne Xe
Contract Billing
PeopleBook

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J.D. Edwards World Source Company
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Table of Contents

Contract Billing Overview	1-1
Choosing between Contract and Service Billing	1-2
System Integration	1-2
Service Billing	1-2
General Accounting	1-3
Payroll and Time Accounting	1-3
Equipment/Plant Management	1-5
Work Orders	1-5
Job Cost	1-5
Accounts Receivable	1-6
Address Book	1-6
Accounts Payable	1-6
System Features	1-6
Multiple Types of Billing Calculations	1-7
Vertex Tax Interface	1-8
Flexible Markups	1-8
Workfile Management	1-9
Pay To Bill Functionality	1-9
Invoice Formatting	1-9
Billing AAls	1-10
Revenue Recognition	1-10
Journal Processing	1-10
Multi-National Functionality	1-11
Contract Billing Tables	1-13

Contract Information

Contract Information	2-1
Understanding Contract Setup	2-3
Defining Parts of a Contract	2-3
Understanding Billing Types	2-4
Using Change Orders	2-5
Using MultiCurrency Contracts	2-6
Setting Up Contract Information	2-7
Working with Independent Contract Billing Lines	2-17
Defining Contract Billing Lines for Lump Sum	2-18
Setting Up Lump Sum for Manual Calculation	2-19
Setting Up Lump Sum to Calculate Invoice Amounts	2-21
Setting Up Recurring Billing Amounts	2-26
Defining Contract Billing Lines for Unit Price	2-28
Setting Up Unit Price for Manual Calculation	2-29
Setting Up Unit Price to Calculate the Billing Amount	2-31
Defining Contract Billing Lines for Milestone Billing	2-35
Defining Contract Billing Lines for Progress Billing	2-39

Billing Events for Progress Billing	2-40
Defining Contract Billing Lines for Time and Material	2-44
Cross-References for Time and Material (T&M)	2-44
Working with Dependent Contract Billing Lines	2-49
Working with Prepayments for Contracts	2-49
Defining a Contract Billing Line for a Direct Draw	2-50
Defining a Contract Billing Line for a Rated Draw	2-54
Defining a Contract Billing Line for Fees	2-57
Defining Fees for Billing Amounts	2-58
Working with Contract Information	2-63
Searching for Contract Information	2-63
Reviewing the Status of Contract Billing Information	2-64
Revising Contract Billing Lines	2-65
Entering Text for a Contract Billing line	2-67
Processing Options for Contract Billing Line Details	2-68

Workfile Management

Workfile Management	3-1
Understanding Workfile Information	3-3
Workfile Generation	3-3
Processing Payroll	3-4
Processing Burden	3-5
Processing Components	3-6
Defining Parent/Child Relationships in the Workfile	3-7
Viewing Workfile Transactions	3-7
Assigning Eligibility Codes	3-8
Assigning Control/Sequence Numbers	3-10
Generating the Workfile	3-13
Processing Options: Workfile Generation (R48120)	3-14
Reviewing the Workfile	3-17
Reviewing Workfile Transactions	3-19
Reviewing Workfile Transaction Revisions	3-24
Reviewing Transaction Totals	3-25
Reviewing Burden Transactions	3-26
Reviewing Component Transactions	3-28
Revising the Workfile Transactions	3-31
Adding Existing G/L Transactions to the Workfile	3-32
Changing the Markup on the Workfile Transaction	3-34
Entering Ad-Hoc Workfile Transactions	3-40
Assigning a Hold Status	3-48
Splitting a Workfile Transaction	3-49
Moving a Workfile Transaction to the Workfile History Table	3-51
Printing Workfile Transactions	3-53
Printing Workfile Totals	3-54
Working with Workfile History	3-55
Reviewing Transaction Revisions	3-55
Moving a Transaction Out of History	3-56
Processing Options for Detail History	3-57

Invoice Processing

Contract Billing Invoice Processing	4-1
Understanding Invoice Processing	4-3
About the Invoice Generation Process	4-3
Selecting Versions and Modes for Invoice Generation	4-8
Using Interactive Versions in Invoice Generation	4-8
Journal Reclassification	4-9
Associated G/L Batch Processing	4-10
Document Types For Invoice Processing	4-10
Revising Override Dates	4-11
Generating Invoices Automatically	4-13
Processing Options: Service Billing Invoice Generation (R48121)	4-16
Working with Invoice Batches	4-19
Reviewing Invoice Information	4-20
Processing Options: Batch Review (P48221)	4-25
Deleting Invoice Information	4-27
Creating Invoice Information Manually	4-31
Adding Workfile Transactions to an Invoice	4-34
Creating Credit Memos	4-38
Generating Preliminary Invoice Journal Entries	4-39
Revising Override Dates	4-41
Reviewing Preliminary Invoice Journal Entries	4-42
Processing Options: Journal Edit Register (R48300)	4-43
Creating Final Invoice Journal Entries	4-43
Posting Invoice Batches	4-47
Posting Associated G/L Batches	4-49
Printing Invoices	4-51
Printing Invoices Automatically	4-52
Printing Invoices Manually	4-52
Working with Invoice History	4-55
Reviewing the Billing History for Transactions	4-55
Printing Invoices from History	4-56
Processing Options: Invoice Print Selection (R48504)	4-56
Voiding a Final Invoice	4-57

Revenue Recognition

Contract Billing Revenue Recognition	5-1
Understanding Revenue Recognition	5-3
Understanding Revenue Recognition	5-3
Selecting Versions and Modes for G/L Journal Generation	5-4
Using Interactive Versions in G/L Journal Generation	5-4
Types of Journal Entries	5-5
Generating Preliminary G/L Journal Entries	5-11
Processing Options: G/L Journal Generation (R48132)	5-12
Working with G/L Batches	5-15
Reviewing Preliminary G/L Journal Entries	5-16
Revising Preliminary G/L Journal Entries	5-16

Deleting Preliminary G/L Journal Entries	5-17
Creating Final G/L Journal Entries	5-17
Posting G/L Batches	5-18

Setup

System Setup	6-1
What Do These Setup Features Do?	6-2
Setting Up System Constants	6-3
Defining Markup Rules	6-11
Major Key	6-14
Minor Key	6-16
Markup Calculations	6-17
Compound Markup	6-17
Component Information	6-18
Processing Options: Billing Rate/Markup Table (P48096)	6-27
Defining Billing AAI's	6-31
Major Keys	6-31
AAI's for the Contract Billing System	6-32
Actual Revenue Account (4811) - Required	6-32
Tax Liability Accounts (4815)	6-32
Taxable Receivables Accounts (4822 and 4823)	6-33
Accrued Revenue Accounts (4831)	6-33
Accrued Receivable Accounts (4832)	6-33
Work In Progress Accounts (4841)	6-33
Cost Of Goods Sold Accounts (4842)	6-34
Revenue Margin Accounts (4871 and 4872)	6-34
Invoice Margin Accounts (4873 and 4874)	6-34
Key Type/ Table Key	6-35
Minor Keys	6-35
Types of Accounting Rules	6-37
Base Rules	6-37
Reallocation Rules	6-37
AAI Processing in Contract Billing	6-37
Working With Billing AAI's	6-42
Processing Options: Work with Billing AAI's (P48S95)	6-49
Defining Component Rules	6-53
Compound Components	6-53
Assigning Component Information	6-57
Adding Component Rules to Markup Rules	6-57
Setting Up Automatic Accounting Instructions	6-59
Understanding User Defined Codes	6-61
Working With User Defined Codes for Contract Billing	6-64
Understanding the Invoice Cross Reference Table	6-67
Understanding the Invoice Printing Process	6-69
Understanding How the System Determines Which Invoice Print Version To Use	6-69
Currency Processing Option	6-71

Setting Up Invoice Formats	6-73
Understanding Invoice Format Revisions	6-73
Invoice Format Templates	6-74
Modifying the Invoice Format Template without Smart Fields (R48506)	6-75
Modifying the Header Section	6-75
Modifying the Detail Section	6-77
Modifying the Totals Section	6-77
Modifying the Invoice Format Template with Smart Fields (R48507)	6-79
Invoice Print Smart Fields	6-79
Including Smart Fields on an Invoice	6-81
Copying Versions	6-82
Understanding Multicurrency Setup for Contract Billing	6-87
Choosing Modes	6-87
Calculating Fixed and Non-Fixed Amounts	6-89
Choosing Modes for Invoicing	6-89
Creating Multicurrency Transactions	6-89
Understanding Setup of Constants for Multicurrency	6-93
Understanding Setup of Billing Rate/Markup Tables for Multicurrency	6-94
Example: Billing Rate/Markup Table Processing	6-95
Understanding Setup of Components for Multicurrency	6-97
Understanding Contract Setup for Multicurrency	6-97
Understanding Multicurrency Processing of Workfile Generation	6-98
Understanding Multicurrency Processing of Billing Revisions	6-98
Understanding Multicurrency Processing of Invoice Generation	6-100
Understanding Multicurrency Processing of Invoice Revisions	6-101
Understanding Invoice Revisions for Time and Material Billing Lines	6-102
Understanding Invoice Revisions for Non-Time and Material Billing Lines	6-103
Understanding Multicurrency Processing of Printing Invoices	6-103
Understanding Multicurrency Processing of Invoice Journal Generation	6-104
Understanding Multicurrency Processing of Create A/R and G/L Entries	6-104
Understanding Multicurrency Processing of General Ledger Post Reports	6-105
Understanding Multicurrency Processing of Invoice Voids	6-105

Appendix

Appendix A: Vertex Quantum for Sales and Use Tax	A-1
Setting Up the J.D. Edwards/Quantum Interface	A-9
Activating Quantum	A-10
Testing the Quantum Connection	A-12
Activating Quantum Logging	A-14
Setting Up Automatic Accounting Instructions for Quantum	A-15
Setting Up User Defined Codes for Quantum	A-16

Assigning Non-Stock Product Categories to Order Types	A-16
Defining Tax Information for Items	A-19
Assigning GeoCodes to Address Book Records	A-21
Assigning GeoCodes Globally to Address Book Records	A-23
Assigning GeoCodes Manually to Address Book Records	A-24
Calculating Taxes for Related Addresses	A-29
The GeoCode Hierarchy	A-29
Accounts Payable - Use or Exempt Tax	A-29
Accounts Payable - Sales Tax	A-30
Accounts Receivable - Sales Tax	A-31
Sales Order Management - Sales Tax	A-31
Procurement - Use Tax	A-32
CSMS - Service Contract Sales Tax	A-33
CSMS - Service Order Sales Tax	A-34
CSMS - Service Order Use Tax	A-34
CSMS - Call Sales Tax	A-35
Contract/Service Billing - Sales Tax	A-35
Working with Quantum Taxes	A-37
Overriding GeoCodes on an Invoice	A-39
Overriding GeoCodes on a Voucher	A-40
Overriding GeoCodes on a Sales Order	A-41
Overriding GeoCodes on a Purchase Order	A-43
Overriding GeoCodes on a Service Contract	A-44
Overriding GeoCodes on a Service Order	A-45
Overriding GeoCodes on a Call	A-46
Overriding GeoCodes on Contract Billing	A-48
Overriding GeoCodes on Service Billing	A-52
Processing Quantum Tax Information	A-57
Printing Tax Information	A-57
Posting Tax Information	A-58
Appendix B: Searches for Markup Rules	B-1
Major Key Values	B-1
Minor Key Values	B-2
Payroll Transactions	B-2
First-Level Search	B-2
Second-Level Search	B-3
Non-Payroll Transactions for Equipment	B-4
All Other Transactions	B-4
Object and Subsidiary Search	B-5
T2 Payroll Transactions with Equipment Information	B-5
Appendix C: Invoice Design	C-1
Appendix D: Smart Fields	D-1
Appendix E: Field Derivations (F4812)	E-1
Appendix F: World Coexistence	F-1
Assumptions:	F-1
World Coexistence Preparation	F-1
Appendix G: Table Conversion	G-1
Instructions for Using Table Conversion	G-2
Appendix H: Accounting for the Billing Cycle	H-1
Base Rules	H-1

Invoicing Only H-3

 Invoicing Only H-4

 Billing AAI Table Rules H-5

Index



Contract Billing Overview

You use the J.D. Edwards Contract Billing system to bill your customers for services and goods rendered. The Contract Billing system offers a suite of capabilities designed to accommodate the intricacies of both interdivisional and customer billing.


Every contract billing process begins with an agreement or contract, between two parties, a customer and a provider (contractor). The customer, who is the owner of the job or project, requests a product or service. Your company, as the provider, bills the customer for the product or services that you deliver under the contract. The agreement can be amended over time as the needs of your customer changes.

Contract Billing allows you to create invoices according to the terms and conditions of your contractual agreements. The Contract Billing product also supports concurrent billing over multiple change orders (revisions) to the original contract.

Each agreement includes:

- The billing terms of the contract:
 - The type of billing, such as time and material (T&M), lump sum, or unit price
 - The amount to bill on a schedule of values
 - Amendments, or change orders, to the original contract
 - Currency in which to bill
- Information about the customer you are billing:
 - Who to bill
 - Payment terms
 - Discount terms

You can use the J.D. Edwards Contract Billing system to:

- Account for the costs related to T&M of goods and services
 - Mark up the costs to account for profit
 - Calculate fees
 - Bill according to the terms of a contract
 - Provide written proof that justifies the charges
 - Create accounting entries for the contract billing amounts
- 

- Recognize revenues for interdivisional billing

Choosing between Contract and Service Billing

Contract Billing uses many of the same processes and tables that Service Billing uses, but provides additional functionality through processes and tables not available in Service Billing.

System Integration

The Contract Billing system can retrieve costs from any system that stores information in the Account Ledger table (F0911) within the General Accounting system. You can classify costs as either payroll-based or non-payroll-based. Payroll-based costs are labor-related costs for your employees and equipment. Non-payroll-based costs are costs such as subcontractors, materials, and travel.

The information can include costs for:

- Labor costs and associated burden, such as fringe benefits and payroll taxes, from the Payroll and Time Accounting systems
- Equipment operating and maintenance costs from the Equipment/Plant Management system
- Other costs, such as travel, that you charge directly to jobs from the Accounts Payable system

Service Billing

The Contract Billing system shares resources and features with the Service Billing system through:

- Billing Constants
- Workfile Management
- Flexible Markup Capability
- Pay To Bill Functionality
- Invoice Formatting
- Billing AAI's
- Revenue Recognition
- Journal Processing

General Accounting

The Contract Billing system uses the information in the Account Master table (F0901) and the transactions in the Account Ledger table (F0911) to determine whether a transaction is eligible for processing in the Contract Billing system.

Account Master

The Billable Y/N field in the Account Master controls how you bill an account through the Contract Billing system.

Account Ledger

The Bill Code field in the Account Ledger identifies whether the Contract Billing system has processed a T&M transaction. The following codes relate to contract billing:

- | | |
|-------|--|
| Blank | Available for processing |
| N | Non-billable because the Billable Y/N field in the Account Master table is set to N or blank |
| Z | Already processed into the Billing Workfile |

The system assigns eligibility codes to workfile transactions based on the Billable (Y/N) field in the Account Master table and the value of the Journal Generation Control that you set up for your system constants.

For example, if the Billable (Y/N) field for an account is Y and the Journal Generation Control field is set for both revenue recognition and billing, the eligibility code for a related transaction is 0. An eligibility code of 0 indicates that the transaction is eligible for both revenue recognition and billing.

If, in the same example, the Journal Generation Control field is set for billing only, the eligibility code for the transaction is 1. An eligibility code of 1 indicates that the transaction is eligible for billing only.

Payroll and Time Accounting

Payroll-based costs can include the following:

- Actual amount of the employee's pay before deductions and the actual hours worked
- Actual or flat (estimated) burden amounts
- The marked-up labor billing distribution amount for the employee and the related hours
- Actual hours that the employee uses the equipment and the billing rate for the equipment
- Account numbers for labor and equipment distribution

You can process payroll information on a daily basis or based on your payroll cycle. The Payroll system updates the following tables:

- Employee Transactions Detail (F06116)
- Payroll Transaction History (F0618)
- Burden Distribution (F0724/F07241)
- Account Ledger (F0911)

The Contract Billing system processes the transactions in the Payroll Transaction History table (F0618) and creates corresponding T&M workfile transactions in the Service Billing Workfile (F4812). The system retrieves transactions that are identified by the following document types:

- T2 – Payroll labor distribution
- T3 – Burden distribution
- T4 – Labor billing distribution
- T5 – Equipment distribution

Burden distribution transactions (T3) are always linked to corresponding payroll labor distribution transactions (T2). Burden is the cost over and above wages or salaries that a company incurs as a result of employing people. These costs can include taxes and insurance. Depending on how you set the constants for the Contract Billing system, these burden transactions can be processed in conjunction with the related labor transactions in the Service Billing Workfile.

You can calculate burden in two ways:

- Use the actual burden rate and percentage with the employee's actual hours and pay rate
- Use an flat (estimated) burden percentage

During the normal payroll cycle, the system can calculate flat and actual burden amounts. If you process payroll journal entries on a daily basis without completing the payroll cycle, the system calculates only flat burden.

After the Contract Billing system processes the payroll information, the system updates the transactions in the Payroll Transaction History or Employee Transactions Detail, and Account Ledger tables as processed.

Equipment/Plant Management

Projects often involve equipment, such as a crane to move heavy materials on a job site. The agreement between the provider and the customer contains a provision to bill an hourly rate for the time that the crane is used for the project.

The Contract Billing system processes transactions with document type TE from the Equipment/Plant Management system. The Equipment/Plant Management system uses the following information to process equipment transactions:

- Equipment asset number to identify the equipment for the billing
- Number of hours that the employee used the equipment
- The Billable Y/N field in Equipment Rate Code Definition table (F1390) to determine whether to write an entry to the Account Ledger for this piece of equipment. If the Billable Y/N field is set to 'Y', the system uses the billing rental rate to calculate the amount of the Account Ledger entry. If this field is set to 'N', the system will not write an Account Ledger entry.

Work Orders

You use work orders to itemize the costs for projects. Work order information exists when the Account Ledger transaction contains a subledger number with subledger type W. Information from a billable work order can affect the markup, tax, and accounting rules for the T&M transactions, when the status of the workorder is billable.

Job Cost

The project assigned to a contract is used to retrieve the following default information from the Business Unit (Job) Master table (F0006):

- Customer number
- Contract type
- Tax explanation and rate/area
- Domestic currency code (if currency is turned on)

For lump sum billing lines, the system can use the projected final amounts from a project in the calculation of the amounts.

For unit price billing lines, the system uses the unit price set up on the billing line and the units from the project in the calculation of the billing amount.

Other information from the Business Unit (job or project) Master, such as reporting category codes 11 and 12, can affect the markup and accounting rules for T&M transactions.

Accounts Receivable

The Contract Billing system can use the Customer Master table (F0301) to identify:

- Payment terms
- Tax explanation and rate/area
- Accounting rules

After you generate a billing, you post the invoice information to the A/R Account Ledger table (WorldSoftware – F0311, OneWorld - F03B11). When you receive the customer's payments, you apply them to the customer's receivable account.

Address Book

The Contract Billing system uses the address book number for the owner in the contract to identify:

- The name of a party in the Address Book Master table (F0101) and Who's Who Information table (F0111), such as a person, company, or branch
- Mailing addresses for the billing in the Address Book Master (F0101) and Address by Date (F0116) tables

Accounts Payable

The Contract Billing system accumulates cost transactions that you record in the Accounts Payable system. The system uses the information in the Accounts Payable Ledger table (F0411) to identify:

- Supplier numbers
- Supplier invoice numbers
- Supplier service dates
- Actual amounts
- Responsible business units
- Work order number

System Features

The Contract Billing system must be able to receive high volumes of information from multiple sources. It must also be able to update this information to the appropriate tables. The J.D. Edwards Contract Billing system is designed to provide:

-
- Flexibility and efficiency
 - High-volume transaction processing for invoices
 - Timely information
 - Rules-based processing

Contract Billing uses integrated components of the Service Billing product to present a unique combination of features for the entire range of billing conditions called for in design-and -build environments.

The features of the Contract Billing system include:

- Multiple Types of Billing Calculations
- Vertex Tax Interface
- Flexible markups
- Workfile Management
- Pay To Bill Functionality
- Invoice Formatting
- Billing AAIs
- Journal Processing
- Multi-National Functionality

Multiple Types of Billing Calculations

- Time and Materials (T&M)

Defines invoicing terms based on actual costs of goods and services that you use to complete the project.

- Lump sum (Fixed Price)

Defines a fixed invoice amount, regardless of the actual costs that are incurred to complete a project. You can calculate this amount manually or allow the system to calculate the invoice amount using five methods; percent complete, markup percent of cost, defined ledger, the greater of the three, or the lesser of the three.

- Unit Price

Defines a type of invoicing that is based on a quantity and a pre-determined price per unit. You can calculate this amount manually or allow the system to calculate the invoice amount.

- Recurring

Defines a fixed invoice amount calculated for a pre-defined recurring frequency, such as weekly or monthly.

- Fee Lines (Fixed Fee)

Defines an amount that you want to invoice the customer in addition to another billing amount. You can base fees on a percentage of the costs that you incur or the amounts you invoice for a contract

- Milestone

Defines milestone events that, when reached, are invoiced to the customer. These values can be a percentage of the work completed or an amount of the total value of the contract.

- Progress

Defines a pre-determined schedule of specific percentage of completion of work in the course of a contract.

- Prepayments

Defines advance deposits that you might require from the customer. The system supports two methods of calculation for this billing line: fixed-amount or percentage.

Vertex Tax Interface

Vertex is a software company that offers a Sales Tax Compliance System called “Quantum” for companies that need to collect and report sales and use tax to various jurisdictions. You can use the Vertex Quantum Sales and Use Tax product, in conjunction with J.D.Edwards tax tables, to apply sales tax to your billable charges.

Flexible Markups

- Allows for the setup of flexible multipliers for tailored, customer- or contract-specific markups, for everything from billable hours to CAD time to photocopy and telephone expenses.
- Supports markup rules for costing - record entries as straight costs or with provisional burdens to support interdepartmental billing and cost reallocations.
- Allows invoice amounts independent of revenue amounts.
- Supports multiple employee billing rates to support billing by industry, discipline, location, or any other user-defined criterion.
- Supports project-specific internal and external billing of equipment costs, with sophisticated multipliers and transfer pricing.

Workfile Management

- Provides an inventory of auditable workfile transactions. The system retains a copy of the workfile transaction, prior to any changes, in the Workfile History table.
- Transaction Level Controls - the ability to assign values at the workfile transaction level to control billing processes. These values, stored in the Eligibility Code field, qualify the workfile transaction to participate in specific billing processes and control the displaying of the various amount fields stored on the workfile transaction. The system assigns the following values:
 - 0 - The workfile transaction is eligible for the invoicing, revenue recognition, and costing processes.
 - 1 - The workfile transaction is eligible for the invoicing process only.
 - 2 - The workfile transaction is eligible for the revenue recognition process only.
 - 3 - The workfile transaction is non-billable.
 - 4 - The workfile transaction is eligible for cost processing only.
 - Transaction Splitting - the processing power to split complex transactions into billable and non-billable items.
 - Sophisticated Error Correcting - the ability to 're-apply' or 're-extend' billing information on a workfile transaction - from customer information to the most current rules you have set up to calculate discounts, taxes, and markups.
 - Journal Re-classification - the capability to support corrections made to account number structure from within the billing system and automatically apply these changes back to the originating system(s).

Pay To Bill Functionality

Because of today's need for integration and being able to meet the needs of the customer in an e-business environment, J.D. Edwards offers a fully internet enabled and integrated solution of its time accounting/payroll and service billing products to allow for single point of entry for billable labor costs and customer invoicing. This integration and technology, combined with the ability to customize invoice formats and billing rates to meet the billing needs of any specific customer, provide for expedient and accurate pay to bill functionality.

Invoice Formatting

The Contract Billing system includes formatting tools that allow you to customize your invoice forms. You may use ready-to-use invoice print versions designed by J.D. Edwards or you can design your own client-specific invoice

versions. You can provide the information your client wants in a format the client can read and understand. You have control over its content, format, and issue. You can make it suit your needs and the needs of each client, even if different clients have widely varying needs.

Billing AAls

The Billing AAls allow you to define accounting rules for your billing processes.

- Interdivisional Revenue Sharing - support interdivisional resource sharing with the ability to track revenue and costs accordingly.
- Transfer Pricing - define accounting rules for the allocation of labor and materials within multi-department, multi-company organizations
- G/L Distribution of Sales Tax – control inclusion of sales tax with revenue or book to a separate tax liability account.
- Margins - analyze invoice and/or revenue margins to enable profitability forecasting.

Revenue Recognition

Revenue Recognition is the accounting rule that defines revenue as an inflow of assets, not necessarily cash, in exchange for goods or services and requires the revenue to be recognized at the time, but not before, it is earned. You use revenue recognition to create G/L entries for income without generating invoices.

Generally, you use revenue recognition when:

- Work is finished and you have earned the income, but you do not need to bill a customer.
- You want income statements and balance sheets to reflect the amounts earned for a realistic picture of the company's financial status.
- You need to reallocate internal costs.

Journal Processing

The Contract Billing product offers a range of journal processes that allow you to select the mode that best suites your organization's accounting needs. These modes are controlled in the billing constants as follows:

Invoicing Processing Only

- You choose this mode if your organization does not require revenue to be recognized independently of the billing process.

Revenue Processing Only

You choose this mode if your organization is only billing interdepartmentally and does not require customer receivables updates in the Accounts Receivable ledger.

Invoicing with Revenue

You choose this mode to allow actual revenue to be recognized independently of the billing process.

Invoicing with Revenue Reconciliation

You choose this mode to control to allow unbilled revenue to be recognized independently of the billing process. The unbilled revenue is then reconciled as actual revenue when invoices are generated.

Note: All journal modes support internal cost reallocations and journal reclassifications.

Multi-National Functionality

Multi-national functionality allows you to build a global customer network to optimize your billing process in multi-currency environments. The Contract Billing system provides for the seamless automation of complex international billing needs.

When you set up your system, you define a currency for your company and for your customers and suppliers. The system recognizes the currency that you define for your company as the domestic currency. The system recognizes any customer or supplier currencies that are different from your company's currency as foreign currencies. The system determines domestic and foreign amounts based on exchange rates that you define for specific effective date ranges.

The multi-national functionality in the Contract Billing system includes:

Currency processing

- Apply billing rate/markup amounts to cost in either the domestic or foreign currency
- Create invoices in either domestic or foreign currency, using any currency in the world.

Multiple languages

- Communicate with customers in their preferred languages to enhance relationships and reduce potential misunderstandings regarding invoices and other correspondence.

See Also

- *Customers and the Euro* in the *Euro Implementation Guide* for information about the new currency of Economic and Monetary Union (EMU) member nations.
- *Multi-Currency Setup* in the *General Accounting Guide* for information about multi-currency processing for your organization.

Contract Billing Tables

Contract Billing Master (F5201)

Stores contract information, including:

- Detail contract information by contract number
- Customer information
- Contract description
- Tax information
- Project and host business units
- Parent contract number
- Currency mode and codes

Contract Billing Line Details (F5202)

Stores the billing terms for the contract. This information includes:

- Detailed billing lines by contract/change order
- Multiple billing types
- Schedule of values by billing line
- Quantities
- Recurring amounts and frequencies
- Tax information by billing line

Account Cross-Reference Details (F5212)

Stores the information you cross-reference for T&M, lump sum, and unit price billing lines.

For T&M billing lines, the account number and related information associates the billable costs with the contract billing lines when the system creates the workfile transaction during Workfile Generation or re-applies information during Workfile Re-extend.

For lump sum and unit price billing lines, the account number and related information associates the costs with the contract billing lines when the system calculates invoice pay item transactions during Invoice Generation.

The information includes:

- Account number
- Subledger and type
- Job type
- Job step
- Pay type
- Employee number
- Equipment number
- Rate group

**Fee Billing Line
Cross-Reference Details
(F5213)**

Stores the information you cross-reference with the contract billing lines for fees. The information includes:

- Fee rates, which are defined by a percentage or rate code
- Amount basis for the fee calculation
- Specific contract billing lines that establish the basis of the fee calculation

**Rate Code Definition
Information (F52131)**

Stores the user defined information for the rate codes that you can use for the calculation of billing fee lines. The definition for a rate code includes the:

- Description
- Percentage rate
- Effective dates

**Milestone / Progress
Billing Line Details
(F5216)**

Stores information of events or percentages you have pre-defined to create invoices.

For these billing lines, the system uses the completed flag and the percentage related to the event to calculate invoice pay item transactions during Invoice Generation.

The information includes:

- Billing event
- Percent or amount complete
- Date complete
- Completion flag

**Milestone / Progress
Billing Line
Cross-Reference Details
(F52161)**

Stores information when you cross-reference a milestone or progress billing line to affect billing. You can cross-reference pre-payment billing lines (rated or draw) and progress billing line to another progress billing line.

Contract Information



Contract Information

A contract is a written agreement between a customer and a provider (contractor). The customer, as the owner of a job or project, requests a product or service. Your company, as the provider, bills the customer for the product or services that you provide under the contract. The contract specifies the billing terms for the job and is the basis of the invoices that you send to the customer for payment.

Contract setup consists of the following tasks:

- ☐ Understanding contract setup
- ☐ Setting up contract information
- ☐ Working with independent contract billing lines
- ☐ Working with dependent contract billing lines
- ☐ Working with contract information



Understanding Contract Setup

You review and analyze contract information to track the status of contracts and accurately plan your invoicing cycle.

Understanding contract setup consists of the following topics:

- ☐ Defining the parts of a contract
- ☐ Understanding the billing types
- ☐ Using change orders
- ☐ Using multicurrency contracts

Defining Parts of a Contract

To perform accurate contract billing, you should understand the various parts of a contract . A contract consists of the following information types:

Master information	This type of information is general information that relates to the entire contract, such as the customer and contract dates. The system stores this information in the Contract Master file (F5201).
Change Order information	This type of information represents additional work that the customer requests that is not included in the original contract. A change order includes one or more billing lines that define the new billing terms for the additional work. Change order information is stored in the Billing Line Details file (F5202)
Billing Line information	This information type is line-by-line details (billing lines) about the goods or services you want to invoice, such a time and materials, lump sum, or unit price. The system stores this information in the Billing Line Details file (F5202).

**Milestone/Progress
Billing information**

This information type is events and percentages/amounts that are the basis for billing these billing lines. The system stores this information in the Milestone/Progress Billing Information file (F5216).

**Cross-reference
information**

The system uses this type of information to perform billing. The system recognizes the following cross-reference files:

Account Cross-Reference Details

Associates cost accounts with the correct billing line. This cross-reference file is used by T&M, lump sum, and unit price billing lines. The system stores this information in the Account Cross-Reference Details file (F5212).

Fee Line Cross-Reference Details

Identifies the billing lines that are the basis for the fee calculation. The system stores this information in the Fee Line Cross-Reference file (F5213).

Milestone/Progress Cross-Reference Details

Identifies the billing lines that are used in the calculation of the milestone or progress billing line. The system stores this information in the Milestone Progress Cross-Reference File (F52161).

Understanding Billing Types

Contract billing lines define the billing information for a contract. Each billing line that you set up on a contract defines specific billing terms. The system uses the billing lines to calculate the billing amounts that print on your customer invoices.

You can set up independent and dependent billing lines on a contract. The billing pay type determines whether the billing line is independent or dependent.

You set up independent billing lines for most of your contracts. For example, you might want to bill your customer for time and materials based on the actual costs that are incurred to complete the job. You set up the time and materials billing line as an independent billing line and specify the accounts that include the costs that you want to bill. When you create an invoice for the contract, the system calculates the billing amount, based on the billing line, and creates one line for the specified amount on the invoice.

Typically, you set up dependent billing lines for a contract when you want to include the additional details that make up a billing amount on an invoice. A

dependent billing is dependent upon other billing lines to calculate a billing amount.

For example, if the amount that you want to bill for time and materials includes fees costs for overhead union dues, you might set up a dependent billing line for the fee. The dependent billing line represents the portion of the billing amount for time and materials that is overhead union dues. You associate the dependent billing line for overhead union dues with the independent billing line for time and materials that includes this information in the total billing amount. Then, when you create the invoice, the system calculates the billing amounts based on the relationship between the dependent billing line and the independent billing line. The system creates the billing amount for the independent time and materials billing line and the dependent billing line for overhead union dues as two separate lines on the invoice.

The Contract Billing system provides multiple billing types to control invoice calculations. These different methods allow your organization to meet the billing terms as negotiated with your customers. These billing types, divided into independent and dependent billing lines, consist of the following:

- T&M billing line
- Unit Price
- Lump sum
- Fee
- Milestone
- Progress
- Direct draw
- Rated draw

Using Change Orders

As the job progresses, you and your customer might agree to revise the billing information for the contract. To maintain the integrity of the base contract, you create an addendum for each revision you make to the base contract. Each addendum is referred to as a change order.

Change orders include any additional work that your customer, the owner of the job, requests that is not included in the base contract. A change order includes one or more billing lines that define the new billing terms for the additional work.

To help track each addendum to a base contract, the system always assign the base contract change order number 000. You can assign each additional change order a number, such as 001, 002, and so on.

Note: J.D. Edwards recommends that you maintain the integrity of the billing lines throughout the assignment of new change orders.

Using MultiCurrency Contracts

If you work in a multicurrency environment, you can create multicurrency contracts. Multicurrency contracts reflect the currency of your company (domestic currency), or the currency of your customer (foreign currency).

As you build a global customer network, you can use the J.D. Edwards Contract Billing system to optimize your revenue recognition and billing processes in multicurrency environments. When you use multicurrency with the Contract Billing system, you can:

- Accumulate billable costs that originate in multiple currencies, such as the costs for employees' time.
- Apply markup amounts to costs in either the domestic or foreign currency.
- Generate invoices for your customers in a currency (foreign) that is different than the currency of the contract.

The Contract Billing system uses a contract as the basis for an invoice. The system recognizes the currency of the company that is responsible for the contract as the domestic currency.

While the currency that you define for your customer might be different than the currency you set up for your contract, you manage the contract in the domestic currency. Then, when you generate an invoice for the contract, the system creates the invoice using the currency of the customer (foreign currency).

After you create a multicurrency contract, you can review the contract in either the domestic or foreign currency. You can revise the amounts related to a multicurrency contract only when you access the contract in the currency mode that it was originally created. The system prevents you from entering both foreign and domestic currency amounts on an individual contract.

Setting Up Contract Information

You set up a contract master record for each contract that you want to maintain and bill in the Contract Billing system. The system stores contract master information in the Contract Master file (F5201). You use the contract master record to identify individual contracts in the system.

You must create a master record for a contract before you can enter any other parts of the contract information. You set up master information for a contract to specify:

- Identification information, such as the contract number, customer number, and related job or project.
- Payment terms that can affect the contract as a whole, such as when payment is due or discount terms.
- Tax information, if applicable.
- Additional details, such as the location of the job or project, the names and addresses of people involved in the contract, the host business unit, and start and completion dates.
- Currency specifications.
- 10 user-defined fields that can be used to categorize your contracts.

Considerations for Setting Up Master Information

Assigning category codes to contracts	You can assign category codes to further identify, track, and report on your contracts. To do this, choose the Contract Category Codes function.
Assigning the customer and contract type	The system uses the information in the project for the contract to automatically assign the customer number and contract type to a contract. You can manually override this information.

Parent and child relationships

Contracts (children) can be subordinate to a main contract (parent). You can use parent and child relationships to manage related contracts.

For example, your company is the general contractor for the construction of an airport. The airport project includes the following phases of construction:

- Main terminal
- Access roads
- Automated transit system
- Concourses

The customer signs separate contracts for each phase of construction. In this case, you can establish parent and child relationships by setting up a parent contract for the airport project and relating the child contract for each phase to the parent contract.

You use the Parent Contract field to establish relationships between contracts. You can also use the values in the Parent Contract field to define:

- Key values for the Billing Rate/Markup table and the Billing AAls.

See *Defining Markup Rules* and *Setting Up Automatic Accounting Instructions* for more information.

Assigning an invoice format code to a contract

You can assign an invoice format code to a contract. To do this, specify a valid invoice format code in the Invoice Format field. The system uses this code when printing the invoice for this contract.

Note that this is a default code and can be overridden using processing options of the invoice print program or by setting up an entry in the Invoice Print Cross-Reference table.

See *Understanding the Invoice Cross Reference Table* for more information.

Changing a contract

When a contract is in an active invoice batch, you can change only the description and invoice format code that is assigned to the contract. To change any other information, you must first do one of the following:

- Remove the contract from the active invoice batch
- Complete the billing process by creating A/R and G/L journal entries

Deleting a contract

You cannot delete a contract if the contract:

- Is a parent contract
- Has change orders set up
- Has been invoiced
- Is in an active invoice batch

Deleting a contract with change orders

To delete a contract with associated change orders, you must delete the change orders before you can delete the base contract.

For example, a contract might include change orders 000, 001, and 002. You must delete change orders 001 and 002 before you can delete the base contract (change order 000).

You can delete only one change order at a time.

You cannot delete a contract with associated change orders if:

- The change order has been invoiced
- The contract is in an active invoice batch
- The contract is a parent contract

Before You Begin

Verify that the following information is set up prior to entering master information for the contract.

- Tax information, if applicable, for each business unit (project or job) or customer. See *A/R Tax Setup* in the *Accounts Receivable Guide*.
- Address information for each customer in the Address Book table (F0101). See *Working with Address Book Records* in the *Address Book Guide*.
- Master information for each customer in the Customer Master table (F0301). See *Creating Customer Records* in the *Accounts Receivable Guide*.
- Multicurrency, if you are processing invoices using different currencies. See *Setting Up Multi-currency* in the *General Accounting Guide*.
- Master information for each business unit (job) in the Business Unit Master table (F0006). See *Entering Job Master Information* in the *Job Cost Guide* or *Working with Business Units* in the *General Accounting Guide*.
- Verify that you have defined a customer number for your projects if you want the system to automatically retrieve the customer for the contract.
- Define all billable accounts in the chart of accounts to process T&M billing lines.
- Define your cost accounts and budgets to process lump sum billing lines.
- Verify the Billing Constants have been set up.

► To set up master information for a contract

From Daily Processing (G5210), choose Contract Master Revisions.

1. On Work With Contract Master, click Add.

Contract Master Revisions - [Contract Master Revisions]

File Edit Preferences Form Window Help

OK Cancel Dismiss Abort Links Billing... OLE... Internet

Contract R2 Description

Inv Batch No

OL Batch No

General Additional Detail Dates/Addresses Category Codes Currency

Project / Job

Parent Contract R2

Host Business Unit

Customer

Customer Ref#

Invoice Format Code

Payment Terms

Tax Rate/Area

Tax Explanation Code

Display program information and copyright

2. On Contract Master Revisions, complete the following fields in the header:

- Contract
- Description (first line)

If you leave the contract blank, the system uses Next Numbers to assign a number when you click OK.

If you leave company blank, the system retrieves the company number assigned to the project or job in the Job Business Unit Master table (F0006).

3. On the General tab, complete the following fields:

- Project / Job
- Customer

If you leave the customer number blank, the system retrieves the address number for the customer assigned to the project or job in the Job Business Unit Master table (F0006). If you did not enter a customer number for the project or job, you must complete the Customer field on Contract Master Revisions.

4. Complete the following optional fields:

- Parent Contract
- Host Business Unit
- Customer Ref #
- Invoice Format Code
- Payment Terms
- Tax Rate/Area
- Tax Explanation Code

If you leave payment terms blank, the system retrieves payment terms for the customer from the Address Book table (F0301).

If you leave the tax explanation code and the tax rate/area blank, the system retrieves the tax information assigned to the project or job in the Job Business Unit Master table (F0006). If you did not enter tax information for the project, the system retrieves tax information for the customer from the Address Book table (F0301).

Note: A processing option controls the display of the tax rate/area and tax explanation code. If the tax information fields are suppressed, the system does not retrieve tax information for the project or the customer.

5. On the Additional Detail tab, complete the following optional fields:

- 3rd Party
- 3rd Party Reference
- Status
- Type
- Min Threshold Amount

If you leave the type blank, the system retrieves the type for the project from the Job Business Unit (F0006).

6. On the Dates/Addresses tab, complete the following optional fields:

- Planned Start
- Planned Comp
- Actual Start
- Actual Comp
- User Date 3
- User Date 4
- Remit To

- Send To
 - Alternate Billing
 - User Address 1
 - User Address 2
 - User Address 3
7. On the Category Codes tab, complete the following optional fields:
- Cat Code 1
 - Cat Code 2
 - Cat Code 2
 - Cat Code 4
 - Cat Code 5
 - Cat Code 11
 - Cat Code 12
 - Cat Code 13
 - Cat Code 14
 - Cat Code 15
8. On the Currency tab, complete the following optional fields:
- Domestic Currency Mode
 - Foreign Currency Mode
 - Billing Currency

The system retrieves the currency mode from the Billing Constants table (F48091). You can override this setting if the base (Domestic) currency code differs from the billing (Foreign) currency code.

The system retrieves the base currency code from the currency code for the company of the project from the Company Constants (F0010).

The system retrieves the billing currency code from the currency code for the customer from the Address Book table (F0301). You can override this code to any valid currency code to meet the needs of your customer.

9. After you enter the master contract information, click OK.

The system displays the Contract Billing Line Detail Revisions.

10. You may continue entering billing line details or you may exit the program and enter the billing lines at a later time.

Field	Explanation
Contract	A number that uniquely identifies a contract in your system. If you leave this field blank when you enter a contract master record, the system uses the Next Numbers facility (system 52, index 01) to assign the number.
Description	A user defined name or remark.
Project / Job	A number that identifies the project or job associated with this contract. You can set up projects or jobs in the Job Cost system. You can use the project/job number as a search criterion on the Contract Search form.
Customer	The address number to which billing and accounts receivable transactions will be posted. Typically, this is the address number for the customer. The number comes from the Contract Master table (F5201).
Parent Contract	A code that identifies the parent contract to which this particular contract is associated.
Host Business Unit	The Business Unit responsible for the job. This is particularly useful during transfer pricing.
Customer Ref #	The contract number as recorded on the customer's books. If you enter this number on the Contract Master Revisions form, you can use it as a search criterion on the Contract Search form. The system updates this number in the reference field (VR01) of the accounts receivable record for billing.
Invoice Format Code	A code that uniquely identifies a series of formats and determines the overall layout of the invoice.

Field	Explanation
Payment Terms	<p>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.</p> <p>For WorldSoftware, the following are examples of valid values:</p> <p>Blank Net 15 1 1/10 net 30 2 2/10 net 30 N Net 30 P Fixed day of 25th Z Net 90</p> <p>This code prints on customer invoices.</p> <p>For OneWorld software, the following are examples of valid values:</p> <p>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</p>
Tax Rate/Area	<p>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, province) and their rates. To be valid, a code must be set up in the Tax Rate/Area table (F4008).</p>
Tax Explanation Code	<p>A user defined code (00/EX) that controls how a tax is assessed and distributed to the G/L revenue and expense accounts.</p>
3rd Party	<p>The address number of the architect for the contract or project.</p>
3rd Party Ref	<p>The Architect Contract Number as recorded on the owners books. This information will be for reference and kept for use in Contract Search.</p>
Status	<p>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).</p>
Type	<p>A user defined code (51/CT) that identifies the type of contract.</p>
Min Threshold Amt	<p>The minimum amount required for the contract. If the billing amount is less than the amount in this field, the system will not generate an invoice.</p>

Field	Explanation
Planned Start	The date you plan to start work on the contract.
Planned Comp	The date you plan to complete work on this contract.
Actual Start	The date you actually start work on the contract.
Actual Comp	The date you actually completed work on the contract.
User Date 3	User defined Julian Date 3.
User Date 4	User defined Julian Date 4.
Remit To	Address Number – Remit To
Send To	User defined address book number. This will be verified against Address Book.
Alternate Billing	Address number of an alternate location to which the owner wants a copy of the invoice (application) sent.
User Address 1	User defined address book number. This will be verified against Address Book.
User Address 2	User defined address book number. This will be verified against Address Book.
User Address 3	Address Number 3 – User
Cat Code 1	This is a user defined category code (system 52, code 01) that you can use to meet the specific needs of a contract.
Cat Code 2	This is a user defined category code (system 52, code 01) that you can use to meet the specific needs of a contract.
Cat Code 3	This is a user defined category code (system 52, code 01) that you can use to meet the specific needs of a contract.
Cat Code 4	This is a user defined category code (system 52, code 01) that you can use to meet the specific needs of a contract.
Cat Code 5	This is a user defined category code (system 52, code 01) that you can use to meet the specific needs of a contract.
Cat Code 11	For future use.
Cat Code 12	For future use.
Cat Code 13	For future use.
Cat Code 14	For future use.
Cat Code 15	For future use.

Field	Explanation
Domestic	<p>A code that specifies whether amounts are in the domestic currency of the contract or the foreign currency of the supplier.</p> <p>Valid codes are:</p> <ul style="list-style-type: none"> D Domestic F Foreign 3 Foreign and Domestic <p>For conversions, D indicates domestic to foreign, and F indicates foreign to domestic.</p> <p>..... <i>Form-specific information</i></p> <p>Choose the Domestic or Foreign button to select the currency mode. This currency mode manages how amounts are calculated and stored within the billing system.</p>
Foreign	<p>A code that specifies whether amounts are in the domestic currency of the contract or the foreign currency of the supplier.</p> <p>Valid codes are:</p> <ul style="list-style-type: none"> D Domestic F Foreign 3 Foreign and Domestic <p>For conversions, D indicates domestic to foreign, and F indicates foreign to domestic.</p> <p>..... <i>Form-specific information</i></p> <p>Choose the Domestic or Foreign button to select the currency mode. This currency mode manages how amounts are calculated and stored within the billing system.</p>

Working with Independent Contract Billing Lines

After you set up contract master information, you must define contract billing lines to generate invoices for your client. Contract billing lines define the billing terms of the contract. You can set up independent and dependent contract billing lines. The pay type determines whether the billing line is independent or dependent.

Independent contract billing lines include all of the information that the system needs to calculate a billing amount.

You can use the following pay types to define independent billing lines on a contract:

- Lump sum
- Unit price
- Milestone billing
- Progress billing
- Time and material (T&M)

Working with independent contract billing lines consists of the following tasks:

- ☐ Defining contract billing lines for lump sum
- ☐ Setting up recurring billing amounts
- ☐ Defining contract billing lines for unit price
- ☐ Defining contract billing lines for milestone billing
- ☐ Defining contract billing lines for progress billing
- ☐ Defining contract billing lines for time and material

Before You Begin

- ☐ Set up a contract master for your contract. See *Setting Up Contract Information*.

Defining Contract Billing Lines for Lump Sum

Contract billing lines for lump sum define a fixed billing amount. When you set up a billing line on a contract for lump sum, your company agrees to bill the customer for a fixed amount, regardless of the actual costs that are incurred to complete the job.

You can define lump sum billing lines for which you must calculate the billing amount manually, or that the system can use to calculate the billing amount automatically.

To automatically calculate the billing amount, you must define a cross-reference to link the lump sum billing line to an account, multiple accounts, or a range of accounts. The accounts to which you cross-reference include the information about the actual costs and projected final costs that the system uses in the calculation of the billing amount for lump sum.

The system can also use the lump sum billing line to automatically calculate the revenue amount for revenue recognition. To do this, you must assign both a cost account and a cross-reference account to the billing line. The system uses the cost account to determine the appropriate account derivation rules for the revenue journal entry.

When you define contract billing lines for lump sum, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the owner address information
- Revenue account based on the automatic accounting instruction BC01 for lump sum

If you set the system constants to recognize revenue for contract billing lines that are not based on time and material, the system highlights the Pricing Type field for the billing line until you define the cross-reference for the billing line.

Defining contract billing lines for lump sum consists of the following tasks:

- ☐ Setting up lump sum for manual calculation
- ☐ Setting up lump sum to calculate the invoice amount
- ☐ Setting up recurring billing amounts

Setting Up Lump Sum for Manual Calculation

You can define lump sum billing lines for which you must calculate the billing amount manually, or that the system can use to calculate the billing amount automatically.

Before You Begin

- ☐ Create the master record for a contract. See *Setting Up Contract Information*.

► To set up lump sum for manual calculation

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.

2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:

- Contract No
- Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:

- Change Date
- Description
- Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp
 - Reference
 - Terms
 - Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
 - Billing Line
 - Description
 - BL (Billing Type)
 - Schedule Of Values

If you leave the Billing Type (BL) field blank, the system will default an 'L' for lump sum. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:
 - Elig Ovr
 - Billing AAI Control
 - Business Unit
 - Sub
 - Obj Acct
 - Subledger
 - Sub Type
 - G/L Offset
 - Tax Rate
 - Tx Ex

- Alternate Seq Code
- Project/Job
- Bill Suspend
- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only).
 - If you leave the Billing AAI Control blank, the system assigns a '0' to identify the account associated with this billing line as a revenue account.
 - If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC01.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

You may ignore this message as you do not use the cross-reference information when using a lump sum billing line for manual calculation.

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.
9. You may continue entering additional billing lines or click Cancel to exit the program.

Setting Up Lump Sum to Calculate Invoice Amounts

You set up contract billing lines for lump sum to define a fixed invoice amount. When you set up a billing line on a contract for lump sum, your company agrees to invoice the customer a fixed amount, regardless of the actual costs that are incurred to complete the job.

You can set up contract billing lines for lump sum that the system can use to automatically calculate the invoice amount. The system calculates the invoice amount during the invoice generation process.

To automatically calculate the invoice amount, you must set up the following:

- **Percent Complete or Percent of Cost:** A cross-reference for the contract billing line to one or more cost accounts. The system uses the account cross-reference to determine the actual and projected final costs. You may specify a ledger type other than F% (projected final costs) to control the calculation method
- **Defined Ledger:** A cross-reference to only one cost account. The system uses the account cross-reference to determine the percentage assigned to the account for the specified ledger type.

When you create an invoice for the lump sum billing lines, you can specify one of the following methods of calculation for the invoice amount:

- Percent Complete
- Percent of Cost
- Defined Ledger Type
- The greater or lesser of the two (percent complete or percent of cost)

Percent Complete Method

When you specify the Percent Complete Method, the system calculates the invoice amount as follows:

- $\text{Percent Complete} = \text{Actual Cost-To-Date} / \text{Projected Final Cost}$
- $\text{Invoice Amount} = \text{Percent Complete} \times \text{Schedule of Values}$
- $\text{Current Invoice Amount} = \text{Invoice Amount} - \text{Prior Billed Amount}$

Schedule of Values is stored in the Billing Line Details of a contract. Actual Cost-to-Date is located in the AA ledger. Projected Final Cost is located in the HA ledger.

Percent of Cost Method

When you specify the Percent of Cost Method, the system calculates the invoice amount as follows:

- $\text{Markup Amount} = \text{Schedule of Values} - \text{Projected Final Cost}$
- $\text{Markup Percent of Cost} = \text{Markup Amount} / \text{Projected Final Cost}$
- $\text{Current Invoice Amount} = \text{Markup Percent of Cost} \times \text{Actual Cost for Current Period}$

Schedule of Values is stored in the Billing Line Details of a contract. Actual Cost-to-Date is located in the AA ledger. Projected Final Cost is located in the HA ledger.

Defined Ledger Method

When you specify the Defined Ledger Method, the system calculates the invoice amount as follows:

- Invoice Amount = Schedule of Values x Percent Assigned to Defined Ledger

Schedule of Values is stored in the Billing Line Details of a contract. Actual Cost-to-Date is located in the AA ledger. Percent is located in the specified Defined Ledger type.



To set up lump sum to calculate billing amounts

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start

- Planned Comp
- Reference
- Terms
- Cat Code 1
- Cat Code 2

5. In the detail area, complete the following required fields:

- Billing Line
- Description
- BL (Billing Type)
- Schedule Of Values

If you leave the Billing Type (BL) field blank, the system default will be an L for lump sum. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:

- Elig Ovr
- Billing AAI Control
- Business Unit
- Sub
- Obj Acct
- Subledger
- Sub Type
- G/L Offset
- Tax Rate
- Tx Ex
- Alternate Seq Code
- Project/Job
- Bill Suspend
- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default Processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only).
 - If you leave the Billing AAI Control blank, the system assigns a '0' to identify the account associated with this billing line as a revenue account.
 - If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC01.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will receive the following warning, "Warning - Cross-Reference Not Setup".

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.

Note: The system highlights the X-Ref field until you enter cross-reference information for the billing line.

9. Choose the lump sum billing line to add cross-reference information and click Cross-Reference from the Row menu.
10. On T&M, Unit Price, and Lumpsum Reference Revisions, complete the following fields for one or more accounts:
- Business Unit
 - Sub (Subsidiary)
 - Obj Acct (Object)
 - Subledger
 - SBL type

Caution: The account numbers you specify in the cross-reference should be non-billable in the Account Master table (F0901). If you specify billable accounts, you risk double-billing the billing line. The results will be unpredictable.

If you leave the subledger blank, the system uses the blank subledger and not all subledgers.

11. Click OK for the system to accept the information and return to Contract Billing Line Detail Revisions.

Setting Up Recurring Billing Amounts

You can use recurring amounts to bill for a total fixed amount in smaller increments at a recurring frequency, such as weekly or monthly. For example, your company rents a trailer for the job site. The total cost is 3,600 dollars. The owner of the job agrees to reimburse your company at a rate of 300 dollars per month.

Before You Begin

- ☐ Define Recurring Billing Codes (52, RB)



To set up lump sum for recurring billing amounts

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multi-currency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp

- Reference
 - Terms
 - Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
- Billing Line
 - Recurring Billing Amount
 - Recurring Code

If you leave the Billing Type (BL) field blank, the system will default an 'L' for lump sum. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:
- Schedule of Values
 - Elig Ovr
 - Billing AAI Control
 - Business Unit
 - Sub
 - Obj Acct
 - Subledger
 - Sub Type
 - G/L Offset
 - Tax Rate
 - Tx Ex
 - Alternate Seq Code
 - Project/Job
 - Bill Suspend
 - Category Code 3
 - Category Code 4
 - Category Code 5
 - Vertex Prod Cat.
 - Vertex Trn. Type

Default Processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a 1 (costing/invoicing only).

- If you leave the Billing AAI Control blank, the system assigns a 0 to identify the account associated with this billing line as a revenue account.
 - If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC01.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK to instruct the system to accept the billing line and redisplay your entries. You do not need cross-reference information for recurring billing information.

See Also

- *Generating Invoices Automatically*
- *Creating Invoice Information Manually*

Defining Contract Billing Lines for Unit Price

Contract billing lines for unit price define a billing term that is based on a quantity and price per unit. When you set up a billing line on a contract for unit price, your company agrees to bill the customer for a quantity in place at a predetermined price per unit.

You can define unit price billing lines for which you must calculate the billing amount manually, or unit price billing lines that the system can use to calculate the billing amount automatically.

To automatically calculate the billing amount for a unit price billing line, you must set up a cross-reference to link the billing line with the account that includes the quantities in place that you want to use in the billing calculation.

When you set up a contract billing line for unit price, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the owner address information
- Revenue account based on the automatic accounting instruction BC02 for unit price

Defining billing lines for unit price consists of the following tasks:

- ☐ Setting up unit price for manual calculation
- ☐ Setting up unit price to calculate the billing amount

Setting Up Unit Price for Manual Calculation

You set up contract billing lines for unit price to generate a bill based on a quantity in place at a predetermined price per unit.

To calculate the billing amount for unit price at the time you generate invoices, you can set up a unit price billing line for manual calculation.

To set up unit price for manual calculation

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional fields:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multi-currency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp
 - Reference

- Terms
 - Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
- Billing Line
 - Description
 - BL (Billing Type)
 - UM (Unit of Measure)

Use the billing type U or 2 for unit price lines. Notice that the value entered in the Billing Type field controls the shading of fields. The system prevents input to shaded fields.

6. Complete two of the following fields:
- Schedule of Values
 - Quantity
 - Unit Price
7. In the detail area, complete the following optional fields:
- Elig Ovr
 - Billing AAI Control
 - Business Unit
 - Sub
 - Obj Acct
 - Subledger
 - Sub Type
 - G/L Offset
 - Tax Rate
 - Tx Ex
 - Alternate Seq Code
 - Project/Job
 - Bill Suspend
 - Category Code 3
 - Category Code 4
 - Category Code 5
 - Vertex Prod Cat.
 - Vertex Trn. Type

Default Processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a 1' (costing/invoicing only).
 - If you leave the Billing AAI Control blank, the system assigns a '0' to identify the account associated with this billing line as a revenue account.
 - If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC02.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
8. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

You may ignore this message as you do not use the cross-reference information when using a unit price billing line for manual calculation.

9. Click OK again to instruct the system to accept the billing line and redisplay your entries.
10. You may continue entering additional billing lines or click Cancel to exit the program.

Setting Up Unit Price to Calculate the Billing Amount

You set up contract billing lines for unit price to create invoices based on a quantity in place and a predetermined price per unit.

You can set up billing lines for unit price that the system can use to automatically calculate the billing amount during the billing process.

To do this, you must set up a cross-reference from the billing line to the account that contains the quantities in place. The system uses the account to determine the actual quantity in place to date from the AU (actual units) ledger.

When you set up cross-references for a unit price billing line:

- The system uses only the account on the first line of the cross-reference table to calculate the billing.
- You cannot use positional wildcards when you enter the account.
- Payroll and equipment information is not applicable.

The system calculates the billing amount based on the following formula sequence:

- $\text{Earned Units-to-Date} = \text{Actual Quantity-in-Place-to-Date}$
- $\text{Current Units} = \text{Earned Units-to-Date} - \text{Previously Billed Units}$
- $\text{Unit Price} = \text{Schedule of Values} / \text{Scheduled Units}$
- $\text{Current Billing Amount} = \text{Current Units} \times \text{Unit Price}$

Additional Considerations

Verifying job accounts and budgets

You can verify the budget information for a job and determine the correct account to cross-reference for the quantity in place by choosing Original Budget Entry from the Form menu. The system displays the Original Budget Entry form from the Job Cost system.

Locating account information

If you don't know the account number that you want to include in the cross reference for a contract billing line, you can locate and select accounts from a list of the accounts you have set up for your system. To do this, choose the Select Account No Row menu. The system displays the Account Master Search form.



To set up unit price to calculate the billing amount

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:

- Planned Start
- Planned Comp
- Reference
- Terms
- Cat Code 1
- Cat Code 2

5. In the detail area, complete the following required fields:

- Billing Line
- Description
- BL (Billing Type)
- UM

Use the billing type U or 2. If you leave the Billing Type (BL) field blank, the system will default an L for lump sum. Notice that the value entered in the Billing Type field controls the shading of fields.

6. Complete two of the following fields:

- Schedule of Values
- Quantity
- Unit Price

7. In the detail area, complete the following optional fields:

- Elig Ovr
- Billing AAI Control
- Business Unit
- Sub
- Obj Acct
- Subledger
- Sub Type
- G/L Offset
- Tax Rate
- Tx Ex

- Alternate Seq Code
- Project/Job
- Bill Suspend
- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default Processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only).
 - If you leave the Billing AAI Control blank, the system assigns a '0' to identify the account associated with this billing line as a revenue account.
 - If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC02.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
8. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

9. Click OK again to instruct the system to accept the billing line and redisplay your entries.
10. Choose the unit price billing line to add cross-reference information and click Cross-Reference from the Row menu.
11. On T&M, Unit Price, and Lumpsum Reference Revisions, complete the following fields for only one cost account:
- Business Unit
 - Sub (Subsidiary)
 - Obj Acct (Object)
 - Subledger
 - SBL type

Caution: The account numbers you specify in the cross-reference should be non-billable in the Account Master table (F0901). If you specify billable accounts, you risk double-billing the billing line. The results will be unpredictable.

12. Click OK for the system to accept the information and return to Contract Billing Line Detail Revisions.

Defining Contract Billing Lines for Milestone Billing

When you define a contract billing line for milestone billing, your company agrees to bill the customer only after you reach a specific milestone, or complete a billing event, in the course of a job.

When you set up a contract billing line for milestone billing, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the owner address information
- Revenue account from the automatic accounting instruction BC04 for milestone billing

Billing Events for Milestone Billing

You can define a billing event as either the completion of a specific phase of work or a specific billing date. To do this, you cross-reference each of the billing events that make up the billing line for the milestone billing with a specific date and the percentage that you want to bill for that event. The total percentage of all of the billing events for the billing line must equal 100 percent.

The system calculates the billing amount for a completed billing event based on the following formula:

Schedule of Values X Percentage for the Milestone

The schedule of values for the milestone billing is the amount of the overall billing for the contract.

See Also

- *Working with Prepayments for Contracts* to cross-reference a draw to a billing line for milestone billing.

Setting up contract billing lines for milestone billing consists of the following:

- Defining billing lines for milestone billing

- Defining billing events for milestone billing

To define billing lines for milestone billing

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp
 - Reference
 - Terms
 - Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
 - Billing Line
 - Description
 - BL (Billing Type)
 - Schedule of Values

Use the billing type M or 6 for milestone billing line. If you leave the Billing Type (BL) field blank, the system will default an 'L' for lump sum. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:

- Elig Ovr
- Billing AAI Control
- Business Unit
- Sub
- Obj Acct
- Subledger
- Sub Type
- G/L Offset
- Tax Rate
- Tx Ex
- Alternate Seq Code
- Project/Job
- Bill Suspend
- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only).
- If you leave the Billing AAI Control blank, the system assigns a '0' to identify the account associated with this billing line as a revenue account.
- If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC04.
- If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
- If you leave the tax information blank, the system assigns the tax information from the contract master.

- If you leave the project/job blank, the system assigns the project from the contract master.
- 7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, “Warning - Cross-Reference Not Setup”.

- 8. Click OK again to instruct the system to accept the billing line and redisplay your entries.

► To define billing events for milestone billing

1. On Work With Contract Billing Line Details, to locate a contract, complete the following field in the header area:
 - Contract No
 - Click Find.
2. Choose the change order and click Select.
3. On Contract Billing Line Detail Revisions, choose the milestone billing line to add billing event information and click Cross-Reference from the Row menu.

Contract Billing Line Details - [Milestone Billing Line Revisions]

File Edit Preferences Row Window Help

OK Find Del... Can... New... Dis... Abo Links ▼ Mark/... OLE ... Internet

Contract No 5352 R2 00050 Light Rail Construction Milestone Basis
 Change Order No 000
 Billing Line TRACK Lay Track
 Schedule of Values 100,000,000.00 Percent Remaining To Distribute 0.0000

Event Name	Event Description 1	Secondary Description	% Sched	Mile Am
10 miles	10 Miles completed		25.0000	25,000
30 miles	30 Miles completed		25.0000	25,000
50 miles	50 Miles completed		50.0000	50,000
			0.0000	

Row:1

4. On Milestone Billing Line Revisions, complete the following required fields:
 - Event Name
 - % Sched (Percent Complete)
5. Complete the following optional fields:

- Event Description 1
 - Secondary Description
 - Estimated Date Complete
 - Sequence Number
6. Click OK for the system to accept the information and return to Contract Billing Line Detail Revisions.

Completing a Milestone

To generate an invoice for a milestone billing line when you complete a milestone for a contract, you must do one of the following:

- Enter a date in the Actual Complete field for the billing event. The system will automatically update the Complete Yes field to Y.
- Enter Y in the Complete Yes field. The system automatically updates the Actual Complete field with the system date.

When you generate invoices, the system compares the cut-off date for the generation with the actual completion date. If the generation date is the same or later, the system processes the billing event for the milestone billing line. At this point in the billing process, you cannot change the billing amount.

After you generate an invoice for an event, the system updates the Billed Yes field to Y. The billing event is now protected and you can no longer change the information for the event.

See *Generating Invoices Automatically* and *Creating Invoice Information Manually* for more information about cutoff dates.

Defining Contract Billing Lines for Progress Billing

When you define a contract billing line for progress billing, your company agrees to bill the customer only after you reach a specific percentage of completion of work in the course of a job.

When you set up contract billing lines for progress billing, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset from the owner address information
- Revenue account from the automatic accounting instruction BC05 for progress billing

Billing Events for Progress Billing

You can define a billing event as a cumulative percentage of completion of work by an estimated date. When you define the billing events for progress billing:

- Each billing event represents a cumulative percentage of work completed for the job.
- The final billing event must be 100 percent to bill the entire schedule of values amount for the billing line.

The system calculates the billing amount for a completed event based on the following formula:

$$\text{Schedule of Values X Cumulative Percentage of Completion} - \text{Total of Previously Billed Amounts}$$

The schedule of values for the progress billing is the amount of the overall billing for the contract.

See Also

- *Working with Prepayments for Contracts* to cross-reference a draw to a billing line for progress billing

Setting up billing lines for progress billing consists of the following:

- Defining a billing line for progress billing
- Defining billing events for progress billing

To define a billing line for progress billing

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date

- Description
- Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multi-currency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:

- Planned Start
- Planned Comp
- Reference
- Terms
- Cat Code 1
- Cat Code 2

5. In the detail area, complete the following required fields:

- Billing Line
- Description
- BL (Billing Type)
- Schedule of Values

Use the billing type P or 7 for a progress billing line. If you leave the Billing Type (BL) field blank, the system will default an 'L' for lump sum. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:

- Elig Ovr
- Billing AAI Control
- Business Unit
- Sub
- Obj Acct
- Subledger
- Sub Type
- G/L Offset
- Tax Rate
- Tx Ex

- Alternate Seq Code
- Project/Job
- Bill Suspend
- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default Processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only).
 - If you leave the Billing AAI Control blank, the system assigns a '0' to identify the account associated with this billing line as a revenue account.
 - If you leave the account number (business unit, object, and subsidiary) blank, the system assigns the account number from the AAI's set up for item BC04.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.



To define billing events for progress billing

1. On Work With Contract Billing Line Details, to locate a contract, complete the following field in the header area:
 - Contract No
2. Click Find.
3. Choose the change order and click Select.
4. On Contract Billing Line Details, choose the progress billing line to add billing event information and click Cross-Reference from the Row menu.

5. On Progress Billing Line Revisions, complete the following required fields:
 - Event Name
 - % Sched (Percent Complete)
 - Complete the following optional fields:
 - Event Description 1
 - Secondary Description
 - Estimated Date Complete
 - Sequence Number
6. Click OK for the system to accept the information and return to Contract Billing Line Detail Revisions.

Completing a Billing Event

To create an invoice for a specified percentage of completion for your contract, you must do one of the following:

- Enter the date in the Actual Complete field for the billing event. The system then updates the Complete Yes field to Y.
- Enter Y in the Complete Yes field. The system then updates the Actual Complete field with the system date.

When you generate invoices, the system compares the cutoff date for the generation with the actual completion date. If the generation date is the same or later, the system processes the billing event.

After you generate an invoice for an event, the system updates the Billed Yes field to Y. The billing event is now protected, and you can no longer change the information for the event.

See *Generating Invoices Automatically* and *Creating Invoice Information Manually* for more information about cutoff dates.

Change Orders for Progress Billing

When you create a change order for progress billing, you can use the schedule of percent complete for the contract billing line to override a previously defined progress billing line in the same contract. To do this, you must:

- Define the contract billing line for progress billing on a subsequent change order for the contract.
- Define the schedule of percent complete for billing for the new billing line.
- Cross-reference the new billing line for progress billing to the previously defined billing line for progress billing.

The system automatically assigns I (Inactive) to the Billed Yes field of the remaining unbilled percentages on the schedule of percent complete for the cross-referenced billing line. The system uses the schedule of percent complete from the subsequent change order to create a billing amount for the related billing lines for the progress billing.

Defining Contract Billing Lines for Time and Material

Contract billing lines for time and material (T&M) define billing terms that are based on the actual costs of goods and services that you use to complete the job. The actual costs for a contract can include payroll-based costs, such as labor and burden, and costs that are not based on payroll, such as equipment usage and materials.

When you set up a billing line on a contract for time and material, your company agrees to bill the customer for the costs of goods and services that are related to the contract, plus any applicable markup amounts.

You enter the payroll-based costs through the Payroll and Time Accounting systems. You enter the costs that are not based on payroll through the Equipment/Plant Management, Inventory, and Accounts Payable systems. You post the transactions for these costs to the Account Ledger table (F0911) in the General Accounting system. The Contract Billing system uses the transactions as the source for costs related to time and material.

Cross-References for Time and Material (T&M)

You must cross-reference each contract billing line for time and material to the accounts in the general ledger that contain the related costs. The system calculates billing amounts for T&M billing lines based on the information in the cross-referenced accounts.

You can set up cross-references for T&M billing lines to one or more billable cost accounts. The system uses the account cross-references to:

- Create workfile transactions for costs related to time and material when you accumulate costs for the Contract Billing system.
- Retrieve account derivation rules to create the journal entries for billing and revenue recognition

Each billable cost account and its related cross-reference information must be unique for the T&M billing lines that relate to a specific contract and change order.

You can use the same account number in different change orders for the same contract. In this case, the system bills all future costs that are related to the previously defined T&M billing lines with the same cross-reference information on the most recently defined T&M billing line.

When you define contract billing lines for time and material, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the customer address information

Defining contract billing lines for time and material consists of the following:

- Defining a billing line for time and material
- Setting up cross-references for T&M billing lines

To define a billing line for time and material

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, Original.

Note: For multi-currency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp
 - Reference
 - Terms

- Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
- Billing Line
 - Description
 - BL (Billing Type)

Use the billing type T or 1 for a T&M billing line. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:
- Elig Ovr
 - Billing AAI Control
 - Schedule of Values
 - Business Unit
 - Sub
 - Obj Acct
 - Subledger
 - Sub Type
 - G/L Offset
 - Tax Rate
 - Tx Ex
 - Alternate Seq Code
 - Project/Job
 - Bill Suspend
 - Category Code 3
 - Category Code 4
 - Category Code 5
 - Vertex Prod Cat.
 - Vertex Trn. Type

Default Processing:

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only).
- If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.

- If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, “Warning - Cross-Reference Not Setup”.

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.

The system highlights the X Ref (Cross-reference) field until you define a cross-reference for the T&M billing line.



To set up cross-references for T&M billing lines

1. On Work With Contract Billing Line Details, to locate a contract, complete the following field in the header area:
 - Contract No
2. Click Find.
3. Choose the change order and click Select.
4. On Contract Billing Line Detail Revisions, choose the T&M billing line and click Cross-Reference from the Row menu.
5. On T&M, Unit Price, and Lumpsum Reference Revisions, complete the following fields for one or more billable cost accounts:
 - Business Unit
 - Sub (Subsidiary)
 - Obj Acct (Object Account)
 - Subledger
 - SBL Type (Subledger Type)
6. Complete one or more of the following optional fields for payroll information:
 - Job Type
 - Job Step
 - Pay Type
 - Employee Number
 - Home Business Unit
 - Cost Pool

7. Complete one or more of the following optional fields for equipment information:

- Equipment Number
- Home Business Unit
- Cost Pool
- Rate Group

The fields related to payroll and equipment information are mutually exclusive. You can enter either payroll or equipment information for a cross-reference. The system prevents you from entering both.

8. Click OK for the system to accept the information and return to Contract Billing Line Detail Revisions.

See Also

- *Workfile Management*

Working with Dependent Contract Billing Lines

After you set up contract master information, you must define contract billing lines to generate invoices for your client. Contract Billing lines define the billing terms of the contract. You can set up independent and dependent billing lines on a contract.

Dependent contract billing lines include only a portion of the information that the system needs to calculate a billing amount. To calculate a billing amount for a dependent contract billing line, you must associate each dependent billing line with an independent billing line. Typically, you set up dependent billing lines when you want to generate invoices that show each element included in individual billing amounts.

The billing type you use to define a contract billing line determines whether or not the billing line is dependent. You can use the following billing types to define dependent billing lines on a contract:

- Prepayments
- Fees

Working with dependent contract billing lines consists of the following tasks:

- ☐ Working with prepayments for contracts
- ☐ Defining billing lines for fees

Before You Begin

Set up the contract master for your contract. See [Creating the Master Record for a Contract](#).

Working with Prepayments for Contracts

Prepayments, or draws, are advance deposits that your company might require from the customer at the time they sign the contract. When you set up a billing line on a contract for prepayments, your company agrees to apply the amount of the prepayment against the total billing amounts for the contract.

You can set up contract billing lines for prepayments to define billing terms for rated draws and direct draws.

Direct Draw

A direct draw is a fixed-amount reduction that you apply to the billing amount for the contract.

You apply the direct draw to the billing amount beginning with the first billing until the entire amount of the prepayment is fully applied to the contract

Rated Draw

A rated draw is a percentage reduction that you apply to the billing amount of the contract each time you create an invoice for the contract. The percentage reduction is based on a percentage work completed for the job.

You apply the amount of the rated draw over the life of the contract. The entire amount of the prepayment is fully applied to the contract by the time the work for the contract is complete.

Working with prepayments for contract consists of the following tasks:

- ☐ Defining a contract billing line for a direct draw
- ☐ Defining a contract billing line for a rated draw

Defining a Contract Billing Line for a Direct Draw

You define a contract billing line for a direct draw to represent a prepayment or advance deposit that your company might require from the customer at the time they sign the contract.

A direct draw represents a fixed-amount reduction that you apply to a contract. You define a dependent contract billing line for a direct draw. The dependent billing line reduces the billing amount of another billing line in the contract. To apply a direct draw billing line to a billing amount, you must set up a cross-reference between the two billing lines.

You can set up cross-references between contract billing lines for direct draws and the following contract billing lines:

- Unit Price (independent)
- Lumpsum (independent)
- Time and Material (independent)
- Milestone (independent)
- Progress (independent)
- Fee (dependent)

You apply the reduction beginning with the first billing until the entire schedule of values for the draw is fully apply to the contract. The schedule of values for the direct draw is the amount of the prepayment. For example, a direct draw is for -22,000 dollars and the first three billings are for 10,000 dollars each. The calculations for the billings consist of the following sequence:

- 10,000 Billing - 10,000 Direct Draw reduction = 0 Billing Amount
- 10,000 Billing - 10,000 Direct Draw reduction = 0 Billing Amount
- 10,000 Billing -2,000 Direct Draw reduction = 8,000 Billing Amount

After you set up a contract billing line for a direct draw, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the customer of the contract
- Revenue account based on the automatic accounting instruction BC06 for direct draw

Defining a contract billing line for a direct draw consists of the following tasks:

- Defining a contract billing line for a direct draw
- Setting up cross-references for direct draw



To define a contract billing line for a direct draw

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text, 'Original'.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp
 - Reference
 - Terms
 - Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
 - Billing Line
 - Description
 - BL (Billing Type)
 - Schedule of Values

Use the billing type D or 8 for a direct draw billing line. Notice that the value entered in the Billing Type field controls the shading of fields.

The direct draw reduces the billing amount. You must enter a negative amount in the Schedule of Values field, such -10,000.

6. In the detail area, complete the following optional fields:
 - Elig Ovr
 - Business Unit
 - Sub
 - Obj Acct
 - Subledger
 - Sub Type
 - G/L Offset
 - Tax Rate
 - Tx Ex
 - Alternate Seq Code
 - Project/Job
 - Bill Suspend

- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default Processing

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only). Contract billing lines for direct draws apply to billing amounts only. After you enter the information, the system automatically assigns 1 to the Eligibility Override field. You cannot change this code.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.

The system highlights the X Ref (Cross-reference) field until you define a cross-reference for the direct draw billing line.

To set up cross-references for direct draw

1. On Work With Contract Billing Line Details, to locate a contract, complete the following field in the header area:
 - Contract No
2. Click Find.
3. Choose the change order and click Select.
4. On Contract Billing Line Detail Revisions, choose the direct draw billing line and click Cross-Reference from the Row menu.
5. On Draw Cross-Reference Revisions, choose the contract billings lines that you want to cross-reference to this direct draw line and click Select/Delete from the Row menu.

The system places an X in the X-Ref column.

6. Click Cancel to return to Contract Billing Line Detail Revisions.

Defining a Contract Billing Line for a Rated Draw

You define a contract billing line for a rated draw to represent a prepayment or advance deposit that your company might require from the customer at the time they sign the contract.

A rated draw represents a percentage reduction that you apply to the billing amount of the contract each time you create an invoice for the contract. The percentage reduction is based on a percentage of work completed for the job. You apply the amount of the rated draw over the life of the contract. The entire amount for the prepayment is fully applied to the contract by the time the work for the contract is complete. The schedule of values amount for a rated draw is a negative amount. The amount represents a reduction to the total billing value for the contract.

You define a dependent contract billing line for a rated draw. The dependent billing line reduces the billing amount of another billing line in the contract. To apply a rated draw billing line to a billing amount, you must set up a cross-reference between the two or more billing lines.

You can set up cross-references between contract billing lines for direct draws and the following contract billing lines:

- Unit Price (independent)
- Lumpsum (independent)
- Milestone (independent)
- Progress (independent)

Rated draws usually relates to progress billing. After your company completes a specific percent of the job or project, the system calculates the current reduction amount with the following formula:

Schedule of Values x Percentage of Completion - Prior Reduction Amounts

You apply the reduction beginning with the first billing until the entire schedule of values for the draw is fully apply to the contract. The schedule of values for the rated draw is the amount of the prepayment.

For example, a rated draw is for -5,000 dollars and the related progress billing is for 100,000 dollars. You define the first billing event as 10 percent complete. When you complete the first billing event, the system applies the percentage of completion to the schedule of values for the progress billing and the rated draw.

The system calculates the billing amount as follows:

- $100,000 \times .10 = 10,000$ (initial billing amount)
- $-5,000 \times .10 = -500$ (prepayment reduction)
- $10,000 + (-500) = 9,500$ (billing amount after reduction)

After you set up a contract billing line for a rated draw, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the customer of the contract
- Revenue account based on the automatic accounting instruction BC07 for rated draw

Defining a contract billing line for a rated draw consists of the following tasks:

- Defining a contract billing line for a rated draw
- Setting up cross-references for rated draw

To define a billing line for a rated draw

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click **Add**.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No
 - Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:
 - Change Date
 - Description
 - Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text to Original.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:
 - Planned Start
 - Planned Comp
 - Reference
 - Terms
 - Cat Code 1
 - Cat Code 2
5. In the detail area, complete the following required fields:
 - Billing Line
 - Description
 - BL (Billing Type)
 - Schedule of Values

Use the billing type R or 9 for a rated draw billing line. Notice that the value entered in the Billing Type field controls the shading of fields.

The rated draw reduces the billing amount. You must enter a negative amount in the Schedule of Values field, such -10,000.

6. In the detail area, complete the following optional fields:
 - Elig Ovr
 - Business Unit
 - Sub
 - Obj Acct
 - Subledger
 - Sub Type
 - G/L Offset
 - Tax Rate
 - Tx Ex
 - Alternate Seq Code
 - Project/Job
 - Bill Suspend
 - Category Code 3
 - Category Code 4
 - Category Code 5
 - Vertex Prod Cat.
 - Vertex Trn. Type

Default Processing

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only). Contract billing lines for direct draws apply to billing amounts only. After you enter the information, the system automatically assigns 1 to the Eligibility Override field. You cannot change this code.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.

The system highlights the X Ref (Cross-reference) field until you define a cross-reference for the rated draw billing line.

To set up cross-references for rated draw

1. On Work With Contract Billing Line Details, to locate a contract, complete the following field in the header area:
 - Contract No
2. Click Find.
3. Choose the change order and click Select.
4. On Contract Billing Line Detail Revisions, choose the rated draw billing line and click Cross-Reference from the Row menu.
5. On Draw Cross-Reference Revisions, choose the contract billings lines that you want to cross-reference to this rated draw line and click Select/Delete from the Row menu. The system places an X in the X-Ref column.
6. Click Cancel to return to Contract Billing Line Detail Revisions.

Defining a Contract Billing Line for Fees

A fee represents an amount that you want to bill the customer in addition to another billing amount. You can define billing terms for fees based on the

schedule of values for another billing line in a contract. To do this, you define dependent contract billing lines for fees.

Contract billing lines for fees are dependent on other billing lines for their calculation. To calculate billing amounts for a fee billing line, you must set up a cross-reference between the fee billing line and the other billing lines within the contract. You must also assign rate code or a fee percentage to the billing line for a fee. The rate code specifies a table for fee percentages that the system uses for a fee billing line. The rate code is based on an effective date rate.

Defining contract billing lines for fees consists of the following task:

- ☐ Defining fees for billing amounts

To apply a fee to a contract, you must set up a cross-reference between the dependent fee billing line and other billing lines within the contract against which you want to apply the fee. You can also set up cross-references to other fee billing lines, thereby creating a compound fee calculation.

When you create invoices, the system uses either the invoice amount or the cost amount to calculate the fee amount. For example,

$$\text{Fee Amount} = \text{Fee Percent} \times \text{Total Invoice Amount for the Billing Lines}$$

Before You Begin

- Enter the contract billing lines that you want to cross-reference
- Define valid rate codes for a fee line

Defining Fees for Billing Amounts

You can define dependent contract billing lines for fees. Fees represent an amount that you bill your customer in addition to the schedule of values for one or more contract billing lines. You can base the contract billing line for a fee on a percent of either the costs incurred or the amounts invoiced for a contract.

After you set up a contract billing line for fees, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company based on the contract master
- Accounts receivable offset based on the customer of the contract
- Revenue account based on the automatic accounting instruction BC03 for fees

Defining fees for billing amounts consists of the following:

- Defining a rate code for a fee

- Defining a contract billing line for a fee
- Setting up a cross-reference for a fee

To define a rate code for a fee

From System Setup (G5240), choose Table Information. On Table Information (G5241), choose Fee Rate Code Table.

A rate code specifies the fee percentage that the system uses to calculate a fee billing line. The rate code is based on an effective date range.

1. On Work With Fee Rate Code Table, click Add.
2. On Fee Rate Code Table Revisions, complete the following fields in the header area:
 - Rate Code
 - Description
3. Complete the following fields:
 - % Fee
 - Date From
 - Date Thru
4. Click OK to instruct the system to accept the fee information.
5. Click Cancel to return to Work With Fee Rate Code Table

Effective Dates for Fee Percentages

When a contract specifies different fee percentages over a period of time, you can define a rate code that is specific to the contract. You identify the effective period for each fee percentage with from and through dates.

The system compares the effective date range for a rate code with the table basis date assigned to the billing information used as the basis for the fee to determine the applicable fee percentage.

To define a billing line for a fee

From Daily Processing (G5210), choose Contract Billing Line Details.

1. On Work With Contract Billing Line Details, click Add.
2. On Contract Billing Line Detail Revisions, complete the following fields in the header area:
 - Contract No

- Change Order

If you leave the change order blank, the system will assign the next available number. If this is the base order of a contract, the system assigns 000.

3. On the General tab, complete the following optional information:

- Change Date
- Description
- Change Status

If you leave the change date blank, the system will default the current date. If you leave the description blank on the base change order, the system will default the text to Original.

Note: For multicurrency contracts, the system uses the change date to retrieve the exchange rate for the contract.

4. On the Additional Details tab, complete the following optional fields:

- Planned Start
- Planned Comp
- Reference
- Terms
- Cat Code 1
- Cat Code 2

5. In the detail area, complete the following required fields:

- Billing Line
- Description
- BL (Billing Type)

Use the billing type F or 4 for a fee billing line. Notice that the value entered in the Billing Type field controls the shading of fields.

6. In the detail area, complete the following optional fields:

- Elig Ovr
- Business Unit
- Sub
- Obj Acct
- Subledger
- Sub Type
- G/L Offset

- Tax Rate
- Tx Ex
- Alternate Seq Code
- Project/Job
- Bill Suspend
- Category Code 3
- Category Code 4
- Category Code 5
- Vertex Prod Cat.
- Vertex Trn. Type

Default Processing

- If you leave the Eligibility Code Override (Elig Ovr) blank, the system assigns a '1' (costing/invoicing only). Contract billing lines for direct draws apply to billing amounts only. After you enter the information, the system automatically assigns 1 to the Eligibility Override field. You cannot change this code.
 - If you leave the G/L Offset blank, the system assigns the G/L Offset from the customer.
 - If you leave the tax information blank, the system assigns the tax information from the contract master.
 - If you leave the project/job blank, the system assigns the project from the contract master.
7. After you enter the billing line information, you may continue entering additional billing lines or click OK.

You will get a warning, "Warning - Cross-Reference Not Setup".

8. Click OK again to instruct the system to accept the billing line and redisplay your entries.

The system highlights the X Ref (Cross-reference) field until you define a cross-reference for the fee billing line.

To set up cross-references for a fee

1. On Work With Contract Billing Line Details, to locate a contract, complete the following field in the header area:
 - Contract No
2. Click Find.

3. Choose the change order and click Select.
4. On Contract Billing Line Detail Revisions, choose the fee billing line and click Cross-Reference from the Row menu.

5. On Fee Cross-Reference Details, choose one of the method of calculations for this fee line:
 - Markup
 - Rate Code
6. Choose one of the fee basis options:
 - Invoice/Revenue
 - Cost
7. Choose Select Lines from the Form menu to locate contract billing lines that are eligible for fees.
8. On Select Cross Reference Lines, choose one or more of the contract billing lines and click Select Records from the Row menu. When a contract billing line is selected, it is removed from the form.
9. Click Cancel to return to Fee Cross Reference Details.

Note that the contract billing lines you have selected as the basis for the fee billing line calculation are displayed.

10. Click OK to return to Contract Billing Line Detail Revisions.
11. Click Cancel to return to Work With Contract Billing Line Details.
12. Click Close.

Working with Contract Information

After you create a contract master and define the billing lines for the contract, you can generate invoices for the contract. If you need to verify or clarify the information that you set up for a contract, you can:

- Review the billing information for the contract.
- Revise the billing information for a contract. For example, you might need to add, change or delete a billing line.

Working with contract information consists of the following tasks:

- ☐ Searching for contract information
- ☐ Reviewing the status of contract billing information
- ☐ Revising contract billing lines
- ☐ Entering text for a contract billing line

Searching for Contract Information

You can access Contract Search from the following forms:

- Contract Master Revisions
- Contract Billing Line Details
- Contract Status Inquiry
- Contract Invoice History Inquiry
- Billing Rate/Markup Table
- Billing AAI's

If you need to access a specific contract in the system, but you do not know the contract number, you can use the Contract Search program to locate the contract. You can also use the Contract Search program to review all of the contracts in the system that match specific criteria, such as all the contracts that belong to a specific owner.

You can use one or a combination of the following search criteria to locate a specific contract:

- First line of the contract description
- Contract type code
- Contract status code
- Customer
- Customer reference number
- Project or job

After you locate the contract that you want to review, you can select the contract and access the following forms:

- Contract Master Revisions, to review and revise contract information
- Contract Status Inquiry, to review the billing, and payment information for a contract

See Also

- *Setting Up Contract Information*
- *Reviewing the Status of Contract Billing Information*



To search for contract information

1. On Contract Search, to locate a specific contract, complete one or a combination of the following fields:
 - Description
 - Type
 - Status
 - Customer
 - Customer Contract
 - Project/Job

Reviewing the Status of Contract Billing Information

After you create a contract master and define the billing lines for the contract, you can review the current status of the billing information. The billing information for a contract includes amounts and units that you have:

- Scheduled for billing
- Billed
- Unbilled
- Earned

- Received
- Revenue Recognized
- Revenue Not Recognized

► **To review the status of contract billing information**

From Contract Billing Processing (G52), choose Contract Status Inquiry.

1. On Work With Contract Status Inquiry, to locate the related contract, complete the following field:
 - Contract Number
2. To limit the billing information and define the type of information to review, complete the following optional fields:
 - Thru Date

If you do not specify a through date, the system uses the system date.

3. To review additional unit based information, choose the Display Unit/Unit Cost checkbox.

Revising Contract Billing Lines

You enter original contract information as a base contract. The base contract consists of the contract master record and change order number 000. The contract is the basis for the invoice that you create for your customer. You can revise any information related to the billing lines you set up for the contract before you generate an invoice for the contract.

When you generate an invoice for your customer, the contract is in an active invoice batch. While the contract is included in an active invoice batch, the system prevents you from making any changes to contract master or the contract billing lines. After you generate invoices, the contract is no longer included in an invoice batch and you can revise contract billing lines.

After you have generated an invoice for a contract, you can make the following revisions to the billing lines:

- Add or delete a billing line
- Change the schedule of values, unit of measure, or quantity
- Change, add, or delete cross-references
- Change the retainage or recurring billing information
- Change the account information

The system does not keep a history of the revisions that you make to contract billing lines. To maintain a history of contract billing changes, you must create change orders.

To ensure that you preserve the record of the original base contract, you can use a processing option for the Contract Billing Line Details program to prevent changes to the billing lines in the base contract. In this case, the system prevents you from making any changes to the billing lines that you originally set up on the base contract. If your client requests additional work, you must enter billing lines for the new terms as an additional change order. You assign each new change order a unique number, such as change order number 001, 002, and so on.

To revise contract billing lines

From Contract Billing Processing (G52), choose Contract Billing Line Details

1. On Work With Contract Billing Line Details, to locate a contract and change order, complete the following fields:
 - Contract Number
 - Change Order Number
2. Select the change order and click Select.
3. On Contract Billing Line Detail Revisions, revise the billing line.

You cannot revise the following fields:

- Billing Line

Adding a Billing Line to a Contract or Change Order

To add a billing line between two existing billing lines, choose Insert Pay Item Line for the billing line that precedes the new information. The Line Number field in the detail area identifies the position of the new line in the sequence of billing lines.

Deleting Contract Billing Lines

The system prevents you from deleting contract billing lines that have been included in an invoice.

Balancing Budgets and the Schedule of Values

If you use the Job Cost system and you want to keep the schedule of values for a contract in balance with the budget for the job, you can set up the system to issue an error or a warning when the amounts differ. To do this, you use a processing option for the Billing Line Details form.

The system makes the comparison between the schedule of values and the budget for the respective job whenever you make a change to the schedule of values.

If you change the budget in the Job Cost system, the Contract Billing system does not inform you of the change. The two amounts are not balanced until you update the schedule of values in the contract.

Entering Text for a Contract Billing line

The billing lines that you define for a contract define the billing terms. You can enter free-form text to further clarify billing lines. For example, you might associate free-form text with a billing line to include the following information:

- Estimated schedules and resources
- Specifications for materials
- Reasons for a change order
- Justification of costs
- References to other billing lines



To enter text for a contract billing line

1. On Contract Billing Line Details to locate a contract and change order, complete the following fields:
 - Contract Number
 - Change Order Number
2. Choose Text for a billing line.
3. On Media Objects, choose File, New and Text.

After you enter the free-form text, the system identifies that text exists with a paper clip icon next to the billing line.

4. Choose File and Save, then Exit.

Processing Options for Contract Billing Line Details

Edits	
1. Prevent Base Contract Changes	_____
2. Schedule of Values Budget Edit	_____
3. Budget Ledger Type	_____
4. Cross Reference Warning	_____
5. Schedule of Values Milestone Edit	_____
Display	
1. Suppress Tax Information	_____
Default	
1. Derive Account	_____
Print	
1. Contract Print Version (R5201)	_____
Blank = XJDE0001	

Workfile Management



Workfile Management

Effective management of the billing workfile is fundamental to your Service Billing processes. The typical billing process includes generating the workfile, creating and printing invoices, and recording journal entries for income and receivables.

Workfile Management consists of the following topics:

- ☐ Understanding workfile information
- ☐ Generating the workfile
- ☐ Reviewing the workfile
- ☐ Revising the workfile transactions
- ☐ Working with workfile history



Understanding Workfile Information

You review and analyze workfile information to track the status of workfile transactions and accurately plan your invoicing cycle.

To understand workfile generation, you should be familiar with the following concepts:

- Workfile generation
- Processing payroll
- Processing burden
- Processing components
- Defining parent/child relationships in the workfile
- Viewing workfile transactions
- Assigning eligibility codes
- Assigning control/sequence numbers

Workfile Generation

The billing workfile (F4812) is a repository of transactions used by the system to invoice customers, recognize revenue, and allocate costs for your organization. The system provides the following three methods to create workfile transactions:

Workfile Generation

The system uses this batch process to create workfile transactions based on billable accounting entries stored in the Account Ledger table (F0911). When you run Workfile Generation, the system copies source transactions from the Account Ledger to create workfile transactions, applying the correct markup, offset, and tax information. You use the Work With Workfile form to view these transactions.

G/L Transaction Selection

You use this interactive program to create workfile transactions based on billable accounting entries stored in the Account Ledger table (F0911). When you use G/L Transaction Selection, the system copies the selected source transactions from the Account Ledger to create workfile transactions, applying the correct markup, offset, and tax information. You use the Work With Workfile form to view these transactions.

Ad-hoc Workfile Transactions

You use this interactive program to create workfile transactions that are not represented in the Account Ledger table (F0911).

Processing Payroll

Account Ledger transactions originate from multiple sources, such as the Accounts Payable, Equipment/Plant Management, and Payroll systems. You run the Workfile Generation program to accumulate the cost information from these sources into the billing system.

Caution: After the system creates payroll and account ledger tables, the following transaction information in the Account Ledger table (F0911) should not be changed or deleted. Changes on Account Ledger transactions that have been processed by the billing system are not updated onto existing workfile transactions.

For the system to create workfile transactions from payroll transactions, all information must be identical in the Payroll and Employee tables with the Account Ledger table. The payroll system allows summarized accounting entries; therefore, the billing system must retrieve detail information from payroll to create the workfile transactions. The system uses the following fields from the Account Ledger to retrieve additional information from the Payroll Transaction History (F0618) or the Employee Transactions Detail (F06116) tables to create the workfile transactions.

- Batch number
- Account number
- G/L Date
- Subledger information

To maintain the integrity of the original source transactions, the system creates copies of these billable transactions. The copied transactions are referred to as workfile transactions and are stored in the Billing Workfile (F4812).

Workfile transactions include costs with any applicable markup, tax, and other key information. The rest of the billing process is based on the information stored in workfile transactions.

All workfile transactions with an eligibility code of '0' (invoicing, revenue, costing) or '1' (invoicing only) must include a customer number. The system uses the customer number to invoice the transactions. You must identify a customer number on individual business units (jobs) or work orders associated with the transactions.

Note: You attach a customer number in the Owner Address field on the Job Cost Master Revisions, not the Job Site field. The Address Book number on the Single Business Unit form is not the customer number.

Processing Burden

Burden is the cost that a company incurs as a result of employing people. Burden can include:

- Company-paid payroll taxes
- Insurance
- Fringe benefits, such as union pensions
- Direct labor costs, such as small tools

The following conditions must exist for you to create burden transactions in the workfile:

- Set business unit burden flag in payroll to create burden entries in the Burden Distribution file (World - F0624, OneWorld - F0724)
- A labor entry must be posted to a billable account in the Account Ledger table (F0911)
- The burden accounting entries must also be posted to a billable account in the Account Ledger table (F0911).
- The Bill Burden field in the Billing Constant must be set to process burden.

You use a billing constant to control whether burden entries from payroll are processed for the workfile. The system calculates burden transactions when payroll journal entries are created. The only way you can process burden within the billing system is in conjunction with its associated workfile transaction.

The eligibility code for burden transactions must be compatible with the eligibility code for the associated workfile transaction. Specifically, the system prevents the eligibility code for a workfile transaction from being more restrictive than the eligibility code of its burden transactions.

For example, if the burden transaction for a workfile transaction is eligible for revenue and invoicing, but the workfile transaction is eligible only for invoicing, the system overrides the burden transaction eligibility code to be the same as the workfile transaction.

The Payroll system calculates the following types of burden:

Actual burden	The actual cost of payroll taxes, insurance, and fringe benefits. The system calculates the burden for the actual costs that are associated with each employee's timecard.
Flat burden	An estimated burden amount that the system derives from the direct labor costs. The system calculates the burden on a timecard-by-timecard basis as a percentage of the labor costs.

When burden transactions are associated with a workfile transaction, the system displays an X in the Burden (B) field for that workfile transaction on the Work With Workfile form. You use the Burden Information Row menu to view these workfile transactions.

Note: When you use daily time entry, the only type of burden that you can associate with a workfile transaction is flat burden. After you process the daily payroll transactions and accumulate their costs in the workfile, the system marks the original payroll transactions as billed.

After the original payroll transactions have been processed, the system does not retrieve any new burden transactions calculated for the transactions. For example, if you reverse the flat burden amount and calculate the actual burden amount for the original payroll transactions, the system does not retrieve the new burden transactions.

Processing Components

A component is a type of markup. The system calculates component transactions based on amounts or units from source transactions. For example, you might include a component transaction to offset the cost of borrowing money.

You can use component transactions based on the invoice amount to apply charges in addition to the markup amount for the workfile transaction. A compound component creates an additional markup; its calculation is based on existing component amounts.

You set up the rules for component calculations in the Component Table. You must then assign this component rule to a markup rule to instruct the system to create component transactions

When a component transaction is associated with a workfile transaction, the system displays an X in the Component (C) field for that workfile transaction on the Work With Workfile form. You use the Component Information Row menu to view the component workfile transactions.

Defining Parent/Child Relationships in the Workfile

The workfile transactions can share a parent/child relationship under the following conditions:

Workfile transaction/Component workfile transaction	This parent / child relationship exists when component transactions are created for a workfile transaction.
Labor/Burden	This parent / child relationship exists when the burden associated with labor is stored in the workfile.
Burden/Components	This parent / child relationship exists when component transactions are created for burden transactions.

Viewing Workfile Transactions

You can view the following transactions in the workfile:

Workfile Transactions

Workfile transactions are copies of source transactions from the Account Ledger that represent the billable costs for your company.

Burden Transactions

Burden transactions are workfile transactions that represent the cost over and above the direct labor wages or salaries that a company incurs as a result of employing people. Burden transactions might include:

- Company-paid payroll taxes
- Insurance
- Fringe benefits, such as union pensions

The billing system always processes burden transactions in conjunction with the associated labor workfile transactions. You use the Burden Information row exit to view these workfile transactions. See *Reviewing Burden Transactions*.

Component Transactions

Component transactions are special types of workfile transactions that represent additional amounts that you add to the original costs when you invoice a customer. For example, component transactions might be used to offset the cost of borrowing money.

The billing system always processes component transactions in conjunction with associated workfile transactions. You use the Component Information row exit to view these workfile transactions. *See Reviewing Component Transactions.*

Assigning Eligibility Codes

The system assigns eligibility codes to workfile transactions based on the Billable Y/N field in the Account Master table and the Journal Generation Control field you set up in your Billing Constants.

Note: The value stored in the eligibility code field controls the amounts that are displayed and determines the billing processes in which the workfile transaction can participate. The system assigns the following eligibility codes to the workfile transactions:

- '0' - The workfile transaction is eligible for invoicing, revenue recognition, and costing processes.
- '1' - The workfile transaction is eligible for invoicing process only.
- '2' - The workfile transaction is eligible for revenue recognition process only.
- '3' - The workfile transaction is non-billable.
- '4' - The workfile transaction is eligible for cost processing only.
- '5' - The workfile transaction is eligible for A/P vouchering only (currently CSMS workfile transactions only)

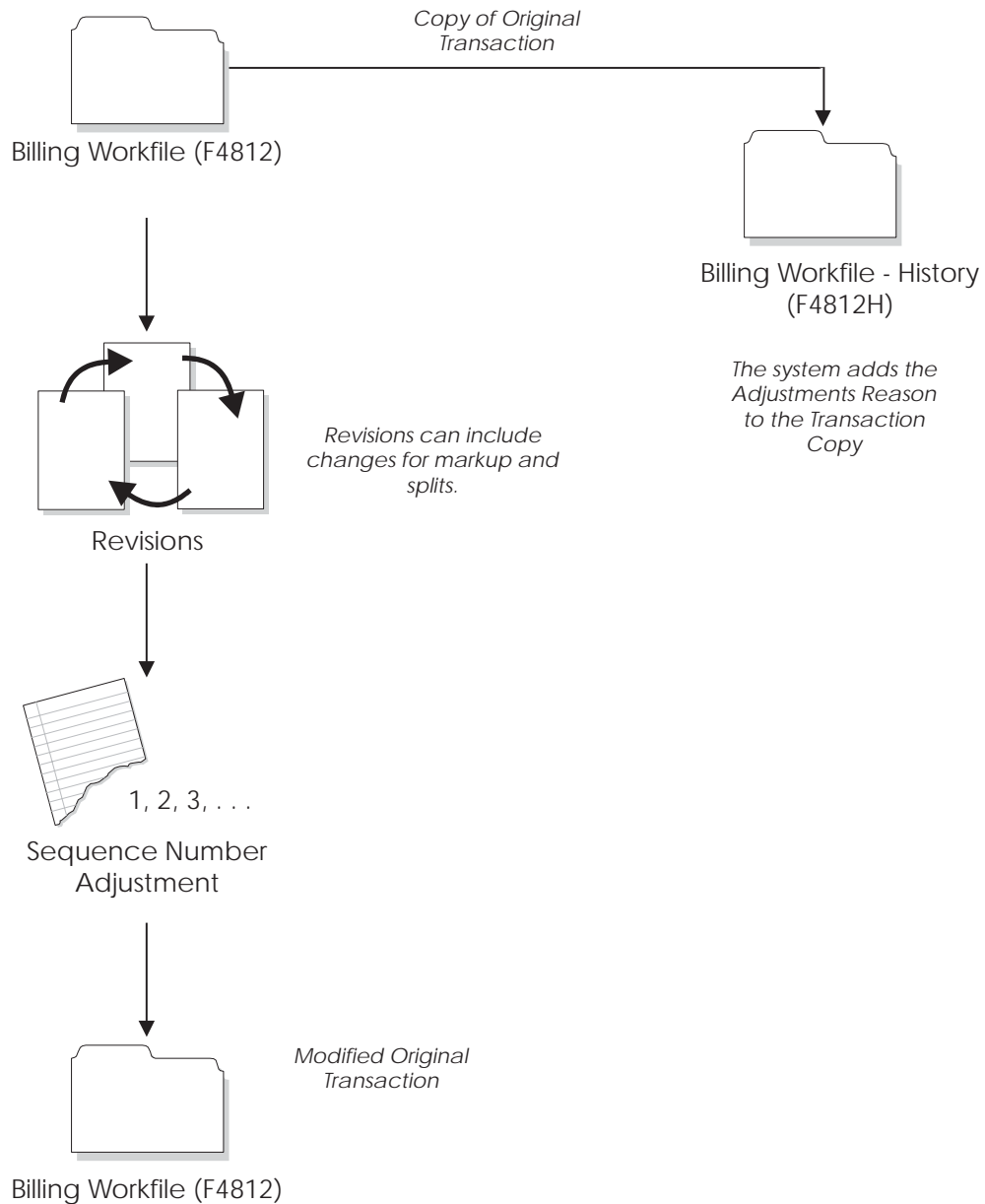
For example, if the Billable Y/N field for an account is set to Y and the Journal Generation Control field is set to 3, Invoicing and Revenue Recognition w/o Reconciliation, the eligibility code is set to 0, indicating that the workfile transaction is eligible for invoicing, revenue recognition, and costing. If the same account with a Y in the Billable Y/N field is processed through the Contract Billing system and the Journal Generation Control field is set to 1, Invoicing Only, the eligibility code is set to 1, indicating that the workfile transaction is eligible for invoicing only.

The following table illustrates the system logic used to assign the eligibility codes:

Account Master - Bill Y/N	Billing Constants - Journal Creation	Billing Workfile - Eligibility Code Assigned
N	Not Applicable	No workfile transaction created
Y	1	1
Y	2	2
Y	3	0
Y	4	0
1	1	1
1	2	No workfile transaction created
1	3	1
1	4	1
2	1	No workfile transaction created
2	2	2
2	3	2
2	4	2
4	1	4
4	2	4
4	3	4
4	4	4

Assigning Control/Sequence Numbers

As the following graphic illustrates, when you revise workfile transactions, the system assigns a series of sequence numbers to the workfile transactions and each new revision for audit purposes.



You can use these numbers to track the progression of revisions to original workfile transactions. The system assigns each workfile transaction the following control and sequence numbers:

Billing Control ID (BCI)	The BCI number is assigned at the time the workfile transaction is first created in the Billing Workfile. The system uses Next Numbers, system 48 index 2 (Billing Control) to derive the number. The BCI number of a workfile transaction never changes, regardless of the revisions made to the workfile transaction. If you split a workfile transaction, the resulting workfile transactions will share the same BCI.
Sequence Number (SBSQ)	The sequence number of the original workfile transaction is always 1. The sequence number changes only when you split the workfile transaction. The system assigns the next available sequence number within that BCI series to the resulting workfile transactions. For example, the first time a workfile transaction is split, the sequence numbers assigned to the resulting workfile transactions are 2 and 3. If you split one of those workfile transactions, the sequence numbers assigned to the resulting workfile transactions are 4 and 5.
Parent Sequence Number (PRSQ)	The parent sequence number of the original workfile transaction is always 0. The parent sequence number changes only when you split the workfile transaction. The system assigns a parent sequence number to workfile transactions that result from a split. The parent sequence number is always the sequence number of the workfile transaction that you split. For example, if you split a workfile transaction with a sequence number of 1 and a parent sequence number of 0, the system assigns the resulting workfile transactions a parent number of 1.
Secondary Sequence Number (SCSQ)	The secondary sequence number of the original workfile transaction is always 1. The secondary sequence number tracks the number of revisions you make to a workfile transaction. You can use this number to track the progression of revisions to original workfile transactions. For example, you might revise a workfile transaction three times. The secondary sequence number of the workfile transaction you revise is 1. After the revision, the secondary sequence number for the workfile transaction is 2. When you change the transaction again, the secondary sequence number is 3. When you split a workfile transaction, the secondary sequence numbers will be 1 on the resulting workfile transactions.

**Component Link
Number (CLNK)**

The component link number of the workfile transaction links the parent workfile transaction to the child component transactions. If this number is 0, no components exist for this workfile transaction. The component link number changes when you split a workfile transaction with components. The system assigns a new component link number to each resulting parent workfile transaction. This new component link number is then assigned to the respective component workfile transactions.

Generating the Workfile

From the Workfile Processing menu (G5211), choose Workfile Generation.

Invoices are based on billable costs. The first step in the billing process is to generate the workfile. Billable costs are represented by source transactions that the system stores in the Account Ledger table (F0911).

When you run Workfile Generation to create workfile transactions, the system performs the following actions:

- Identifies all the unprocessed source transactions in the Account Ledger table (F0911)
- Determines whether the account for each source transaction is billable, based on the Billable (Y/N) field in the Account Master table (F0901)
- Uses related tables when constants and source transactions indicate the need for additional information, such as when burden is associated with payroll transactions
- Updates the source transactions in the Account Ledger table as processed or non-billable
- Updates the payroll transaction history and employee transaction details for all payroll-related source transactions
- Calculates markup and tax amounts
- Creates copies of source transactions in the Billing Workfile (F4812)
- Assigns appropriate eligibility codes to the copied transactions based on the Journal Generation Control field in the system constants and the Billable (Y/N) field in the Account Master table

To indicate that the source transactions have been created in the billing workfile, the system marks the source transactions in the Account Ledger table with N (if the account is non-billable) or Z (if the account is billable and has been processed by the billing system). The next time you run workfile generation, the system creates workfile transactions for only the source transactions that have not been previously included in the workfile generation process.

See Also

- *Setting Up System Constants*
- *Understanding Setup of Billing Rate / Markup Tables for Multicurrency*

- *Appendix B - Searches for Markup Rules* for more information about calculating markup

Before You Begin

- ☐ Verify that the following information is set up prior to running Workfile Generation.
 - Address information for each customer in the Address Book table (F0101). See *Entering Address Book Records in the Address Book Guide*.
 - Master information for each customer in the Customer Master table (F0301). See *Creating Customer Records in the Accounts Receivable Guide*.
 - Multi-currency, if you are processing invoices using different currencies. See *Setting Up Multi-currency* in the *General Accounting Guide*.
 - Master information for each business unit (job) in the Business Unit Master table (F0006). See *Working with Business Units* in the *General Accounting Guide*.
- ☐ Verify that you have defined a customer number for your work orders or business units (jobs) that you intend to invoice.
- ☐ Define all billable accounts in the chart of accounts.
- ☐ Verify the Billing Constants have been set up.
- ☐ Define the rules in the following applicable Contract Billing tables:
 - Billing Rate/Markup Table
 - G/L Offset and Retainage Table
 - Tax Derivation Table

Processing Options: Workfile Generation (R48120)

Defaults Tab

1. Home Business Unit Selection

Use this processing option to specify the source for the home business unit for payroll equipment records. Valid values are:

- 1 Use the Payroll Master.

Blank Use the Asset Master (default).

Process Tab

1. Contract Revenue Generation Options (Future Use)

Reviewing the Workfile

After you generate the workfile, you can review the related workfile transactions to verify that the information the system retrieved from the source transactions is correct. Source transactions are the transactions that the system stores in the Account Ledger table (F0911). The system might also require other information from the originating systems to process some source transactions.

Reviewing the workfile consists of the following tasks:

- ☐ Reviewing workfile transactions
- ☐ Reviewing workfile transaction revisions
- ☐ Reviewing transaction totals
- ☐ Reviewing burden transactions
- ☐ Reviewing component transactions

When you review transactions in the Billing Workfile (F4812), you should look for potential errors, such as:

- Payroll transactions charged to the incorrect work order or job
- Incorrect markup amounts (if changes are made to your markup tables since the creation of your workfile transactions)

The system will update workfile transactions with an 'E' in the Hold Code field during the workfile generation or workfile re-extension batch processes when the following errors are detected:

**Customer Not Found
(Error Message - 090G)**

Cause - The system did not find a customer number for the business unit or work order assigned to the workfile transaction.

Resolution - Several solutions are outlined below:

- 1) Add the customer number to the business unit or work order. You must re-extend the workfile transaction to re-apply the customer number.
- 2) Change the business unit or work order to one that has a customer number assigned to it. You must re-extend the workfile transaction to re-apply the customer number.
- 3) Change the Customer Number Basis in the Billing Constants to properly retrieve the customer number from business unit or work order. You must re-extend the workfile transaction to re-apply the customer number to the workfile transaction.

**Customer Master
Information Missing
(Error Message - 3490)**

Cause - The customer number assigned to the workfile transaction is not set up in the Customer Master table (F0301)

Resolution - Add the customer number into the Customer Master table (F0301). You must re-extend the workfile transaction to accept this change.

**Work Order Number
Invalid (Error Message -
0115)**

Cause - The work order number assigned to the workfile transaction does not currently exist in the Work Order Master table (F4801).

Resolution - Enter the work order number in the Work Order Master table (F4801) or change the work order assigned to the workfile transaction. You must re-extend the workfile transaction to accept these changes.

**Work Order Number
Non-Billable (Error
Message - 090H)**

Cause - The work order number assigned to the workfile transaction is flagged as non-billable. The system uses the value in the second description of the User Defined Codes set up for Work Order Status validation (00/SS) to determine if a work order is billable. You set a value of 'X' in the second position of the second description of a work order status value to identify a work order as non-billable.

Resolution - Several solutions are outlined below:

- 1) Change the status of the work order in the Work Order Master table (F4801). You must re-extend the workfile transaction to accept this change.
- 2) Remove the 'X' from the second description of this work order status set up in the User Defined Codes (00/SS). You must re-extend the workfile transaction to accept this change. Please check with your system administrator before making this change as other departments may be using the Work Order Master table (F4801).
- 3) Change the work order number assigned to the workfile transaction. You must re-extend the workfile transaction to accept this change.

If you work in a multi-currency environment, you can review the workfile in the domestic currency or in a foreign currency.

Reviewing Workfile Transactions

To review the transactions in the Billing Workfile (F4812), you must first locate them. You can enter search criteria to control the workfile transactions that the system displays. If you specify more values in your search criteria, the closer you narrow your search. You can also review specific workfile transactions to verify accounting and billing information and determine whether a workfile transaction is taxable.



To review workfile transactions

From the Workfile Processing menu (G5211), choose Workfile Revisions.

T	C	Do Ty	G/L Date	C	B	Hd CD	Customer	Contract Number	Con Typ	Contract Company	Chg No	Billing Line
1		T2	4/30/05				150					
1		T2	4/30/05				150					
1		T2	4/30/05				150					
1		T2	4/30/05				150					
1		T2	6/11/05	X	X		150					
1		T2	6/11/05	X	X		150					
1		T2	6/11/05	X	X		150					

1. On Work With Workfile, complete one or more of the following fields to locate workfile transactions:

On the General tab:

- Customer
- Job Number
- G/L Date From/Thru
- Subledger/Type

On the People tab:

- Supplier Number

On the Account tab:

- Account Number
- Subledger/Type

On the Contract tab:

- Contract Number
- Contract Type

On the Payroll tab:

- Employee Number

- Job Type
- Job Step

On the Equipment tab:

- Equipment Worked
- Equipment Worked On

On the Internal tab:

- Billing ID

2. Review the following fields:

- Transaction Classification
- Elig Code
- Tax Y/N
- Contract Number
- Billing Currency

Field	Explanation
Customer	<p>The address book number to which the system posts billing and accounts receivable transactions.</p> <p>..... <i>Form-specific information</i></p> <p>Enter a customer's address book number in this field to search for transactions associated with that customer.</p>
G/L Date From/Thru	<p>The date that identifies the financial period to which the source transaction was posted. Based on the company's fiscal year and current accounting period, the system edits the date for PBCO (posted before cutoff), PYEB (prior year ending balance), PACO (post after cutoff), and WACO (post way after cutoff).</p>
Subledger/Type	<p>A code that identifies a detailed auxiliary account within a general ledger account. A subledger can be an equipment item number or an address book number. If you enter a subledger, you must also specify the subledger type.</p> <p>..... <i>Form-specific information</i></p> <p>Enter a work order number in this field to search for transactions associated with that work order.</p>

Field	Explanation																				
Job Number	<p>A code that identifies a separate entity for which you want to track costs within a business. For example, a business unit might be a job, project, work center, or branch/plant.</p> <p>Business unit security can prevent you from locating business units for which you have no authority.</p> <p>..... <i>Form-specific information</i></p> <p>Enter a business unit in this field to search for transactions associated with that business unit.</p>																				
Supplier Number	<p>An individual/organization that provides goods and services. This number is stored in the Address Book system.</p>																				
Account Number	<p>A code that identifies a separate entity for which you want to track costs within a business. For example, a business unit might be a job, project, work center, or branch/plant.</p> <p>Business unit security can prevent you from locating business units for which you have no authority.</p> <p>..... <i>Form-specific information</i></p> <p>Enter a business unit in this field to search for transactions associated with that business unit.</p>																				
Contract Number	<p>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.</p>																				
Contract Type	<p>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.)</p> <p>The following document types are defined by J.D. Edwards and should not be changed:</p> <table> <tr> <td>P</td><td>Accounts Payable documents</td></tr> <tr> <td>R</td><td>Accounts Receivable documents</td></tr> <tr> <td>T</td><td>Payroll documents</td></tr> <tr> <td>I</td><td>Inventory documents</td></tr> <tr> <td>O</td><td>Purchase Order Processing documents</td></tr> <tr> <td>J</td><td>General Accounting/Joint Interest Billing documents</td></tr> <tr> <td>S</td><td>Sales Order Processing documents</td></tr> <tr> <td>OS</td><td>Subcontract</td></tr> <tr> <td>OP</td><td>Purchase Order</td></tr> <tr> <td>R2</td><td>Contract Billing</td></tr> </table>	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	OS	Subcontract	OP	Purchase Order	R2	Contract Billing
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																				
OS	Subcontract																				
OP	Purchase Order																				
R2	Contract Billing																				
Employee Number	<p>This field specifies the employee number associated with a workfile transaction that originated in the payroll system.</p>																				

Field	Explanation
Job Type	A user defined code (07/G) that defines the jobs within your organization. You can associate pay and benefit information with a job type and apply that information to the employees who are linked to that job type.
Job Step	A user defined code (07/GS) that designates a specific level within a particular job type. The system uses this code in conjunction with job type to determine pay rates by job in the Pay Rates table.
Equipment Worked	The ID number of the equipment an employee used to perform a job. For example, an employee might drive a company dump truck or operate a printing press. Use this field to distribute the cost of using the equipment to the proper account in the general ledger.
Equipment Worked On	The ID number for the equipment that an employee maintained or repaired, but did not use. For example, an employee might change the oil in the company dump truck. Use this field to direct labor expenses to this piece of equipment.
Billing Control ID	<p>The Billing Control ID is a unique number assigned to all records that is used for billing of tenant information. The ID number is assigned automatically to the billing records through the Next Number facility.</p> <p>..... <i>Form-specific information</i></p> <p>Enter the billing control ID of the billing transaction you want the system to display.</p>
T C	<p>A code that identifies the classification of a billing transaction. Valid codes are:</p> <ul style="list-style-type: none"> blank Ad hoc entry in the active Billing Workfile (F4812) A Contract Revenue Non-T& M Record C Service Contracts (CSMS) D Service Orders (CSMS) E Claims (CSMS) F Calls (CSMS) 1 Labor Entry 2 Burden Entry 3 Equipment Entry 4 Inventory Entry (future use) 5 Purchasing Accounts/Payable Entry 6 Journal Entry 7 Manual Entry 8 System Generated Control Record 9 Future

Field	Explanation
Elig Code	<p>A user defined code that determines how a transaction is processed. This code controls the operation at the single-transaction level. Valid values are:</p> <ul style="list-style-type: none">0 Available for invoicing and revenue.1 Available for invoicing only.2 Available for revenue only.3 Non-billable.4 Available for cost only.5 Available for A/P only. (OneWorld CSMS Only) <p>The system assigns eligibility codes to workfile transactions based on the Billable (Y/N) field in the Account Master table and the Journal Generation Control field that you set up in your system constants. For example, if an account with a Y in the Billable (Y/N) field is processed through the billing system and the Journal Generation Control field is set for billing only, the eligibility code for the transaction is 1. An eligibility code of 1 indicates that the transaction is available for invoicing only.</p>
Tax Y/N	A code that indicates whether the item, by itself, is subject to sales tax.

Reviewing Workfile Transaction Revisions

For every revision of a transaction that you create as you process workfile transactions, the system stores a copy of the previous transaction. You can review this audit trail to see all the changes that you have made to a transaction. The system displays the revision history of a workfile transaction starting with the most recent revision to the original workfile transaction.

To review transaction revisions

From Workfile Processing (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See Reviewing Workfile Transactions.

2. Choose Transaction Inquiry from the Row menu for a specific transaction.

C	Par Seq	Seq Num	Sec Seq	Description of Adjustment Reason	Invoiced Amount	Foreign Inv Amount	Date Updated
X		1	1	No Adjustment	2,800.00		12/16/99

- On Inquire Workfile History, review the revision history for the transaction.

Reviewing Transaction Totals

You can review the total amounts for one or more transactions. Review transaction totals so you can:

- Make projections relating to the invoice and cost totals.
- Verify the accuracy between the invoice information that the system stores in the workfile and the invoice information that you print for your customers.

If you find a discrepancy with the transaction totals, you should make any necessary revisions before you continue with the billing process.

► To review totals for a specific transaction

From the Workfile Processing menu (G5211), choose Workfile Revisions.

- On Work With Workfile, complete the steps for locating workfile transactions.

See *Reviewing Workfile Transactions*.

- Choose Totals from the form menu to submit the report.

3. Review the following amounts:

- Amount – Foreign Invoiced
- Amount – Revenue
- Amount

The system prints the amounts based on the eligibility code setting.

Field	Explanation
Base Invoice	The invoice amount for a billing detail transaction.
Base Revenue	The revenue amount for a billing detail transaction.
Cost Amount	The cost (source amount) for a billing detail transaction.

Reviewing Burden Transactions

Burden is the cost that a company incurs as a result of employing people. Burden can include:

- Company-paid payroll taxes
- Insurance
- Fringe benefits, such as union pensions
- Direct labor costs, such as small tools

You use a system constant to control whether burden transactions are processed for the workfile. The system calculates burden transactions when you create payroll journal entries. The only way you can process burden within the billing system is in conjunction with its associated workfile transaction.

When burden transactions are associated with a workfile transaction, the system displays an X in the Burden (B) field for that transaction on the Work With Workfile form.

To review burden transactions

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See Reviewing Workfile Transactions.

2. Verify the following field to identify the transactions with burden:

- Burden Exists
3. Choose Burden Info from the Row menu for the transaction you want to review.

C	E	C	PDDB Code	T	T	Explanation -Remark-	Base Curr	Cost Amount	Cost w/Comp
	1			E		FICA Paid	USD	77.50	77.50
	1			H		SUI Paid	USD	15.63	15.63
	1			Q		Medicare Paid	USD	18.13	18.13
	1			Z		Medicare Paid	USD		
X	1		1005			Health/Co	USD	45.00	117.54
X	1		7705			Dental/Co	USD	8.64	22.56

4. On Burden Information, verify the information in the following fields:
 - Employee Number
 - Transaction Number
 - DBA Code
 - Tax Type
 - Name – Remark Explanation

Field	Explanation
B	A flag that indicates whether burden exists for this workfile transaction. Valid values are: Blank No burden exists for this transaction. X Burden exists for this transaction.
Employee Number	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, a location, and any other address book members.

Field	Explanation
Transaction Number	<p>The system gives each timecard entered a unique transaction number. You can use this field in the Time Entry By Job program to retrieve a specific timecard for display.</p> <p>This field is also used to tie a timecard to each Actual Burden audit record created for the timecard during the Actual Burden Journaling process.</p>
PDBA Code	<p>A code that defines the type of pay, deduction, benefit, or accrual.</p> <p>Pay types are numbered from 1 to 999. Deductions and benefits are numbered from 1000 to 9999.</p>
T T	<p>A user defined code (07/TT) that identifies the type of payroll tax associated with this workfile transaction.</p>
Explanation –Remark–	<p>A description, remark, explanation, name, or address retrieved from the following cost (source) transactions:</p> <ul style="list-style-type: none">• Journal entry (Explanation 2 field)• A/P voucher entry (Explanation field)• Payroll (pay type description; regular, overtime, and so on)

See Also

- *Entering Timecards for Employees* in the *HR & Payroll Foundation Guide* for more information.

Reviewing Component Transactions

A component is a type of markup. The system calculates component transactions based on amounts or units from source transactions. For example, you might include a component transaction to offset the cost of borrowing money.

You can use component transactions based on the invoice amount to apply charges in addition to the markup amount for the workfile transaction. Use a compounded component to include additional markup added to the source transaction plus additional charges added to the marked-up amount for the billing.

When a component transaction is associated with a workfile transaction, the system displays an X in the Component (C) field for that transaction on the Work With Workfile form.

▶ To review component transactions

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*

2. Verify the following field to identify the transactions with components:
 - Components Exist
3. Choose Component Info from the Row menu for the transaction you want to review.

Component Code	Explanation -Remark-	Base Currency	Cost Amount	Invoice Amount	Billing Currency
COM	Cost of Money	USD	25.00	56.00	USD
FRG	Fringe	USD	550.00	1,232.00	USD
OVH	Overhead	USD	1,440.00	3,225.60	USD

4. On Component Transaction Inquiry, verify the information in the following fields:
 - Component Link
 - Cost Table
 - Invoice Table
 - Base Cost
 - Base Units
 - Base Invoice Taxable
 - Component Code
 - Cost Amount

- Invoice Amount

See Also

Entering Timecards for Employees in the HR & Payroll Foundation Guide for more information.

Field	Explanation
C	A flag that indicates whether components exist for this workfile transaction. Valid values are: Blank No components exist for this transaction. X Components exist for this transaction.
Component Link	The component link field attaches the component record to its base work file record.
Cost Table	A code that identifies a component cost rate table to use for this Billing Rate/Markup Table entry (for World, Cost Plus Markup Table entry). The component table identifies the components and their calculation rules. These component amounts are applied as overhead to the original cost. You set up component tables on the Component Table Definition form.
Invoice Table	A code that identifies a component bill table to use for this Billing Rate/Markup Table entry (for World, Cost Plus Markup table entry). The component table identifies the components and their calculation rules. These component amounts are billed in addition to any invoice markups. You set up component tables on the Component Table Definition form.
Base Cost	A number that identifies the actual amount. Enter debits with no sign or a plus sign. Enter credits with a minus sign either before or after the amount. You can use decimals, dollar signs, and commas. The system ignores nonsignificant symbols.
Base Units	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.
Base Invoice Taxable	The portion of the invoice amount that is subject to tax.
Component Code	A component code identifies a provisional burden that is accounted for at the billing detail transaction level.
Cost Amount	A number that identifies the actual amount. Enter debits with no sign or a plus sign. Enter credits with a minus sign either before or after the amount. You can use decimals, dollar signs, and commas. The system ignores nonsignificant symbols.
Invoice Amount	The invoice amount for a billing detail transaction.

Revising the Workfile Transactions

The transactions in the Billing Workfile table (F4812) are the basis for the rest of the billing process. You should make any necessary additions and revisions to the workfile transactions before you continue. Any changes that you make to a workfile transaction affect only the information in the workfile. The changes do not affect the cost (source) transactions in the Account Ledger table (F0911).

You use the workfile re-extension function to apply revisions made to workfile transactions. Workfile Re-extension can be run three ways:

- From Menu G48S31, choose Workfile Re-extension to run as a batch process.
- From Work with Workfile, choose Row Menu Trans Re-extend.
- The system will execute the workfile re-extension automatically if a change is detected during workfile revisions.

Revisions to the workfile include:

- Adding informational text that you want to print on an invoice
- Adding any G/L transactions that were omitted from the workfile without running the Generation program again
- Correcting information such as the account number or work order number
- Adding transactions directly to the workfile without entering them into the Account Ledger Table (F0911) first, such as transactions for expense reports that have not yet been processed in the Accounts Payable system
- Moving a workfile transaction from the active workfile to the workfile history table so that it is not included on an invoice

Revised workfile transactions remain in the Billing Workfile (F4812). The system retains a copy of the transaction prior to any changes in the Billing Workfile History table (F4812H) for audit purposes.

Revising the workfile consists of the following tasks:

- ☐ Adding existing G/L transactions to the workfile
- ☐ Changing the markup on the workfile transaction
- ☐ Entering ad-hoc workfile transactions

- ☐ Assigning a hold status
- ☐ Splitting a workfile transaction
- ☐ Moving a workfile transaction to the workfile history table
- ☐ Printing workfile transactions
- ☐ Printing workfile totals

Adding Existing G/L Transactions to the Workfile

You can add transactions from the Account Ledger table (F0911) to the Billing Workfile without running the Generation program. For example, you can process accounting entries that you did not include in the workfile generation. You can also process accounting entries that were entered in the General Accounting system after you ran workfile generation.

When you add a transaction to the workfile, the system runs a workfile generation interactively for the selected accounting entries. The system updates the Account Ledger table to mark the transaction as billed. If the billable accounting entry originated from the payroll system, the system updates the Payroll Transaction History (F0618) or Employee Transactions Detail (F06116) tables. The system also applies any markup, tax, and G/L offset information retrieved from the Contract Billing tables.

To add existing G/L transactions to the workfile

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*.

2. Choose G/L Transaction Selection from the Form menu.

Account Number	G/L Date	Explanation Alpha Name	Amount	Cur Code	Doc Number	Doc Type	Sub-ledge
6100.1341	4/30/05	Payroll Labor Distribution	54.00	USD	11	T2	
6100.1341	6/25/05	Payroll Labor Distribution	4,073.67	USD	98	T2	00065C
6100.1341	7/9/05	Payroll Labor Distribution	3,971.40	USD	92	T2	00065C
6100.1342	7/9/05	Payroll Labor Distribution	196.88	USD	92	T2	00065C
6100.8115	6/30/05	Payroll Labor Distribution	514.00	USD	5	T2	00065C
6100.8115	6/30/05	Payroll Labor Distribution	173.08	USD	5	T2	00065C
6100.8116	4/30/05	Payroll Labor Distribution	301.88	USD	7	T2	00065C

3. On G/L Transaction Selection, complete one or more of the following fields to limit the list of transactions:
 - Account Number
 - G/L Date From
 - G/L Date Thru
 - Subledger / Type

The system automatically supplies the information for these fields if you completed them on the Billing Details form.

4. To determine which home business unit to use for payroll equipment records, complete one of the following:
 - Asset Master (Default)
 - Payroll
5. Choose Select from the Row menu for all of the transactions that you want to add to the workfile.
6. Click Close to return to Work With Workfile.
7. Complete the steps for reviewing workfile transactions.

Field	Explanation
Account Number	<p>A field that identifies an account in the general ledger. You can use one of the following formats for account numbers:</p> <ul style="list-style-type: none"> • 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 <p>The first character of the account indicates the format of the account number. You define the account format in the General Accounting Constants program.</p>
G/L Date From	<p>A date that identifies the financial period to which the transaction will be posted. The Fiscal Date Patterns table for general accounting specifies the date range for each financial period. You can have up to 14 periods. Generally, period 14 is used for audit adjustments.</p>
G/L Date Thru	<p>A date that identifies the financial period to which the transaction will be posted. The Fiscal Date Patterns table for general accounting specifies the date range for each financial period. You can have up to 14 periods. Generally, period 14 is used for audit adjustments.</p>
Subledger / Type	<p>A number that identifies a work order in the Service and Contract Billing systems. In general, if you specify a work order, you must also specify W as the subledger type for the work order.</p>
Asset Master (Default)	<p>A OneWorld processing flag for an event.</p>
Payroll	<p>A OneWorld processing flag for an event.</p>

Changing the Markup on the Workfile Transaction

The markup for a workfile transaction is the increase in costs in order to account for overhead and profit. You define the markup rules in the Billing Rate/Markup table. The system uses the markup rules to apply markups to the workfile transaction when you run workfile generation. You can also change markup information after you generate the workfile.

After you make changes to the Billing Rate/Markup table, you can apply the revised markup information to the workfile transaction, or you can reapply the markup rules you originally defined for your system on the Billing Rate Markup Table.

In addition to changing the markup through Workfile Revisions, you can also make changes to the Re-Apply Markup Option and Adjustment Reason fields by choosing Transaction Re-extend from the Row menu for a specific transaction.

► To change the markup

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*.

2. Choose a workfile transaction and click Select.

3. On Job/Amounts Revisions, to review the origin of the markup and tax information for the workfile transaction, choose Table Information from the Form menu.

Table Basis Date	Key Type Description	Table Key Value	Curr Code
6/11/05	Work Order Class	C01	USD
Invoice Markup Table	2		
Revenue Markup Table	Table Not Applicable		
Component Markup Table			
G/L Offset Table			
Tax Derivation Table			

4. On Table Information, click Cancel to return to the Job/Amount Revisions form.
5. On Job/Amount Revisions, choose the Invoice Amounts tab to change the markup for invoice amounts and complete any combination of the following applicable fields:
 - Inv Ovr Rate/Cap
 - Inv Markup %
 - Inv Mark Up Amt
6. On Job/Amount Revisions, choose the Revenue Amounts tab to change the markup for revenue amounts and complete any combination of the following applicable fields:
 - Rev Ovr Rate/Cap
 - Rev Markup %
 - Rev Mark Up Amt
7. Click Calculation Preview.

The system calculates the markup and displays the changes that will be made.

8. On Job/Amount Revisions, complete the following fields :
 - Re-apply Markup
 - Adj Reason
9. Click OK.

Caution: If you change the markup information on Job/Amount Revisions and do not want the markup information from the Billing Rate/Markup table, and do not enter a 3 in the Re-apply Markup field before pressing OK, the default markup information will come from the Billing Rate/Markup table. To prevent this, remember to enter a 3 in the Re-apply Markup field.

Field	Explanation
Inv Ovr Rate/Cap	<p>The rate the system uses to mark up the invoice amount reflected in the billing of professional services such as draftsmen, engineers, or consultants fees. This rate does not affect the employee's paycheck.</p> <p>You can use this markup rate as an override rate or as a maximum rate. The Override Rate Calculation for the Total Invoice Markup is:</p> $(\text{Override Rate} * \text{Unit}) * (1 + \text{Markup Percent}) + \text{Markup Amount}$ <p>When a Maximum or Cap Rate is Specified:</p> <p>Compare override rate with rate from cost transaction.</p> <p>Use the lower rate as the override rate.</p> <p>You can set up this override or maximum unit rate on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup rates.</p> <p>With the new Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than the invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the markup table form to specify a markup table for revenue and invoice markup rates.</p>
Inv Markup %	<p>The percentage the system uses to mark up the invoice amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. Enter the percentage as a whole number. For example, 50.275 percent would be entered as 50.275. This percentage rate does not affect the employee's paycheck.</p> <p>You set up this percentage on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup percentage rates.</p> <p>With the Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the the markup table form to specify a markup table for revenue and invoice markup rates.</p>

Field	Explanation
Inv Mark Up Amount	<p>An amount the system uses to mark up the invoice amount reflected in the billing of professional services such as draftsmen, engineers, or consultants fees. This amount will not affect the employee's paycheck.</p> <p>You define this amount on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup amounts.</p> <p>With the Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the markup table form to specify a markup table for revenue and invoice markup rates.</p>
Rev Ovr Rate/Cap	<p>The rate the system uses to mark up the revenue amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This rate does not affect the employee's paycheck. You can use this markup rate as an override rate or as a maximum rate.</p> <p>The Override Rate Calculator for the Total Revenue markup is:</p> $(\text{Override Rate} * \text{Unit}) * (1 + \text{Markup \%}) + \text{Markup Amount}$ <p>When you specify a Maximum or Cap Rate, the system compares the override rate with the rate from the cost transaction and uses the lower rate as the override rate.</p> <p>You set up the override/maximum unit rate in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup rates.</p> <p>You can mark up the revenue amount at a different rate than the invoice amount by using the Billing Rate/Markup Table with a generation type 2. The value in the Independent Revenue/Invoice field in the constants controls this function.</p>

Field	Explanation
Rev Markup %	<p>The percentage the system uses to mark up the invoice amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. Enter the percentage as a whole number. For example, 50.275 percent would be entered as 50.275. This percentage rate does not affect the employee's paycheck.</p> <p>You set up this percentage on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup percentage rates.</p> <p>With the Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the the markup table form to specify a markup table for revenue and invoice markup rates.</p>
Rev Mark Up Amt	<p>An amount used to mark up the revenue amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This amount will not affect the employee's paycheck. This amount is set up in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup amounts. This amount is set up in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup amounts.</p> <p>With the Service Billing/Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount using the Billing Rate/Markup Table with a generation type 2. The Independent Invoice flag in the constants controls this function.</p>

Field	Explanation
Re-apply Markup	<p>You re-extend a transaction when you want to change or reapply the markup for the transaction based on your specific overrides or on the information that you have defined in the markup tables. The valid values are:</p> <ol style="list-style-type: none">1 Reapply the established invoice markup rates from the Billing Rate/Markup Table. The revenue amount is not changed.2 Reapply the established revenue markup rates from the Billing Rate/Markup Table. The invoice amount is not changed.3 Use the rates or amounts entered in the Amounts/Units Information window or on the Revisions form. Do not apply the established invoice or revenue markup rates from the Billing Rate/Markup Table. <p>blank Reapply both the invoice and revenue markup rates using the established rates from the Billing Rate/Markup Tables.</p> <p>Note: You cannot use options 1 or 2 when the Independent Invoice flag in the system constants specifies that the invoice and revenue amounts must be the same.</p>
Adj Reason	<p>A user defined code (48/AR) that you use to specify the reason for a revision to a single or a group of billing detail transactions in the Billing Workfile (F4812). The system updates the historical billing detail transaction with this reason for audit purposes.</p>

Entering Ad-Hoc Workfile Transactions

If you do not enter cost information during an accounting cycle, the transactions are not available when you generate the workfile. You can manually add transactions to the workfile on an as-needed basis for costs that are not processed during the accounting cycle. Transactions you enter into the workfile manually are referred to as ad-hoc transactions.

For example, an accounting department processes expense reports on the 15th of each month. The supervisor's expenses contain a billable cost that must be in the Billing Workfile by the 5th of the month. In this case, you enter the cost as an ad-hoc transaction to the workfile. The ad-hoc transaction is created to represent cost information that is not in the Account Ledger table and is independent of the regular accounting cycle. After you enter the ad-hoc transaction into the workfile, you can mark up the cost, enter a remark, and complete the billing process.

When you enter an ad-hoc transaction into the workfile:

- You cannot record a reason why the transaction was created.

- No source document exists to backup the transaction.
- The detail information for the costs in the general ledger and the workfile is inconsistent.

Caution: If you enter an ad-hoc transaction and then process the related source transaction through the normal accounting and billing cycles, the system creates a duplicate transaction in the workfile. To prevent this, you must manually change the eligibility code for the duplicate workfile transaction to nonbillable and remove it from the workfile.

If you do not remove the duplicate workfile transaction from the workfile, the system continues to display the transaction on the Workfile Revisions form. You might bill for the transaction in error if the eligibility code for the transaction is ever changed back to billable.

► To enter ad-hoc workfile transactions

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, click Add.

2. On Workfile Entry, complete the following fields:
 - G/L Date
 - Account Number
3. Complete the following optional fields for the new transaction:
 - Subledger/Type

- Eligibility Code
 - Currency Code
 - Re-Extend Option
4. Enter appropriate amounts in the following fields:
- Units/Rate
 - Cost Amount
 - Ovr Rate/Cap
 - Mark Up %
 - Mark Up Amount
 - Inv. Taxable Amt
 - Total Invoice
 - Discount %
5. Enter appropriate revenue amounts in the following fields, if applicable:
- Rev Rate/Cap
 - Rev Mark Up %
 - Rev Markup Amt
 - Revenue Amount
6. Complete the following optional fields that further define your ad hoc workfile transaction:
- Home BU
 - Job Type
 - Empl/Supp
 - Job Step
 - Explanation
 - Remark
7. Click OK.

Field	Explanation
G/L Date	<p>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.</p> <p>The system edits this field for PBCO (posted before cutoff), PYEB (prior year ending balance), and so on.</p>

Field	Explanation
Account Number	<p>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.</p> <p>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.</p> <p>Security for this field can prevent you from locating business units for which you have no authority.</p> <p>Note: The system uses the job number for journal entries if you do not enter a value in the AAI table.</p>
Subledger/Type	<p>A code that identifies a detailed auxiliary account within a general ledger account. A subledger can be an equipment item number or an address book number. If you enter a subledger, you must also specify the subledger type.</p>
Eligibility Code	<p>A user defined code that determines how a transaction is processed. This code controls the operation at the single-transaction level. Valid values are:</p> <ul style="list-style-type: none"> 0 Available for invoicing and revenue. 1 Available for invoicing only. 2 Available for revenue only. 3 Non-billable. 4 Available for cost only. 5 Available for A/P only. (OneWorld CSMS Only) <p>The system assigns eligibility codes to workfile transactions based on the Billable (Y/N) field in the Account Master table and the Journal Generation Control field that you set up in your system constants. For example, if an account with a Y in the Billable (Y/N) field is processed through the billing system and the Journal Generation Control field is set for billing only, the eligibility code for the transaction is 1. An eligibility code of 1 indicates that the transaction is available for invoicing only.</p>
Currency Code	<p>A code that indicates the currency of a customer's or a supplier's transactions.</p>

Field	Explanation
Re-Extend Option	<p>You re-extend a transaction when you want to change or reapply the markup for the transaction based on your specific overrides or on the information that you have defined in the markup tables. The valid values are:</p> <ol style="list-style-type: none"> 1 Reapply the established invoice markup rates from the Billing Rate/Markup Table. The revenue amount is not changed. 2 Reapply the established revenue markup rates from the Billing Rate/Markup Table. The invoice amount is not changed. 3 Use the rates or amounts entered in the Amounts/Units Information window or on the Revisions form. Do not apply the established invoice or revenue markup rates from the Billing Rate/Markup Table. blank Reapply both the invoice and revenue markup rates using the established rates from the Billing Rate/Markup Tables. <p>Note: You cannot use options 1 or 2 when the Independent Invoice flag in the system constants specifies that the invoice and revenue amounts must be the same.</p>
Units/Rate	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.
Cost Amount	A number that identifies the actual amount. Enter debits with no sign or a plus sign. Enter credits with a minus sign either before or after the amount. You can use decimals, dollar signs, and commas. The system ignores nonsignificant symbols.

Field	Explanation
Ovr Rate/Cap	<p>The rate the system uses to mark up the invoice amount reflected in the billing of professional services such as draftsmen, engineers, or consultants fees. This rate does not affect the employee's paycheck.</p> <p>You can use this markup rate as an override rate or as a maximum rate. The Override Rate Calculation for the Total Invoice Markup is:</p> $(\text{Override Rate} * \text{Unit}) * (1 + \text{Markup Percent}) + \text{Markup Amount}$ <p>When a Maximum or Cap Rate is Specified: Compare override rate with rate from cost transaction. Use the lower rate as the override rate.</p> <p>You can set up this override or maximum unit rate on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup rates.</p> <p>With the new Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than the invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the markup table form to specify a markup table for revenue and invoice markup rates.</p>
Mark Up %	<p>The percentage the system uses to mark up the invoice amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. Enter the percentage as a whole number. For example, 50.275 percent would be entered as 50.275. This percentage rate does not affect the employee's paycheck.</p> <p>You set up this percentage on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup percentage rates.</p> <p>With the Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the the markup table form to specify a markup table for revenue and invoice markup rates.</p>

Field	Explanation
Mark Up Amount	<p>An amount the system uses to mark up the invoice amount reflected in the billing of professional services such as draftsmen, engineers, or consultants fees. This amount will not affect the employee's paycheck.</p> <p>You define this amount on the Billing Rate/Markup Table form. Use generation type 1 to specify a table for invoice markup amounts.</p> <p>With the Service Billing and Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount. The Independent Invoice flag in the system constants controls this function. Use generation type 2 on the markup table form to specify a markup table for revenue and invoice markup rates.</p>
Inv. Taxable Amt.	The portion of the invoice amount that is subject to tax.
Total Invoice	The invoice amount for a billing detail transaction.
Discount %	The percent of the total invoice that you will discount if the invoice is paid within the discount period. You enter the discount percent as a decimal, for example, a 2 percent discount is .02.
Rev Rate/Cap	<p>The rate the system uses to mark up the revenue amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This rate does not affect the employee's paycheck. You can use this markup rate as an override rate or as a maximum rate.</p> <p>The Override Rate Calculator for the Total Revenue markup is:</p> $(\text{Override Rate} * \text{Unit}) * (1 + \text{Markup \%}) + \text{Markup Amount}$ <p>When you specify a Maximum or Cap Rate, the system compares the override rate with the rate from the cost transaction and uses the lower rate as the override rate.</p> <p>You set up the override/maximum unit rate in the Cost Plus Markup Table (World) using generation type 1 to specify a table for revenue/invoice markup rates.</p> <p>You can mark up the revenue amount at a different rate than the invoice amount by using the Billing Rate/Markup Table with a generation type 2. The value in the Independent Revenue/Invoice field in the constants controls this function.</p>

Field	Explanation
Rev Mark Up %	<p>The percentage you use to mark up the revenue amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This percentage rate will not affect the employee's paycheck. This percentage rate is set up in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup percentage rates.</p> <p>Enter percentages as whole numbers. For example, 50.275% would be entered as 50.275.</p>
Rev Markup Amt	<p>An amount used to mark up the revenue amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This amount will not affect the employee's paycheck. This amount is set up in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup amounts. This amount is set up in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup amounts.</p> <p>With the Service Billing/Contract Billing modules, you can mark up the revenue amount at a different rate than invoice amount using the Billing Rate/Markup Table with a generation type 2. The Independent Invoice flag in the constants controls this function.</p>
Revenue Amount	The revenue amount for a billing detail transaction.
Home BU	The number of the business unit in which the employee generally works.
Job Type	A user defined code (07/G) that defines the jobs within your organization. You can associate pay and benefit information with a job type and apply that information to the employees who are linked to that job type.
Empl/Supp	A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, a location, and any other address book members.
Job Step	A user defined code (07/GS) that designates a specific level within a particular job type. The system uses this code in conjunction with job type to determine pay rates by job in the Pay Rates table.
Explanation	A description, remark, explanation, name, or address.
Remark	A name or remark that describes an element in the J.D. Edwards systems.

See Also

- *Moving a Workfile Transaction to the Workfile History Table* for more information about changing the status of a transaction to non-billable.

Assigning a Hold Status

If you are not ready to process a workfile transaction, you can put the transaction on hold. You can hold a transaction indefinitely, or you can specify a release date. When you put a workfile transaction on hold, the transaction remains in the Billing Workfile, but the system does not process it until the release date. The release date is compared to the system date to determine when the system can include it in normal billing processing. The system stores the release date as part of the audit trail for the workfile transaction.

To assign a hold status

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See Reviewing Workfile Transactions.
2. Choose a specific transaction and click Select.
3. On the Additional tab of Job/Amount Revisions, complete the following fields, entering a release date if necessary:
 - Hold Cd/Release Date

Note: If you assign a hold status to a workfile transaction with associated burden transactions, component transactions, or both, the system automatically assigns the hold to all the related transactions.

Field	Explanation
Hold Cd/Release Date	<p>A code that identifies the type of hold status applied to a billing detail transaction.</p> <p>Valid alpha values are:</p> <ul style="list-style-type: none"> Blank Not on hold. A On hold for invoicing, revenue recognition, and cost transfers. B On hold for invoicing and revenue recognition. Cost transfers are not allowed. I On hold for invoicing only. Revenue recognition and cost transfers are allowed. R On hold for revenue recognition. This value applies only when the Journal Generation Control flag in the system constants is set to process revenue only. <p>Valid numeric values are:</p> <ul style="list-style-type: none"> Blank Not on hold. 1 On hold for invoicing, revenue recognition, and cost transfers. 2 On hold for invoicing and revenue recognition. Cost transfers are allowed. 3 On hold for invoicing only. Revenue recognition and cost transfers are allowed. 4 On hold for revenue recognition. This value applies only when the Journal Generation Control flag in the system constants is set to process revenue only.

Splitting a Workfile Transaction

After you generate the workfile, you can split a workfile transaction into two new workfile transactions. You can split a transaction by a specific currency amount, unit amount, or a percent.

You might want to split a transaction so that you can process one of the new transactions for billing, but not the other. For example, an employee works overtime and is paid at twice the regular hourly rate. If you need to invoice the employee's time at the regular rate, you can split the workfile transaction into two equal portions. One portion can be billable and the other non-billable.

The system allows you to choose whether to use the units or an amount for the basis for the split. You can also designate whether to use an amount or a percentage when performing the split calculation.

You cannot split payroll transactions that include associated burden nor can you split burden transactions.

When you split a workfile transaction, the system:

- Displays two new transactions. The amounts and units for the new transactions equal that of the transaction prior to the modification.
- Moves a copy of the workfile transaction prior to the modification to the Billing Workfile - History for audit purposes.
- Assigns sequence numbers to all the related workfile transactions. The billing control ID (BCI) remains the same for the resulting workfile transactions. You can review the sequence numbers and control ID in the internal information for this workfile transaction.
- Splits associated component workfile transactions.

When you split a workfile transaction with a hold code, the system assigns the hold code and released date information to the resulting new transactions. See *Assigning a Hold Status* for more information about hold codes.

► To split a workfile transaction

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*.

2. Choose Transaction Split from the Row menu for a specific workfile transaction.

Workfile Revisions - [Workfile Split Basis]

File Edit Preferences Window Help

Can... Dis... Algo Links Displ... OLE... Internet

☐ Foreign

Amount Basis

☒ Units 4.00

☐ Cost Amount 86.54

☐ Inv Taxable Amount 280.00

☐ Revenue Amount

Amount/Percent for Record1

☒ Split Percent 0.00

☐ Split Amount

Calculation Preview / Perform Split

3. On Workfile Split Basis, complete one of the following from Amount Basis:

- Units
 - Cost Amount
 - Inv Taxable Amount
 - Revenue Amount
4. Complete one of the following fields from Amount Percent for Record 1:
 - Split Percent
 - Split Amount
 5. Click Split Calculation Preview/Perform Split to view the results of the split calculation. You may click Cancel to return to Workfile Split Basis as many times as necessary to achieve the split results you want.
 6. On Workfile Split Amounts, click OK when you've achieved your desired split results.

The actual splitting of the workfile transaction will not occur until you click OK.

Field	Explanation
Split Percent	A value that specifies the amount or percent for Split Record 1. Enter an amount or percent. 0 The value is an amount. 1 The value is a percent.
Split Amount	A value that specifies the amount or percent for Split Record 1. Enter an amount or percent. 0 The value is an amount. 1 The value is a percent.

Moving a Workfile Transaction to the Workfile History Table

You can move a transaction out of the active Billing Workfile if the transaction does not belong in the workfile. Before you can move a transaction out of the workfile, the status for the transaction must be non-billable. You make a workfile transaction non-billable by updating the eligibility code to a 3.

When you move a transaction to workfile history, the system:

- Copies the transaction to the Billing Workfile History (F4812H) for audit purposes
- Removes the transaction from the active Billing Workfile (F4812)

Workfile transactions that you move to history do not appear on the Workfile Revisions form. You must use the Workfile History Inquiry to view workfile transactions removed from the Billing Workfile and added to Workfile History.

You also use the Workfile History Inquiry to re-activate workfile transactions you have moved to history. See *Working With Workfile History*.

Note: The system does not remove the original transaction from the Account Ledger table.



To move a transaction to workfile history

From the Workfile Processing menu (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*.

2. Choose a specific transaction and click Select.
3. On Job/Amounts Revisions, change the following field to make it non-billable and click OK:
 - Elig Code
4. Click Find on Work With Workfile.
5. Choose the specific workfile transaction and click Delete. The workfile transaction will be deleted from the Billing Workfile (F4812) and added to the Workfile History (F4812H).

Field	Explanation												
Elig Code	<p>A user defined code that determines how a transaction is processed. This code controls the operation at the single-transaction level. Valid values are:</p> <table><tr><td>0</td><td>Available for invoicing and revenue.</td></tr><tr><td>1</td><td>Available for invoicing only.</td></tr><tr><td>2</td><td>Available for revenue only.</td></tr><tr><td>3</td><td>Non-billable.</td></tr><tr><td>4</td><td>Available for cost only.</td></tr><tr><td>5</td><td>Available for A/P only. (OneWorld CSMS Only)</td></tr></table> <p>The system assigns eligibility codes to workfile transactions based on the Billable (Y/N) field in the Account Master table and the Journal Generation Control field that you set up in your system constants. For example, if an account with a Y in the Billable (Y/N) field is processed through the billing system and the Journal Generation Control field is set for billing only, the eligibility code for the transaction is 1. An eligibility code of 1 indicates that the transaction is available for invoicing only.</p>	0	Available for invoicing and revenue.	1	Available for invoicing only.	2	Available for revenue only.	3	Non-billable.	4	Available for cost only.	5	Available for A/P only. (OneWorld CSMS Only)
0	Available for invoicing and revenue.												
1	Available for invoicing only.												
2	Available for revenue only.												
3	Non-billable.												
4	Available for cost only.												
5	Available for A/P only. (OneWorld CSMS Only)												

Printing Workfile Transactions

From the Daily Processing menu (G48S11), choose Workfile Print.

You can review workfile transactions online using Work With Workfile. You can also generate a report that prints a list of selected transactions. You might want to use this report for a number of reasons, including:

- As an exception report, for example, to print all of the transactions that have not been invoiced
- As a comparison with the detail in the Account Ledger

To compare the workfile transactions to the detail in the Account Ledger, you can review the Account Ledger online using Account Ledger Inquiry, or you can print the G/L by Object Account report.

If you find a discrepancy, you should make the necessary changes to the Billing Workfile table before you continue with the billing process.

This report includes the following columns:

- G/L Date
- Cost
- Units
- Rate
- Billed Amount
- Account Number
- Subledger
- Contract
- Job Type
- PDBA Code
- Employee/Supplier
- Equipment
- Journal Batch
- Invoice Batch
- Invoice
- Pay Item

See Also

- *R48405, Workfile Print* in the Reports Guide for a report sample

Printing Workfile Totals

This report will print the totals based on the selected transactions on Work With Workfile and will sort by the following order:

- Currency Mode
- Domestic Currency
- Foreign Currency (if currency is on)

To print workfile totals

From the Daily Processing menu (G48S11), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*.

2. After completing any or all fields in the detail section, choose Totals from the Form menu.

See Also

- *R48TW, Workfile Totals* in the Reports Guide for a report sample

Working with Workfile History

For every revision of a transaction that you create as you process workfile transactions, the system stores a copy of the previous transaction. You can review this audit trail to see all the changes you have made to a transaction.

Working with the workfile history includes the following tasks:

- ☐ Reviewing transaction revisions
- ☐ Moving a transaction out of history

As you review the workfile history, you can reactivate eligible transactions. When you reactivate a transaction, you move it from history back to the active workfile. For example, if you move a transaction to history in error, the transaction is eligible to be moved back to the workfile. After you move the transaction back to the workfile, you can include the transaction on an invoice.

To maintain the integrity of the workfile, the system determines whether a transaction is eligible for reactivation based on the billing control ID number and a combination of other factors.

The following transactions are not eligible for reactivation:

- Invoiced transactions
- Voided transactions
- Transactions copied to history during the modification process

Reviewing Transaction Revisions

For every revision of a transaction that you create as you process workfile transactions, the system stores a copy of the previous transaction. You can review this audit trail to see all the changes that you have made to a transaction. The system displays the revision history of a transaction starting with the most recent revision to the original transaction.

To review transaction revisions

From Workfile Processing (G5211), choose Workfile Revisions.

1. On Work With Workfile, complete the steps for reviewing workfile transactions.

See *Reviewing Workfile Transactions*.

2. Choose Transaction Inquiry from the Row menu for a specific transaction.
3. On Inquire Workfile History, review the revision history for the transaction.

Moving a Transaction Out of History

As you review the workfile history, you can move transactions that you previously assigned as nonbillable out of history. When you move a transaction out of history, you reactivate the transaction. When you reactivate a transaction, the system:

- Makes the transaction and all its associated tax and text eligible for processing
- Marks the historical transaction as reactivated
- Moves a copy of the historical transaction from the Billing Workfile History table to the Billing Workfile table

► To move a transaction out of history

From Workfile Processing (G5211), choose Workfile History Inquiry.

GL Date	C	B	Customer	Contract Number	Con Typ	Contract Company	Chg No	Billing Line	Business Unit
4/30/05	X		150						6100 134
4/30/05			150						6100 134
4/30/05			150						6100 134
4/30/05			150						6100 134
4/30/05			150						6100 134
6/11/05	X		150						6100 134
6/11/05	X		150						6100 134
6/11/05	X		150						6100 134
6/11/05	X		150						6100 134
6/11/05	X		150						6100 134

1. To locate a transaction on Work with Detail History, complete any of the following fields:

On the General tab:

- Customer
- Account Number

On the Internal tab:

- Billing Control ID

On the People tab:

- Supplier number

2. Choose the transaction and choose Reactivate from the Row menu.

After you reactivate a transaction, the system continues to display the transaction on Work with Detail History until you click Find.

Note: Reactivated transactions are nonbillable when they return to the active workfile. You must manually update the billing status before you can complete the billing process for the transaction.

Processing Options for Detail History

DISPLAY OPTIONS:

1. Enter a '1' to display all history records (default). Enter a '2' to display only the records that are eligible for re-activation. _____
2. Enter a '1' to load all records that meet the search criteria. Leave blank (default) to load two pages at a time (this improves performance). _____
3. Enter the amount to initially display on the screen. All amounts can be accessed using the toggle function. _____
 '1' = Base Revenue (default)
 '2' = Base Invoice
 '3' = Total Revenue
 '4' = Total Invoice
 '5' = Base Cost
 '6' = Total Cost

Invoice Processing



Contract Billing Invoice Processing

Invoice processing consists of the following topics:

- ☐ Understanding invoice processing
- ☐ Generating invoices automatically
- ☐ Working with invoice batches
- ☐ Posting the invoice batches
- ☐ Posting associated G/L batches
- ☐ Printing invoices
- ☐ Working with invoice history



Understanding Invoice Processing

Understanding invoice processing consists of the following topics:

- ☐ About the the invoice generation process
- ☐ Selecting versions and modes for invoice generation
- ☐ Using interactive versions in invoice generation
- ☐ Journal reclassification
- ☐ Associated G/L batch processing
- ☐ Document types for invoice processing
- ☐ Revising override dates

About the Invoice Generation Process

When the system initially creates workfile transactions for the billing workfile, they are undifferentiated, generic transactions. Although they contain the key information you need to create invoices, they have not been separated and assigned to a specific invoice number.

The Contract Billing system allows you to create invoices automatically or manually. When you run Invoice Generation from the Invoice Processing menu, you are creating invoices automatically. When you use Create Batch from the form menu on Work With Batches, and Create Invoice from the form menu on Work With Invoices, you are creating invoices manually.

The term invoice has two meanings in the Contract Billing system:

- Information that the system generates from the workfile transactions in the Contract Billing Workfile (F4812) and the summarized invoice information in the Invoice Summary Workfile (F4822).
- A copy of the invoice that you print for customers. The system prints invoices based on the invoice layouts that you define using Invoice Format Revisions.

Note: Workfile transactions supporting T&M billing are created during workfile generation. Workfile transactions supporting non-T&M billing (lumpsum, unit price, milestone, progress, fees) are calculated during invoice generation.

After the system creates the workfile transactions that contain the information for creating T&M invoices, the next step is to generate invoices.

A typical Contract Billing invoice process might consist of the following steps:

- Invoice Generation
- Printing Draft Invoices
- Maintaining Invoice Information
- Generate Preliminary Journal Entries
- Create Final Journal Entries
- Post Invoice Journal Entries to G/L
- Printing Final Invoices

Invoice Generation

When you run Invoice Generation from the Invoice Processing menu, the system automatically summarizes the selected workfile transactions (F4812) into the Invoice Summary Workfile (F4822). The system uses the billing lines you have defined for the contract to control how the workfile transactions will be summarized. The system uses the Invoice Summary entries to create A/R Ledger transactions (F0311/F03B11) when Create A/R is run. See *Generating Invoices Automatically* for additional information.

The billing system also allows you to create invoice information manually. You can manually create an invoice batch, create invoices within a batch, and manage the pay items by merging existing workfile transactions or adding ad hoc workfile transactions directly into the invoice. See *Adding Invoice Information* for additional information.

When you create an invoice automatically or manually, the system provides the following option to control how the invoice is created:

- | | |
|--------------|---|
| Blank | Create invoices for contracts only with billing activity. This prevents an invoice with all amounts equal to zero from being created. |
| 1 | Create invoices regardless of billing activity. Invoices with all amounts equal to zero will be created. |
| 2 | Create invoices with all amounts initialized to zero, regardless of billing activity. |

Note: When you create invoice information manually, you cannot automatically run the Invoice Journal Generation or Create A/R when creating an invoice batch. You must call these processes from Batch Review.

Printing Draft Invoices

You use the Invoice Print program to print invoices for your customer. This program is used to print draft or final invoices. The timing of when these invoices are printed determines the draft or final status. Invoices printed before you Create A/R are considered draft invoices. Invoices printed after Create A/R are considered final invoices.

You print draft invoices to allow your project or account manager to verify the accuracy of invoice information prior to mailing to a customer. This draft invoice information is retrieved from the Billing Workfile (F4812). If errors are detected, you can make corrections to the invoice, usually without having to delete the entire batch of invoices. See *Printing Invoices* for additional information.

Maintaining Invoice Information

The billing system allows you to maintain invoice information at four levels, as outlined below:

Task Level	Action Allowed
Batch	Create a batch header automatically or manually
	Revise a batch header - reset batch status or current activity
	Delete a batch header - remove batch header and all associated invoice information
Invoice	Create invoices automatically
	Add invoices to existing batch manually
	Delete Invoice from batch
Pay Item	Create invoice pay items automatically
	Add pay items to invoice manually
	Delete pay items from invoice
	Revise existing pay item on invoice

Task Level	Action Allowed
Workfile Transaction	Summarize workfile transactions for pay item automatically
	Create ad-hoc workfile transactions for pay item
	Merge existing workfile transactions for pay item
	Remove workfile transactions from pay item

For example, if you have an invoice batch with 200 invoices, yet your project manager notices that an invoice amount is incorrect, then there are incorrect charges to this customer. To correct this situation, you can select an invoice batch from Batch Revisions, select the specific invoice in error, choose the pay item you need to change, and remove the workfile transactions that are being disputed for the particular pay item. The invoice will reflect the new amounts and the disputed workfile transactions will stay in the billing workfile for you to correct and invoice at a later date. See *Working With Invoice Batches* for additional information.

Generate Preliminary Journal Entries - Invoice Journal Generation

The system creates preliminary invoice journals for a selected invoice batch. The workfile transactions are processed against the Billing AAI's to create detail journal accounting entries (F48S910). These detail accounting entries are then compressed into summarized accounting entries (F48S911). The system uses the summarized accounting entries to create the Account Ledger (F0911) transactions for invoice journals when Create A/R is run.

The system uses the A/R and G/L functional servers to edit the summarized accounting entries. The Invoice Summary transactions are temporarily added to the summarized accounting entries (F48S911) to ensure balanced accounting entries.

Note: The Invoice Journal Generation is a batch process. The invoice batch is processed as a unit. If one or more errors are detected, the billing system sets the invoice batch to an error status. You must correct the error condition and re-run Invoice Journal Generation. You may run Invoice Journal Generation as many times as necessary until all errors are corrected.

Create Final Journal Entries - Create A/R

The system creates final invoice accounting entries when you run Create A/R to process your invoice information from the Contract Billing system to the A/R and G/L systems. The system updates the A/R Ledger (F0311/F03B11) and Account Ledger (F0911) transactions, from the Invoice Summary Workfile (F4822) and Summarized Journal Workfile (F48S911), respectively. The billing system uses the

A/R functional server and G/L functional server to validate all accounting information.

The Create A/R is a batch process. The invoice batch is processed as a unit. If one or more errors are detected, no invoices will be processed to the A/R and G/L systems. The billing system sets the invoice batch to an error status. You must correct the error conditions, and then re-run Create A/R. You may run Create A/R as many times as necessary until all errors are corrected and invoice information can be processed to the A/R and G/L systems.

Note: Create A/R writes the invoice information to the A/R and G/L systems. You must run the Post Invoices to G/L program to post the transactions, create automatic offsets, and update the posted codes and batch status.

Post Invoices to G/L

You select the Post Invoices to G/L to post the invoice batch. The system performs the following tasks during the post process:

- Selects the data to post
- Validates information and processes errors
- Creates automatic offsets
- Posts transactions
- Updates the posted codes and batch status

See *Understanding the Post Process for A/R* in the OneWorld Accounts Receivable guide for additional information.

Printing Final Invoices

You use the Invoice Print program to print invoices for your customer. This program is used to print draft or final invoices. The timing of when these invoices are printed determines the draft or final status. Invoices printed before you Create A/R are considered draft invoices. Invoices printed after Create A/R are considered final invoices.

You print final invoices to send to a customer for goods or services rendered. Printing final invoices retrieves invoice information from the Billing Workfile History (F4812H). You would also use this process to reprint invoices as necessary.

It is recommended that you print your final invoices after the Create A/R program has completed and the Post Invoices To G/L program has successfully posted the invoice batch. Printing invoices after A/R information has been processed ensures that the information printed on the invoice matches the invoice information created in the A/R Ledger.

Note: If you print final invoices prior to completing Create A/R and the Post Invoices To G/L processes, you run the risk of inadvertently modifying the invoice information that you printed and mailed to the customer.

Selecting Versions and Modes for Invoice Generation

You must choose the appropriate version of the Invoice Generation program to create invoices, and optionally print the invoices and create accounting entries. Choose one of the following versions, based on your process:

Invoice Generation - No Journals Created	Use this version when you need to create invoices only. No journal accounting entries for A/R and G/L will be created.
Invoice Generation - Journals in Proof Mode	Use this version when you need to create invoices and create journal accounting entries for A/R and G/L in PROOF mode.
Invoice Generation - Journals in Final Mode	Use this version when you need to create invoices and create journal accounting entries for A/R and G/L in FINAL mode.

You would run the Journals in proof mode to review any accounting errors while you are reviewing the invoices for accuracy. You would run the Journals in final mode if you do not need to review the accounting entries or invoices.

Note: If the system detects any errors when running in final mode, it will prevent the accounting entries from being updated to A/R and G/L.

Using Interactive Versions in Invoice Generation

When you set up processing options for Invoice Generation and you choose to create journals in proof or final, you can specify versions for Accounts Receivable (A/R) and General Ledger (G/L) processing. To review the processing options that affect A/R and G/L processing, you must inquire on the A/R and G/L interactive batch versions.

The Contract Billing system allows you to control which version to use in the processing options of the Journal Edit Register (R48300). This program performs all edits and updates for A/R and G/L accounting entries in the billing system. When you run Journal Generation or Create A/R to process the accounting entries, the version of the Journal Edit Register will run.

From the System Administration Tools menu (GH9011), choose Interactive Versions and inquire on the following interactive applications:

**A/R Master Business
Function (P03B0011)**

The system will use version ZJDE0001 if left blank.

**G/L Master Business
Function (P0900049)**

The system will use version ZJDE0001 if left blank.

Journal Reclassification

Depending how you set the billing constants to allow journal reclassification and the processing options for the Workfile Revisions form, you can reclassify, or change the account information for, a workfile transaction.

Journal reclassification exists within the billing product to allow you to reclassify the original cost entry to a different account and let the system automatically create the correcting entries in the Account Ledger (F0911).

When you set up your billing constants to allow journal reclassification, the system creates the correcting journal entries in the Account Ledger Table (F0911) during journal creation.

For example, an employee might charge time to two different work orders during a pay period. When entering time for the pay period, the employee makes an error. After the accounting department processes payroll transactions, you review the costs and discover the employee's data entry error.

You correct the error by changing the work order numbers on the workfile transactions in the Billing Workfile. With journal reclassification, when you run G/L Journal Generation, the system creates correcting journal entries along with the preliminary journal entries for revenue and costing. The system creates adjusting journal entries in the Account Ledger to reverse the original account and update the new account.

You can identify the correcting journal entries by their document type. The system also uses the same pay type (PDBA code) of the workfile transaction for journal reclassification, such as 101 for regular pay, unless you use the PDBA code override in the billing constants.

In addition to creating adjusting entries in the Account Ledger, if you are correcting a workfile transaction that originated from payroll, the system creates an adjusting entry in the Payroll Transaction History file (F0618) during the Create G/L Entries process. These preliminary correcting entries are stored in the P/R Journal Reclassification Workfile (F48S0618) until the Create G/L process is completed.

Associated G/L Batch Processing

When you process an invoice batch and need to create G/L journal entries to support cost reallocation and reclassification journal entries, the system creates a associated G/L batch. This associated G/L batch is assigned to the invoice batch and contains the G/L journal entries associated with the invoice journal entries.

The associated G/L batch is written to the Account Ledger during the Create A/R process when the invoice journal entries are also written to the A/R Ledger and Account Ledger.

Note: The journal entries in the associated G/L batch are not voided if the invoice is voided.

Document Types For Invoice Processing

As you complete the invoicing process, the system can create the following different types of G/L entries. You can identify the origination of journal entries using the following document types:

RI - Invoice Entry	Document type assigned during Invoice Generation.
RM - Credit Memo	Document type assigned when you create credit memo.
EU - G/L Journal Entry	Journal entry created during associated G/L journal processing for revenue sharing or cost transfers associated with invoice information.
AJ - G/L Journal Entry Adjustment	Adjusting journal entry for journal entries previously processed. Created during associated G/L journal processing. Used only if revenue recognition is used.
BA - Billing Adjustment	Reclassification journal entry that originated from general accounting. Created during associated G/L journal processing.
T2 - Payroll Labor Distribution	Reclassification journal entry that originated from payroll labor.
T4 - Labor Billing Distribution	Reclassification journal entry that originated from labor billing. Created during associated G/L journal processing.

**T5 - Equipment
Distribution**

Reclassification journal entry that originated from equipment billing. Created during associated G/L journal processing.

Revising Override Dates

The system allows you to generate invoices independently of creating final journal entries. You assign the invoice and G/L date at the time you generate invoices. You can revise the G/L date and/or invoice date prior to creating final journal entries.

You would use this function if the timing between the original date assignments during invoice generation and creating final journal entries could cause a misrepresentation of aging information in the Accounts Receivable Ledger.

You use a system constant to control when the system displays the Date Override Window on Invoice Journal Generation. You can set the constant so that the system does one of the following:

- Always displays the window
- Only displays the window when you choose Override Date
- Never displays the window

The date that the system displays in the Date Override Window is always the current system date.

Generating Invoices Automatically

From the Invoice Processing menu (G5221), choose Invoice Generation.

When you run Invoice Generation from the Invoice Processing menu, the system automatically summarizes the selected workfile transactions (F4812) into the Invoice Summary Workfile (F4822). The system uses the Sequence/Summarization rules you have defined to control how the workfile transactions will be summarized into the Invoice Summary Workfile (F4822). The system uses the Invoice Summary entries to create A/R Ledger transactions (F0311/F03B11) when Create A/R is run.

Note: Workfile transactions supporting T&M billing are created during workfile generation. Workfile transactions supporting non-T&M billing (lump sum, unit price, milestone, progress, fees) are calculated when you generate invoices automatically if you have set up cross-reference information.

You can define recurring billing invoices for lump sum billing lines. When you generate invoices, the system calculates the recurring amount if you have specified from one to five recurring codes in the processing options and you have not initialized the invoice amount to zero.

During invoice generation, the system performs the following:

- Creates a billing batch header record (F48011). The current activity field is set to 1, indicating that invoice generation is in progress.
- Uses processing options and data selection criteria to select workfile transactions (F4812) to summarize into the Invoice Summary Workfile (F4822) for T&M billing lines. The workfile transactions are updated with the invoice information (batch number, invoice number, pay item, document type, invoice date) to indicate these transactions are included in an invoice.
- Creates workfile transactions to support non-T&M billing lines with cross-reference information and updates the Invoice Summary file (F4822).
- Uses the contract billing lines you have defined to control the invoice and pay item summarization logic.
- Retrieves the customer and G/L Offset from the contract to assign to the invoice.
- Updates the contract master with the invoice batch number. Because of the cumulative nature of contract billing, a contract cannot participate in more than one invoice batch at a time.

- Calls Invoice Journal Generation to create preliminary journal entries or Create A/R to create final journal entries if version is entered in the processing options.
- Updates the billing batch header (F48011) with the currency amount and the number of documents in the batch when Invoice Generation completes. The current activity field in the batch header is reset to 0 to allow additional processes to be performed against this batch.

Note: This step will not be performed if you enter a version to run Create A/R automatically from Invoice Generation and no errors are detected, as the billing batch header will be deleted.

Reviewing Reports For Errors

When you generate invoices, the system assigns invoice numbers and summarizes active workfile transactions to create pay items. 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).

After you run the Invoice Generation program, the system generates a report that includes the following information:

- Contract number, invoice number and related pay items
- Totals by invoice
- Batch number
- Any applicable tax information

Considerations

Calculating invoice amounts for lump sum, unit price, or fee

When you create invoices automatically, the system processes workfile transactions related to time and materials, including components. At this time, the system can also calculate the invoice and fee amounts for non-T&M billing lines such as lump sum if you have defined cross-reference information for the respective billing lines.

Calculating invoice amounts for milestones or progress

When you complete a milestone for a contract, you must enter the date in the Actual Complete field for the billing event. At this time, the system updates the Complete Yes field to Y. You can then invoice for the milestone at the percentage you have specified.

When you generate invoices, the system compares the cut-off date for the invoice generation with the actual completion date. If the generation date is the same or later, the system processes the billing event for the milestone billing line. At this point, the billing process, you cannot change the billing amount.

After the system invoices for an event, it updates the Billed Yes field to Y. At this point, the billing event is protected and you can no longer change the information for the event.

Recurring invoices

You can define recurring invoices for lump sum billing lines. When you generate invoice amounts, the system calculates the recurring amount if:

You have specified from one to five recurring codes in the processing options

You have not initialized the invoice amount to zero.

Before You Begin

- Define the billing constants.
- Define the contract, billing lines, and cross-reference information.
- Generate workfile transactions for T&M billing.
- Modify versions if you want to print invoices or create journal entries during invoice generation.

See Also

- *Printing Invoices Automatically*
- *Setting Up Invoice Formats*

Processing Options: Service Billing Invoice Generation (R48121)

Defaults Tab

1. Document Type

Use this processing option to define the default document type for invoice generation. Enter a document type to use as the default or select it from the Select User Defined Code form. Valid values are:

Blank Use default document type from Billing Constants

UDC 00/DI

2. G/L Date

Use this processing option to enter the G/L Date for invoice generation. The system assigns this date during invoice generation, and it is used when posting the invoices to the general ledger files. If you leave this field blank, the application uses the system date. This date is validated against the current fiscal period identified in the company constants.

3. Invoice Date

Use this processing option to enter the Invoice Date for invoice generation. The system assigns this date to the invoices during invoice generation. If you leave this field blank, the application uses the system date. This date is validated against the G/L Date. If the Invoice Date is greater than the G/L Date, the system issues a warning.

Select Tab

1. Bill From Date

Use this processing option to enter the Bill From Date for invoice generation. The application uses this date to select billing detail transactions. If this date is left blank, all billing detail transactions with a Table Basis Date less than the Bill Through Date are selected for invoice generation.

2. Bill Through Date

Use this processing option to enter the Bill Through Date for invoice generation. The application uses this date to select billing detail transactions. If this date is left blank, all billing detail transactions with a Table Basis Date greater than or equal to the system date are selected for invoice generation.

Process Tab

1. Invoice/Pay Item Structure Key (Required)

Use this processing option to enter the Invoice/Pay Item Structure key. You must use this key to identify the level breaks and sequencing when assigning the invoice/pay item information to the billing detail transactions.

2. Invoice Journal Generation Version (R48131)

Use this processing option to control whether the system generates journals in proof mode. Enter the version of the Invoice Journal Generation (R48131) to run. If you leave this field blank, the Invoice Journal Generation will not be run.

Note: If you enter a version, the system will ignore any version entered for Create A/R Entries.

3. Create A/R Entries Version (R48199)

Use this processing option to control whether the system generates journals in final mode. Enter the version of the Create A/R Entries (R48199) to run. If you leave this field blank, the Create A/R Entries will not be run.

Note: If you enter a version for Invoice Journal Generation, the system will ignore any version entered here.

Print Tab

1. Invoice Print Version (R48504)

Use this processing option to control the printing of the invoice. Enter the version of the Invoice Print program (R48504). If you leave this field blank, the system will not print invoices during invoice generation.

Currency Tab

1. Exchange Rate Date Basis

Use this processing option to identify the date the system uses to retrieve the exchange rate for invoice generation. Valid values are:

- 1 Use the Invoice date (default).
- 2 Use the G/L date.

Working with Invoice Batches

The Batch Review is the central location for accessing all batches in the billing system. A batch is a group of transactions that the system processes and balances as a unit. When you select Invoice Generation from the Invoice Processing menu, the system creates a batch of invoices. Batch Header information is stored in the Billing Batch Header file (F48011).

You use this form to select the batch of transactions to prepare it for further processing. For example, if you print invoices for review by project managers, you can use the batch review process to make any corrections.

The system uses the current activity flag in the batch header to control the processes for a particular batch. The system updates the current activity while the batch is actively being processed. For example, you select a batch and run the Journal Edit Register, the system updates the current activity, indicating the batch is actively being processed. This setting prevents other users from accessing this batch until the Journal Edit Register process has completed, at which time the system will reset the current activity back to 0. The batch is then available for subsequent processing.

You will need to reset the current activity manually for the following situations:

- If a batch process does not complete successfully, the system does not reset the current activity.
- If you select a batch for processing and then cancel the batch processing action from the Report Output Destination form.

Use Batch Header Revisions from the row menu to revise the current activity of a batch. For example, you might need to do this if the generation program does not complete normally due to power failure. In this case, the current activity status would prevent you from accessing the batch for further processing. See *Batch Header Revisions* for additional information on resetting the current activity for a batch header record.

Note: If you delete a batch, the system does not keep an audit trail for the batch number, which comes from Next Numbers in the Foundation Environment (system 00).

Working with invoice batches consists of the following tasks:

- ☐ Reviewing invoice information
- ☐ Deleting invoice information

- ☐ Creating invoice information manually
- ☐ Creating credit memos
- ☐ Generating preliminary invoice journal entries
- ☐ Revising override dates
- ☐ Reviewing preliminary invoice journal entries
- ☐ Creating final invoice journal entries

Reviewing Invoice Information

When you generate invoices, the system creates a batch of invoice transactions. It also updates the workfile transaction with the following information:

- Batch number
- Invoice number
- Pay item number
- Invoice date

To verify the invoice information, you can review it at the following levels:

- Batch header information, including the batch status description and current activity
- Invoices for a selected batch
- Pay items for a selected invoice
- Individual workfile transactions for a selected pay item, including burden and components

As you review the different levels of an invoice, you can revise specific information. For example, you can decrease an invoice amount or add transactions to an invoice.

Reviewing invoice information consists of the following tasks:

- Reviewing invoices
- Revising batch header information

► To review invoices

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A

The system displays the batches in ascending batch number order.

2. On Work With Invoices, review the following fields:
 - Contract Number
 - Cnt Typ (Contract Type)
 - Invoice Number
 - Do Ty (Document Type)
 - Customer Number
 - G/L Date
 - Gross Amount
3. To review the details for an individual invoice, choose an invoice to revise or review and click Select.
4. On Contract Billing Line Inquiry, review the following fields:
 - Billing Line
 - Billing Line Description
 - Chg Num
 - Units
 - UM
 - PT (Billing Type)
 - Base Currency
 - Schedule of Values
5. To review the workfile transactions for a specific pay item, select the T&M pay item (including components) and choose Billing Details from the Row menu.
6. On Invoice Detail Revisions, review the workfile transactions.

To remove workfile transactions from this pay item, see *Deleting Invoice Information*.

To add workfile transactions to this pay item, see *Creating Invoice Information Manually*.

To create ad hoc transactions, see *Creating Invoice Information Manually*.

7. Click Close to return to Contract Billing Line Inquiry.
8. To review the summarized invoice information for this contract billing line, choose the specific billing line and click Select.
9. If this is a T&M billing line, the system displays the T&M Billing Line Revisions form. You can revise the following information:

On the Amounts tab:

- Tax Rate/Area
- Tax Expl Code

On the Discount/Remark tab:

- Remark

10. If this is a unit price billing line, the system displays the Unit Price Revisions form. You can revise the following information:

On the Amounts tab:

- Quantity - Current
- Unit Price - Current
- Sub-Total - Current
- Quantity - To Date
- Sub-Total - To Date
- Tax Rate/Area
- Tax Expl Code

On the Percent tab:

- Quantity - Current
- Sub-Total - Current
- Quantity - To Date
- Sub-Total - To Date

On the Discount/Remark tab:

- Discount Available
- Remark

11. If this is a lump sum billing line, the system displays the Lump Sum Billing Line Revisions form. You can revise the following information:

On the Amounts tab:

- Net Amount - Current
- Stored Materials - Current
- Net Amount - To Date
- Stored Materials - To Date
- Tax Rate/Area
- Tax Expl Code

On the Percent tab:

- Net - Current
- Stored Materials - Current
- Net - To Date
- Stored Materials - To Date

On the Discount/Remark tab:

- Discount Available
- Remark

12. If this is a fee billing line, the system displays the Fee Line Revisions form. You can revise the following information:

On the Amounts tab:

- Tax Rate/Area
- Tax Expl Code

On the Discount/Remark tab:

- Remark

13. If this is a milestone billing line, the system displays the Milestone Detail Revisions form. You can revise the following information:

On the Amounts tab:

- Tax Rate/Area
- Tax Expl Code

On the Discount/Remark tab:

- Remark

14. If this is a progress billing line, the system displays the Progress Detail Revisions form. You can revise the following information:

On the Amounts tab:

- Tax Rate/Area
- Tax Expl Code

On the Discount/Remark tab:

- Remark

15. If this is a direct draw billing line, the system displays the Direct Draw Line Revisions form. You can revise the following information:

On the Amounts tab:

- Tax Rate/Area
- Tax Expl Code

On the Discount/Remark tab:

16. If this is a rated draw billing line, the system displays the Rated Draw Line Revisions form. You can revise the following information:

On the Amounts tab:

- Tax Rate/Area
- Tax Expl Code

On the Discount/Remark tab:

- Remark
- Remark

17. Click Close to return to Contract Billing Line Inquiry.

18. Click Close to return to Work With Invoices.

To revise batch header information

Use this task to revise the batch status or current activity of an invoice batch. For example, you might need to do this if the generation program does not complete normally due to power failure. In this case, the current activity status would prevent you from accessing the batch for further processing. A current activity status of 0 allows you to access the invoice batch for further processing.

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A

The system displays the batches in ascending batch number order.

2. To review an individual invoice batch header, choose a batch to review or revise and choose Batch Header from the Row menu
3. On Batch Header Revisions, complete the following fields:
 - Batch Status
 - Current Activity

Processing Options: Batch Review (P48221)

Defaults Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. Batch Type

Use this processing option to define the default batch type for batch review. This batch type is also assigned when creating an empty batch from batch review. Enter a batch type to use as the default or select it from the Select User Defined Code form. Valid values are:

Blank Use batch type 4 for Contract Billing.

1 Service Billing.

2. Generation Type

Use this processing option to enter the default generation type for batch review. The system assigns this generation type when creating an empty batch and controls the type of entries in the batch. Valid values are:

Blank Use generation type 1 for invoice processing UDC 48/GT

Versions Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. Invoice Print - R48504

Use this processing option to specify the version to use for the Invoice Print program. If you leave this field blank, the system uses version XJDE0001.

2. Journal Generation - R48131

Use this processing option to identify the Journal Generation version. If you leave this option blank,, the system uses version XJDE0001.

3. Journal Edit Register - R48300

Use this processing option to enter the version to use for the Journal Edit Register program. If you leave this option blank, the system uses version XJDE0001.

4. Create A/R Entries - R48199

Use this processing option to enter the version to use for Create A/R Entries. If you leave this option blank, the system uses version XJDE0001.

5. Create G/L Entries - R48198

Use this processing option to enter the version to use for Create G/L Entries. If you leave this option blank, the system uses version XJDE0001.

6. Create A/P Entries - R48197

Use this processing option to specify which Create A/P Entries version to use. If you do not specify a version, the system uses version XJDE0001.

Process Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. Audit Trail Option

Use this processing option to control whether deleted invoices should be updated to the Deleted Invoices Audit table (F48229). Valid values are:

Blank Do not update the Deleted Invoices Audit table (F48229).

1 Update the Deleted Invoices Audit table (F48229).

Deleting Invoice Information

As you review invoice information, you might need to decrease or delete invoice information. You can delete invoice information at four levels - batch, invoice, pay item, or workfile transaction. For example, you might need to delete the entire batch of invoices if the wrong document type was assigned during invoice generation. Or you may need to remove a workfile transaction from a particular invoice pay item.

When you delete a batch of invoices, the system performs the following:

- Deletes the batch header record (F48011)
- Deletes the Invoice Summary transactions (F4822) for the invoice batch
- Removes invoice information from the workfile transactions (F4812) for the invoice batch
- Removes the invoice batch number from the Contract Master (F5201) and Milestone/Progress Information (F5216)
- Deletes the journal detail (F48S910) and summary workfiles (F48S911) for this invoice batch if invoice journals were created

When you delete an invoice from a batch of invoices, the system performs the following:

- Reduces the batch total amount stored in the batch header by the total amount of the invoice.
- Deletes the Invoice Summary transactions (F4822) for the invoice
- Removes invoice information from the workfile transactions (F4812) for T&M pay items. Deletes the workfile transaction for Non-T&M pay items.
- Removes the invoice batch number from the Contract Master (F5201) and Milestone/Progress Information (F5216)
- Resets the batch status of the batch header if invoice journals have been created. The batch status will cause the system to rerun invoice journals.
- If you delete the last invoice in a batch, the batch header is deleted.

When you decrease an invoice pay item amount on an invoice, the system performs the following:

- Reduces the batch total amount stored in the batch header record by the decreased amount of the invoice pay item.
- Reduces the Invoice Summary transaction for that pay item.

- Removes invoice information from the workfile transactions (F4812) for T&M pay items. Deletes the workfile transaction for Non-T&M pay items.
- Removes the invoice batch number from the Contract Master (F5201) and Milestone/Progress Information (F5216)
- Resets the batch status of the batch header if invoice journals have been created. The batch status will cause the system to rerun invoice journals.

When you remove workfile transactions attached to a T&M invoice pay item, the system performs the following:

- Reduces the batch total amount stored in the batch header record by the total amount of the workfile transactions.
- Reduces the invoice amount stored in the Invoice Summary (F4822) transaction for that pay item by the total amount of the workfile transactions.
- Removes invoice information from the workfile transactions (F4812).
- Resets the batch status of the batch header if invoice journals have been created. The batch status will cause the system to rerun invoice journals.
- If you remove all workfile transactions for a T&M pay item, the system does not delete the pay item; instead, the invoice amount is reset to zero.

Deleting invoice information consists of the following tasks:

- Deleting a batch of invoices
- Deleting an invoice
- Removing a workfile transaction from a T&M invoice pay item
- Decreasing a non-T&M invoice pay item
- Decreasing a lump sum invoice pay item

See Also

- *Adding Workfile Transactions to an Invoice* to increase the amount of an invoice



To delete a batch of invoices

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type

- C A
2. Choose the invoice batch to delete and click Delete.

To delete an invoice

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A
2. To delete an invoice in a specific batch, choose the batch and click Select.
3. On Work With Invoices, choose the invoice you want to delete and click Delete.

To remove a workfile transaction from a T&M invoice pay item

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A
2. To delete an invoice in a specific batch, choose the batch and click Select.
3. To review the pay items for an individual invoice, choose an invoice to delete and click Select.
4. To review the workfile transactions for a specific T&M pay item, select the pay item and choose Billing Details from the Row menu.
5. On Invoice Detail Revisions, select the workfile transaction to remove and click Delete From Invoice Row menu.
6. Click Close to return to Contract Billing Line Inquiry.

To decrease a non-T&M invoice pay item

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A
2. To revise an invoice in a specific batch, choose the batch and click Select.
3. To revise the unit price pay items for an individual invoice, choose an invoice to revise and click Select.
4. On Unit Price Revisions, you can revise the following information:

On the Amounts tab:

- Quantity - Current
- Unit Price - Current
- Sub-Total - Current
- Quantity - To Date
- Sub-Total - To Date
- Tax Rate/Area
- Tax Expl Code

On the Percent tab:

- Quantity - Current
- Sub-Total - Current
- Quantity - To Date
- Sub-Total - To Date

On the Discount/Remark tab:

- Discount Available
- Remark

5. Click OK to accept the revisions and return to Contract Billing Line Inquiry.



To decrease a lump sum invoice pay item

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:

- Batch Number
 - Generation Type
 - C A
2. To revise an invoice in a specific batch, choose the batch and click Select.
 3. To revise the lump sum pay items for an individual invoice, choose an invoice to revise and click Select.
 4. On Lump Sum Revisions, you can revise the following information:

On the Amounts tab:

- Net Amount - Current
- Stored Materials - Current
- Net Amount - To Date
- Stored Materials - To Date
- Tax Rate/Area
- Tax Expl Code

On the Percent tab:

- Net Amount - Current
- Stored Materials - Current
- Net Amount - To Date
- Stored Materials - To Date

On the Discount/Remark tab:

- Discount Available
- Remark

5. Click OK to accept the revisions and return to Contract Billing Line Inquiry.

Creating Invoice Information Manually

You can manually generate invoices without running the Invoice Generation program. When you generate invoices manually, you can:

- Create a new batch header or add the invoices to an existing batch
- Create invoices you want to include in a batch
- Add workfile transactions to individual invoices in a batch

For example, you might have an existing batch that includes invoices that you have already reviewed and revised. You can add another invoice to the batch manually without having to delete and regenerate the entire batch.

Note: When you create invoice information manually, the system uses the billing lines you have defined to control the invoice pay item structure. You cannot automatically run the Invoice Journal Generation or Create A/R when creating an invoice batch manually. You must initiate these processes from Batch Review.

Creating invoice information manually consists of the following tasks:

- Creating a batch header manually
- Creating an invoice manually
- Adding workfile transactions to an invoice

Creating a Batch Header Manually

You can manually create a new batch header for invoices. When you create a new batch header, you can create a new batch. However, creating a new batch is optional because you can add invoices to an existing batch.

To create a batch header manually

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, choose Create Batch from the Form menu.

This will create an empty batch header.

Creating an Invoice Manually

You can manually create a new invoice. You can add the invoice to an existing batch or to a new batch header. Creating a new invoice is optional. You can also add transactions to an existing invoice.

To create an invoice manually

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, to create invoices manually for a specific batch, choose the batch and click Select.
2. On Work With Invoices, choose Create Invoice from the Form menu.

3. On Create Manual Invoice, complete the following fields:
 - Contract/Type/Co
4. Complete the following optional fields:
 - Application No
 - Adjustment No
 - Bill From Date
 - Bill Thru Date
 - G/L Date
 - Invoice Date
 - Bill Codes
5. To override the information from the billing constants, contract master and processing options, complete the following optional fields:
 - Invoice Type
 - Tax Area/Expl
 - Payment Terms
 - Zero Invoice Processing
 - LS Calc Method/Ledger Type
 - Exchange Rate Date Basis
6. Click Submit.
7. Click OK on the Invoice Generation window.
8. The new invoice appears on the Work With Invoices form. You can then choose the invoice and click Select to revise the pay items.

Adding Workfile Transactions to an Invoice

The Invoice Summary Workfile might not contain all the billable amounts you have entered during the accounting cycle. To account for this, you need to:

- Review the existing T&M transactions in the Billing Workfile that are not currently in an invoice batch
- Manually add T&M transactions that exist in the Billing Workfile
- Manually add T&M costs that exist in the Account Ledger table and are not currently in the Billing Workfile, if necessary
- Manually add ad hoc costs or credits to the invoice, if necessary

You can add workfile transactions for time and material to a new invoice for a contract, an existing pay item on an invoice, or a new pay item.

Adding transactions to an invoice consists of the following tasks:

- Adding workfile transactions from the workfile for a T&M invoice pay item
- Adding existing G/L transactions for T&M invoice pay item
- Adding ad hoc transactions to a T&M invoice pay item

To add workfile transactions from the workfile for a T&M invoice pay item

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A
2. To review the invoices for a specific batch, choose the batch and click Select.
3. On Work With Invoices, choose the invoice to revise and click Select.
4. On Contract Billing Line Inquiry, choose the T&M pay item to attach the workfile transactions and choose Workfile Selection from the Row menu.
5. On Workfile Selection, choose one or more workfile transactions.
6. Choose Click Merge/Update Invoice from the Row menu.

The system merges the workfile transaction information into the invoice pay item.

7. Click Close to return to Contract Billing Line Inquiry.
8. To review the workfile transactions that you just merged into the invoice pay item, choose the invoice pay item and click Billing Details Row Menu.

To add existing G/L transactions to a T&M invoice pay item

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A
2. To review the invoices for a specific batch, choose the batch and click Select.
3. On Work With Invoices, choose the invoice to revise and click Select.
4. On Contract Billing Line Inquiry, choose the pay item to attach the workfile transactions and choose Workfile Selection from the Row menu.
5. On Workfile Selection, choose G/L Selection from the Form menu.
6. To limit the list of account ledger transactions on the G/L Transaction Selection, complete one or more of the following fields:
 - Account
 - G/L Date From
 - G/L Date Thru
 - Subledger/Type
7. To determine how to update the home business unit for payroll equipment workfile transactions, click one of the following:
 - Asset Master
 - Payroll Master
8. Click Close to return to Workfile Selection.
9. If you want to review the detail information for the workfile transaction you just created, choose the workfile transaction and click Select. This step is optional.
10. On Workfile Selection, choose one or more workfile transactions.

The system merges the workfile transaction information into the invoice pay item.
11. Choose Merge/Update Invoice from the Row menu.

12. Click Close to return to Contract Billing Line Inquiry.
13. To review the workfile transactions you just merged into the invoice pay item, choose the invoice pay item and click Billing Details Row Menu.

To add ad hoc workfile transactions to a T&M invoice pay item

You can add transactions to an invoice on an as-needed basis. For example, you might want to add a workfile transaction to an invoice for services not represented in the Account Ledger (F0911).

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A
2. To review the invoices for a specific batch, choose the batch and click Select.
3. On Work With Invoices, choose the invoice to revise and click Select.
4. On Contract Billing Line Inquiry, choose the pay item to attach the workfile transactions and click Billing Details from the Row menu.
5. On Invoice Detail Revisions, click Add.

CAUTION: If you add workfile transactions directly to the workfile and then process the original billable source transaction through the normal accounting cycles and then run workfile generation, the system creates a duplicate workfile transaction.

6. On Workfile Entry, complete the following fields:
 - G/L Date
 - Account Number
7. Complete the following optional fields for the new workfile transaction:
 - Subledger/Type
 - Eligibility Code
 - Currency Code
 - Re-Extend Option
8. Enter appropriate amounts in the following fields:
 - Units/Rate
 - Cost Amount
 - Ovr Rate/Cap
 - Mark Up %
 - Mark Up Amount
 - Inv. Taxable Amt.
 - Total Invoice
 - Discount %
9. Enter appropriate revenue amounts in the following fields, if applicable:
 - Empl/Supp
 - Rev Mark Up %

- Rev Markup Amt
 - Revenue Amount
10. Complete the following optional fields that further define your ad hoc workfile transaction:
 - Home BU
 - Job Type
 - Empl/Supp
 - Job Step
 - Explanation
 - Remark
 11. Click OK to return you to Contract Billing Line Inquiry.

Creating Credit Memos

When a customer is overcharged and you want the customer's account to reflect the correction, you create a credit memo. Generally, a credit memo is assigned a document type RM. You manually create credit memos using the same steps as manually creating an invoice.

You can add the credit memo to an existing batch or to a new batch header. You can also add existing workfile transactions or enter ad hoc workfile transactions to a credit memo. The workfile transactions must have negative amounts to correct the customer's account balance

To create a credit memo

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, locate a batch.

See [Reviewing Invoice Information](#)
2. Choose the batch and click Select to create credit memos for a specific batch.
3. On Work With Invoices, choose Create Invoice from the Form menu.
4. On Create Manual Invoice, complete the following field:
 - Contract/Type/Co
5. Complete the following optional fields:
 - Application No

Use the application number of the invoice you are crediting. This will allow the system to associate the original invoice with the credit memo in the billing system.

- Adjustment No

Leave the adjustment number blank to allow system to automatically assign the next sequential adjustment number for this application.

- Bill From Date
- Bill Thru Date
- G/L Date
- Invoice Date
- Bill Codes

6. To override the information from the billing constants, contract master and processing options, complete the following optional fields:

- Invoice Type

Remember to enter RM as the document type. This value will identify this transaction as a credit memo in the Accounts Receivable ledger.

- Tax Area/Expl
- Payment Terms
- Zero Invoice Processing
- LS Calc Method/Ledger Type
- Exchange Rate Date Basis

7. Click Submit.
8. Click OK on the Invoice Generation window.
9. The new credit memo appears on the Work With Invoices form. You can then choose the credit memo and click Select to revise the pay items. Remember to process this transactions with negative amount.

See *Adding Transactions to an Invoice* for additional information.

Generating Preliminary Invoice Journal Entries

You complete the billing process by creating journal entries. You first create preliminary invoice journal entries. When you create the entries, the system prints the Journal Edit Register. You should carefully review this report to ensure that you do not create final invoice journal entries that create out-of-balance records in the Account Ledger.

The system creates proof invoice journals for a selected invoice batch. The workfile transactions are processed against the Billing AAI's to create detail journal entries (F48S910). These detail journal entries are then compressed into summarized journal entries (F48S911). The system uses the summarized journal entries to create the Account Ledger (F0911) transactions for invoice journals when Create A/R is run.

The system uses the A/R and G/L functional servers to edit the summarized journal entries. The Invoice Summary transactions are temporarily added to the summarized journal entries (F48S911) to ensure balanced accounting entries.

CAUTION: The Invoice Journal Generation is a batch process. The invoice batch is processed as a unit. If one or more errors are detected, the system sets the invoice batch to an error status. You must correct the error condition and re-run Invoice Journal Generation. You may run Invoice Journal Generation as many times as necessary until all errors are corrected.

During Invoice Journal Generation, the system performs the following:

- Updates the batch header, current activity field is set to 3, indicating that journal generation is in progress.
- Deletes the Detail Journal Workfile and Summarized Journal Workfile entries for this invoice batch. This step allows the journal generation process to rerun as many times as necessary without having to perform a batch delete.
- Uses the invoice batch number to select data. The workfile transactions (F4812) are processed against the Billing AAI's to create detail journal entries in the Detail Journal Workfile (F48S910).
- Summarizes the Detail Journal Workfile entries into the Compressed Journal Workfile (F48S911). These entries are used to create the Account Ledger (F0911) entries when Create A/R is run.
- Updates the Compressed Journal Workfile with invoice information from the Invoice Summary Workfile (F4822). These entries are temporary and stay in the Compressed Journal Workfile only long enough to be edited and to print balanced accounting entries on the Journal Edit Register. The entries from the Invoice Summary Workfile are used to create Accounts Receivable Ledger (F0311/F03B11) entries when Create A/R is run.
- Creates an associated G/L batch to store general journal entries for any revenue or cost reallocations that may be associated with the invoice journal entries.
- Edits the accounting entries stored in the Compressed Journal Workfile, using the interactive versions for the A/R and G/L master business functions.
- Prints the Journal Edit Register to review the accounting entries for this batch.
- Removes the temporary invoice entries from the Summarized Journal Workfile.

- Updates the batch header with the currency amount and number of documents. The batch status is also updated and the current activity is set to 0 to allow additional processes to be performed against this batch.

See Also

- *Setting Up Automatic Accounting Instructions*

To create preliminary invoice journal entries

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, to create preliminary invoice journal entries for a specific batch, choose the batch and choose Invoice Journal Generation from the Row menu.

If you have set the billing constants to automatically display the date override window, then enter the override G/L date and invoice date to assign to the invoices and the invoice journal entries.

2. Click OK.

See Also

- *R48300, Journal Edit Register* in the *Reports Guide* for a report sample

Revising Override Dates

You use a system constant to control when the system displays the Date Override Window on Invoice Journal Generation. You can set the constant so that the system:

- Always displays the window
- Only displays the window when you choose Override Date
- Never displays the window

The date that the system displays in the Date Override Window is always the current system date.

To revise override dates

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A

The system displays the batches in ascending batch number order.

2. To revise the invoice or G/L date originally assigned to the invoices in a batch, choose a batch and choose Date Override from the Row menu.
3. Complete the following fields:
 - Invoice/Voucher Date Override
 - G/L Date Override
4. Click OK.

Reviewing Preliminary Invoice Journal 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 Journal Edit Register. This report shows journal entries summarized by G/L date, document type, document number, business unit, object, subsidiary, and subledger.

You can also run the Journal Edit Register to print additional copies of the journal register after you have created preliminary G/L entries.

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 major/minor keys or invalid accounts related to the rules you define on the Billing AAI's form or Automatic Accounting Instructions



To review preliminary invoice journal entries

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:

- Batch Number
- Generation Type
- C A

The system displays the batches in ascending batch number order.

2. To print the Journal Edit Register for the invoices in a specific batch, choose the batch and click Journal Edit Register from the Row Menu.

Processing Options: Journal Edit Register (R48300)

Versions Tab

1. A/R Master Business Function

Use this processing option to identify the version of the A/R Master Business Function for A/R processing. If you leave this option blank, the system uses version ZJDE0001.

2. G/L Master Business Function

Use this processing option to identify the version of the G/L Master Business Function for G/L processing. If you leave this option blank, the system uses version ZJDE0001.

3. A/P Master Business Function

Use this processing option to identify the version of the A/P Master Business Function for A/P processing. If you leave this option blank, the system uses version ZJDE0001.

Creating Final Invoice Journal Entries

The system creates final invoice journal entries when you run Create A/R to process your invoice information from the Contract Billing system to the A/R and G/L systems. The system updates the A/R Ledger (F0311/F03B11) and Account Ledger (F0911) transactions, from the Invoice Summary Workfile (F4822) and Summarized Journal Workfile (F48S911), respectively. The billing system uses the A/R functional server and G/L functional server to validate all accounting information.

CAUTION: The Create A/R is a batch process. The invoice batch is processed as a unit. If one or more errors are detected, no invoices will be processed to the A/R and G/L systems. The billing system sets the invoice batch to an error status. You must correct the error conditions, and then re-run Create A/R. You

may run Create A/R as many times as necessary until all errors are corrected and invoice information can be processed to the A/R and G/L systems.

CAUTION: Create A/R writes the invoice information to the A/R and G/L systems. You must run the Post Invoices to G/L program to post the transactions, create automatic offsets, and update the posted codes and batch status.

During Create A/R, the system performs the following:

- Calls invoice journal generation if batch is in error or if the proof journals have not been created. See *Generating Preliminary Invoice Journal Entries* previously defined in this chapter for additional information.

If no errors are detected, the system performs the following:

- Creates a batch header in financials, using the same batch number assigned in the billing system. The currency amount of the batch and the number of documents are also passed to the new financials batch header.
- Writes the Account Ledger transactions (F0911), using Compressed Journal Workfile entries (F48S911).
- Writes the A/R Ledger (F0311/F03B11), using the Invoice Summary entries (F4822).
- Writes the Billing Workfile History (F4812H) with workfile transactions (F4812) for this invoice batch.
- Deletes the workfile transactions (F4812) for this invoice batch.
- Updates the Invoice Summary Workfile (F4822) with a flag indicating the invoice has been processed to A/R.
- Writes invoice information to the Invoice Summary Access file (F48520), if the Invoice Summary Access Control in the Billing Constants is set.
- Writes Payroll History transactions (F0618), using the Payroll Reclassification Workfile (F48S0618), if the Journal Reclassification Control in the Billing Constants is set and a payroll reclassification was detected during invoice journal generation.
- Writes the G/L Link file (F48S912)
- Deletes the Detail Journal Workfile (F48S910) for this invoice batch.
- Deletes the Summarized Journal Workfile (F48S911) for this invoice batch.
- Deletes the Payroll Reclassification Workfile (F48S0618) for this invoice batch.
- Deletes the Contract Billing Batch Header record for this invoice batch.

If errors are detected, the system performs the following:

- Deletes the batch header (F0011) created in financials and sets the Contract Billing batch header (F48011) to an error status.

No further processing is performed against any Contract Billing files.

To create final invoice journal entries

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, to create final invoice journal entries for a specific batch, choose the batch and choose Create A/R from the Row menu.

If you have set the billing constants to automatically display the date override window, then enter the override G/L date and invoice date to assign to the invoices and the invoice journal entries.

2. Click OK.

See Also

- *R48300, Journal Edit Register* in the *Reports Guide* for a report sample

Posting Invoice Batches

After you create the final invoice journal entries, you complete the overall billing process by reviewing, approving, and posting the final invoice journal entries to the Account Ledger.

When you post a batch of invoices, the system creates the automatic entries for offsets to the general ledger for the receivables account. The system typically debits an A/R trade account and credits a revenue account.

The journal review and post programs are the same programs you use in the General Accounting systems.

See *Posting Invoices* in the *Accounts Receivable* guide for additional information.

You can start the Post program from either of two menu selections:

- Choose Post Invoices to G/L to start posting directly from the menu.
- Choose Invoice Journal Review to start posting without exiting the Invoice Journal Review program.

The menu selection you choose depends on the method of posting you want to use. If you post from the Post General Journal program, you can:

- Post all approved batches
- Post using manual data selection

If you post from the Invoice Journal review program, you can:

- Post using automated data selection (available from Invoice Journal Review only)
- Post using automated data selection and a subsystem (available from Invoice Journal Review only)

Posting Associated G/L Batches

After you create the final invoice journal entries, you complete the overall billing process by reviewing, approving, and posting the final invoice journal entries to the Account Ledger.

If an associated G/L batch was created during the creation of final invoice journal entries, you need to post this associated G/L batch also.

When you post an associated batch of journal entries, the system creates the automatic offsetting entries and updates the Account Ledger table entries as being posted.

The journal review and post programs are the same programs you use in the General Accounting systems. See *Basic Journal Entry Processing* in the *General Accounting* guide for additional information.

You can start the Post General Journal program from either of two menu selections:

- Choose Post General Journal to start posting directly from the menu.
- Choose General Journal Review to start posting without exiting the General Journal Review program.

The menu selection you choose depends on the method of posting you want to use. If you post from the Post General Journal program, you can:

- Post all approved batches
- Post using manual data selection

If you post from the General Journal review program, you can:

- Post using automated data selection (available from General Journal Review only)
- Post using automated data selection and a subsystem (available from General Journal Review only)

Printing Invoices

You use the Invoice Print program to print invoices for your customer. This program is used to print draft or final invoices. The timing of when these invoices are printed determines the draft or final status. Invoices printed before you Create A/R are considered draft invoices. Invoices printed after Create A/R are considered final invoices.

You print draft invoices to allow your project or account manager to verify the accuracy of invoice information prior to mailing to a customer. This draft invoice information is retrieved from the Billing Workfile (F4812). If errors are detected, you can make corrections to the invoice, usually without having to delete the entire batch of invoices.

You print final invoices to send to a customer for goods or services rendered. Printing final invoices retrieves invoice information from the Billing Workfile History (F4812H). You would also use this process to reprint invoices as necessary.

J.D. Edwards recommends that you print your final invoices after the Create A/R program has completed and the Post Invoices To G/L program has successfully posted the invoice batch. Printing invoices after A/R information has been processed ensures that the information printed on the invoice matches the invoice information created in the A/R Ledger.

Caution: If you print final invoices prior to completing Create A/R and the Post Invoices To G/L processes, you run the risk of inadvertently modifying the invoice information that you printed and mailed to the customer.

You can use the following methods to print invoices for your customers:

Automatically

You can print invoices for your customers as you generate invoices. Use this method to print invoices in a batch during invoice generation.

Manually

You can print invoices after you generate them. When you use this method, you can:

- Print invoices from any existing batch
- Reprint batches that include revised invoices
- Print invoices that have completed the billing process with workfile transactions in history

Printing invoices consists of the following tasks:

- ☐ Printing invoices automatically

- ☐ Printing invoices manually

See Also

- *R48506 or R48507, Invoice Print* in the *Reports Guide* for a report sample
- *Understanding Invoice Processing*
- *Understanding Invoice Format Revisions*
- *Understanding the Invoice Print Cross-Reference Table*

Printing Invoices Automatically

You can print invoices as you generate them. For example, you might want to print draft invoices for review by project managers.

Before You Begin

- Generate workfile transactions.
- Define invoice versions if you want to print the invoices during generation.

To print invoices automatically

All invoices in this batch will be printed using the version entered in the Override Invoice Print Version.

From Invoice Processing (G5221), choose Invoice Generation.

1. Complete the steps for generating invoices.

See *Generating Invoices Automatically*

2. Enter a version in the following processing option for invoice generation:
 - Invoice Print Version

Printing Invoices Manually

After you generate invoice batches, you can print the invoices. You can use the following methods to control the invoice version that the system uses to print the invoices:

- Override Format and Invoice Version fields on Contract Billing Line Inquiry

- Processing Options for Invoice Print Selection
- Key Type and Table Key fields on Invoice Print Cross-Reference

You can assign an override version in the contract master if you want to print invoices using a version other than the one you specify on Version Cross-Reference. You can also use Processing Options on Invoice Print Selection. If you do not specify an override version, the system uses the key type and table key combination that you define on Invoice Print Version Cross-Reference to determine which invoice version to print. The system uses the following hierarchy to search for versions:

- Work order number
- Contract number
- Parent contract number
- Customer
- Job or business unit
- Job class
- Company number
- Default

You can print selected invoices rather than an entire batch. To do this, use the data selection for the Invoice Print Selection version you specify during the printing process. For example, you can limit the print selection to a business unit or an invoice number.

Printing invoices manually consists of the following tasks:

- Assigning an override invoice print version
- Locating a batch of invoices to print

Before You Begin

- Generate workfile transactions.
- Define invoice versions.



To assign an override invoice print version

From the Invoice Processing menu (G5521), choose Batch Review.

1. On Work With Batches, locate a batch.

See [Reviewing Invoice Information](#).

2. To review the invoices for a specific batch, choose the batch and click Select.
3. On Work With Invoices, choose the invoice to revise and click Select:
4. Complete the following field to define an invoice print version:
 - Invoice Format Version
5. Click OK.

Field	Explanation
Invoice Format Version	A code that uniquely identifies a series of formats and determines the overall layout of the invoice. <i>Form-specific information</i> A code that identifies the invoice layout that you want to override any other invoice layout previously defined for the invoice or batch.

To locate a batch of invoices to print

From the Invoice Processing menu (G5221), choose Batch Review.

1. On Work With Batches, locate a batch.

See Reviewing Invoice Information.
2. To print the invoices for a specific batch, choose the batch and choose Invoice Print from the Row menu.

Working with Invoice History

After you create the A/R and G/L entries for your billings, the system moves the workfile transactions that have completed the billing process into the Billing Workfile History table. You can work with final invoices to access these transactions.

Working with final invoices includes the following tasks:

- ☐ Reviewing the billing history for transactions
- ☐ Printing invoices from history
- ☐ Voiding a final invoice

When you work with final invoices, you can review the invoices as needed. You can reprint invoices using the transactions in the Billing Workfile History table. You can also void final invoices. When you void a final invoice, the billing transactions that were included on the invoice return to the active Billing Workfile with a status of not billed. You can then reprocess these unbilled transactions, or change them to a status of nonbillable.

Reviewing the Billing History for Transactions

When you access the invoice history, the system displays the invoice number first. This is particularly helpful if you need to review the billing information for a specific customer. You can also review the billing detail history for transactions if the associated invoice has not been voided.



To review the billing history for transactions

From the Invoice Processing menu (G5221), choose Contract Invoice History Inquiry.

1. On Contract Invoice History Inquiry, To display the invoice history for a contract, complete the following field:
 - Contract Number
2. Click Find.
3. To review the billing detail history for the workfile transactions for a specific invoice, click Select.

See Also

- *Voiding a Final Invoice* for more information about billed transactions

Printing Invoices from History

From Invoice Processing (G5221), choose Invoice Print.

The system moves the workfile transactions that have completed the billing process into Billing Workfile History. You can access these transactions from history and reprint invoices using the Invoice Print report. For example, if an invoice gets lost in the mail, but you have already completed the billing process, you can print the invoice from history.

Caution: The system does not store a copy of the printed invoice. If you change the version associated with the invoice, the reprinted invoice will not look the same as the invoice you previously printed.

See Also

- *Reviewing the Billing History for Transactions*
- *R48506, Invoice Print* in the *Reports Guide* for a report sample

Processing Options: Invoice Print Selection (R48504)

Select Tab

1. Invoice Format Type

Use this processing option to specify the invoice format type that the system uses to retrieve the invoice version UBE and the invoice version.

Print Tab

1. Invoice Version

Use this processing option to specify an invoice version to be used instead of the invoice version set up in the Invoice Print Cross-Reference table (P4858).
Note: If you specify an invoice version, you must also enter a valid invoice version UBE.

2. Invoice Version

Use this processing option to specify an invoice version to be used instead of the invoice version set up in the Invoice Print Cross-Reference table (P4858).

Note: If you specify an invoice version, you must also enter a valid invoice version UBE.

3. Invoice Format Name

Use this processing option to override the invoice format name set up in the Invoice Print Cross-Reference table or retrieved from the Contract Master table.

Currency Tab

1. Currency

Use this processing option to control in which currency the system prints the monetary amounts on an invoice. Valid values are:

Blank Use the value of currency mode of the invoice to determine in which currency to print monetary amounts.

0 Print the monetary amounts in the domestic currency.

1 Print the monetary amounts in the foreign currency.

Note: This value affects only monetary amounts printed using the 'Retrieve Amounts' Smart Field.

Voiding a Final Invoice

After you create final invoice journal entries using Create A/R, you can void invoices. When you void an invoice, the workfile transactions that were included on the invoice return to the billing workfile with a status of not billed. You can then reprocess these transactions or change them to a nonbillable status.

Voiding final invoices consists of the following:

- Voiding a final invoice

Caution: If you have applied unposted cash receipts against a posted invoice, you must void or reverse the receipts before you void the posted invoice. If you have applied posted cash receipts against a posted invoice, you must void the cash receipts and post them to the general ledger before you void the posted invoice.

When you void an invoice, the system updates the following information:

- Creates credit information in the A/R Ledger table (F0311/F03B11)
- Creates credit information in the Account Ledger (F0911)
- Updates batch header information in financials (F0011)

- Updates void invoice information in the Invoice Summary Workfile (F4822)
- Updates void invoice information in the Billing Workfile History (F4812H)
- Returns the voided T&M workfile transactions to the Billing Workfile (F4812) for further processing.
- Resets retainage amounts withheld for the invoice.

Caution: You must use the void process in the Service Billing system if you created the invoice in that system. If you void the invoice in the Accounts Receivable system, the system does not update the applicable Service Billing tables.

If you void an unposted invoice, the system deletes the A/R and G/L records without creating an audit trail for the A/R and G/L transactions and the invoice number. The system does not delete the batch header. You must run the G/L Integrity program to delete the empty header.

When you void a posted invoice, the system creates adjusting A/R and G/L entries to reverse the original entries and changes the G/L batch status to Pending or Approved. You must post these adjusting entries for the batch number that the system displays in Invoice Void Window.

See Also

- *Working with Batch Headers* in the *General Accounting Guide* for more information about deleting batch headers



To void a final invoice

1. From the Invoice Processing menu (G5221), choose Invoice History Inquiry.
2. On Contract Invoice History Inquiry, to display the invoice history for a contract, complete the following field:
 - Contract Number
3. Click Find.
4. Choose the invoice to void and choose Void from the Row menu.

The screenshot shows a window titled "Invoice History Inquiry - [Invoice Void Window]". The window has a menu bar with "File", "Edit", "Preferences", "Window", and "Help". Below the menu bar is a toolbar with icons for "OK", "Cancel", "Display", "About", "Links", "Display...", "OLE...", and "Internet". The main area of the window contains three input fields: "Enter G/L Date" with the value "4/30/05", "For Invoice Number" with the value "3035", and "In Batch" with the value "4411". At the bottom of the window are two buttons: "Exit" and "Void".

5. On the Invoice Void Window, complete the following optional field:
 - Enter G/L date
6. Click the Void button.

The system places a V in the Void field for the invoice on the Contract Invoice History Inquiry.

Revenue Recognition



Contract Billing Revenue Recognition

Revenue Recognition is the accounting rule that defines revenue as an inflow of assets, not necessarily cash, in exchange for goods or services and requires the revenue to be recognized at the time, but not before, it is earned. You use revenue recognition to create G/L entries for income without generating invoices.

Generally, you use revenue recognition when:

- Work is finished and you have earned the income, but you do not need to bill a customer
- You want income statements and balance sheets to reflect the amounts earned for a realistic picture of the company's financial status
- You need to reallocate internal costs

To calculate revenue (actual or accrued) for the current period, you must create G/L journal entries. The amounts related to these entries appear on your income statements and balance sheets when you complete the revenue recognition process. You can use the recognized revenue amounts for projections and to review the profitability or liability of specific departments in your organization.

Revenue Recognition consists of the following tasks:

- ☐ Understanding revenue recognition
- ☐ Generating the preliminary G/L journal entries
- ☐ Working with G/L batches



Understanding Revenue Recognition

Understanding Revenue Recognition

When you process revenue recognition, the system creates G/L journal entries to update the Account Ledger (F0911) with revenue, cost, and margins. You can also create correcting reclassification G/L journal entries, depending on how you define the Journal Reclassification flag in the Billing Constants.

The billing product offers a range of journal processes that allow you to select the mode that best suites your organization's accounting needs. These modes, controlled by the Journal Generation Control flag in the Billing Constants, are as follows:

- | | |
|--------------------------------|---|
| Invoice Processing Only | <p>You choose this mode if your organization does not require revenue to be recognized independently of the billing cycle.</p> <p>Actual revenue is credited at the time final invoice journal entries are written to the Account Ledger and posted by the General Journal Post program.</p> |
| Revenue Processing Only | <p>You choose this mode if your organization is only billing interdepartmentally and does not require customer receivables updates in the Accounts Receivable ledger.</p> <p>Actual revenue is credited and interdepartmental offset accounts are credited at the time final G/L journal entries are written to the Account Ledger and posted by the General Journal Post program.</p> |
| Invoicing with Revenue | <p>You choose this mode to allow revenue to be recognized independently of the billing process.</p> <p>Actual revenue is credited and accrued receivables (unbilled A/R) is debited at the time final G/L journal entries are written to the Account Ledger and posted by the General Journal Post program.</p> <p>Accrued receivables is credited and trade A/R is debited at the time the final invoice journal entries are written to the Account Ledger and posted by the General Journal Post program.</p> |

Invoicing with Revenue Reconciliation

You choose this mode to allow accrued revenue to be recognized independently of the billing cycle or if you markup the revenue amount independently of the invoice amount and need to clear the variance from accrued receivables at the end of the billing cycle.

Accrued revenue (unbilled) is credited and accrued receivables (unbilled) is debited when final G/L entries are written to the Account Ledger and posted by the General Journal Post Program.

Actual revenue is credited, accrued revenue is debited, accrued receivables is credited, and trade A/R is debited when final invoice journals are written to the Account Ledger and posted by the General Ledger Post program.

Selecting Versions and Modes for G/L Journal Generation

You must choose the appropriate version of the G/L Journal Generation program to create preliminary G/L journal entries, and optionally, write the final G/L journal entries to the Account Ledger. Based on your process, choose one of the following versions:

G/L Journal Generation (Journal Entries in Proof Mode)

Use this version when you need to create preliminary journal entries for G/L in Proof mode.

G/L Journal Generation (Journal Entries in Final Mode)

Use this version when you need to create preliminary journal entries for G/L in Final mode.

You would run the G/L Journal Generation in proof mode to review any accounting errors prior to writing the final journal entries to the Account Ledger. You would run the G/L Journal Generation in final mode if you do not need to review the accounting entries.

Note: If the system detects any errors when running in final mode, the batch status is set in error and final journal entries are not written to the Account Ledger.

Using Interactive Versions in G/L Journal Generation

The Contract Billing system allows you to control which version to use in the processing options of the Journal Edit Register (R48300). This program performs

all edits and updates for G/L journal entries in the billing system. When you run G/L Journal Generation or Create G/L to process the journal entries, the selected version of the Journal Edit Register will run.

From the System Administration Tools menu (GH9011), choose Interactive Versions and inquire on the following interactive application:

- G/L Master Business Function (P0900049). The system will use version ZJDE0001 if left blank.

Types of Journal Entries

The billing system processes two types of journal entries:

Preliminary Journal Entries

Preliminary, review-level journal entries that the system stores in the following files:

- Detail Journal Workfile (F48S910)
- Compressed Journal Workfile (F48S911)
- P/R Reclassification Workfile (F48S0618)

Final Journal Entries

Journal entries that the billing system writes to the Account Ledger table (F0911). You must run the General Ledger Post program to post these entries.

Document Types For Revenue Recognition

As you complete the revenue recognition process, the system can create the following different types of G/L entries. You can identify the origination of journal entries using the following document types:

EU-G/L Journal Entry	Journal entry created during G/L Journal Generation
AJ-G/L Journal Entry Adjustment	Adjusting journal entry created during G/L Journal Generation for journal entries previously processed.
BA-Billing Adjustment	Reclassification journal entry for a source transaction that originated from general accounting.
T2 - Payroll Labor Distribution	Reclassification journal entry that originated from payroll labor.

**T4-Labor Billing
Distribution**

Reclassification journal entry that originated from labor billing.

**T5-Equipment
Distribution**

Reclassification journal entry that originated from equipment billing in payroll.

Journal Reclassification

Depending how you set the billing constants to allow journal reclassification and the processing options for the Workfile Revisions form, you can reclassify, or change the account information for a workfile transaction.

Journal reclassification exists within the billing product to allow you to reclassify the original cost entry to a different account and let the system automatically create the correcting entries in the Account Ledger (F0911).

When you set up your billing constants to allow journal reclassification, the system creates the correcting journal entries in the Account Ledger Table (F0911) during journal creation.

For example, an employee might charge time to two different work orders during a pay period. When entering time for the pay period, the employee makes a error. After the accounting department processes payroll transactions, you review the costs and discover the employee's data entry error.

You correct the error by changing the work order numbers on the workfile transactions in the Billing Workfile. With journal reclassification, when you run G/L Journal Generation, the system creates correcting journal entries along with the preliminary journal entries for revenue and costing. The system creates adjusting journal entries in the Account Ledger to reverse the original account and update the new account.

You can identify the correcting journal entries by their document type. The system also uses the same pay type (PDBA code) of the workfile transaction for journal reclassification, such as 101 for regular pay, unless you use the PDBA code override in the billing constants.

In addition to creating adjusting entries in the Account Ledger, if you are correcting a workfile transaction that originated from payroll, the system creates an adjusting entry in the Payroll Transaction History file (F0618) during the Create G/L Entries process. These preliminary correcting entries are stored in the P/R Journal Reclassification Workfile (F48S0618) until the Create G/L process is completed.

Associated G/L Batch Processing

You can complete the revenue recognition and billing processes separately or together as a combined process. When you combine the processes, an associated G/L batch is assigned to the invoice batch to contain the G/L journal entries associated with the invoice journal entries.

The associated G/L batch is written to the Account Ledger during the Create A/R process when the invoice journal entries are also written to the A/R Ledger and Account Ledger.

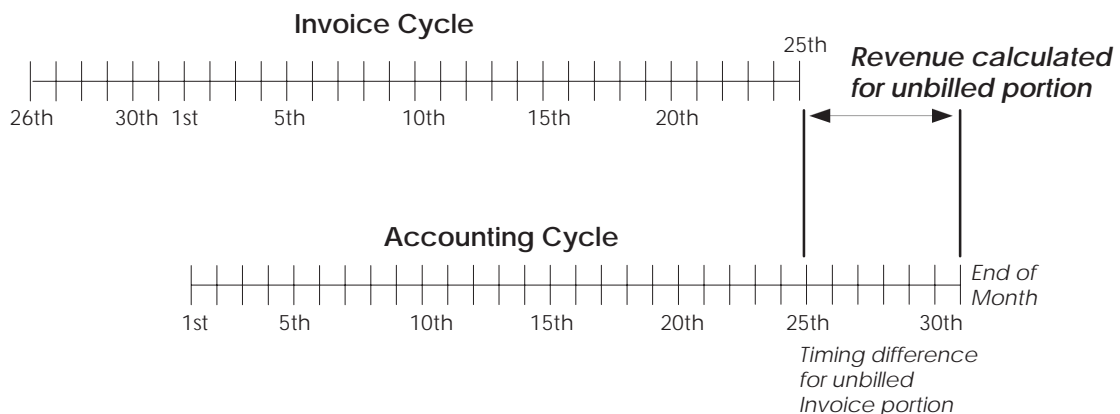
Revenue Reconciliation

You can manage the revenue recognition and billing process with or without revenue reconciliation. You use revenue reconciliation to ensure that variances do not exist between recognized revenue and billing amounts. Variances between recognized revenue and billing amounts can exist when:

- You recognize revenue and generate invoices at different times.
- You mark up revenue and billing amounts independently.

Reconciliation for Timing Differences

If you do not recognize revenue and generate invoices at the same time, the timing difference creates a variance in accrued accounts receivable.



For example, you plan to invoice a project only after the customer approves and accepts the completed project. The project takes three months to complete and you recognize revenue for the project each month. Because of the timing difference between when you recognize revenue (each month) and generate invoices (after completion) for the project, an unreconciled balance exists in accrued accounts receivable.

Three months later, when you bill the project:

- Trade accounts receivable and total revenue amounts for the project are the same.
- The variance in accrued (unbilled) accounts receivable nets to zero.

In the case of a timing difference, over time, all variances are reconciled and net to zero for accrued accounts receivable.

Reconciliation for Independent Revenue and Invoice Mark Up

If you use the same markup rules for revenue and billing, generally no variance exists between the recognized revenue and billing amounts. However, if you mark up revenue and invoice amounts independently, a permanent variance between recognized revenue and billing amounts can exist.

If you do not want variance balances to exist when you mark up revenue and invoice amounts independently, you can use revenue reconciliation to ensure that:

- Variances do not exist between recognized revenue and billing amounts.
- Balances for accrued accounts receivable and accrued revenue are zero.

For example, your company might renegotiate an hourly rate for rental equipment. Although the new rate is 75 dollars an hour, your company continues to bill 70 dollars an hour until the negotiations are complete.

For 2 hours of equipment use, the invoiced amount is 140 dollars. If revenue is recognized at the new rate, the revenue amount is 150 dollars. Without reconciliation, a 10-dollar variance remains in accrued (unbilled) accounts receivable.

Without revenue reconciliation, the system creates debits and credits respectively for the following journal entries:

Revenue recognition	150 dollars for accrued accounts receivable and accrued revenue
Billing	140 dollars for actual accounts receivable and accrued accounts receivable

With revenue reconciliation, the system records, reverses, and reconciles recognized and actual revenue amounts. In the previous example, the system would create debits and credits respectively for the following journal entries:

Revenue recognition	140 dollars for accounts receivable and accrued revenue
Revenue reconciliation	140 dollars for accrued revenue and accrued accounts receivable
	150 dollars for accrued accounts receivable and actual revenue
Billing	150 dollars for actual accounts receivable and accrued accounts receivable

Before You Begin

- ☐ Generate workfile transactions.
- ☐ Define Billing AAls.
- ☐ Select interactive version of G/L processing.

See Also

- *Setting Up Automatic Accounting Instructions*
- *Setting Up System Constants*

Generating Preliminary G/L Journal Entries

From the Periodic Processing menu (G5222), choose G/L Journal Generation.

When you run G/L Journal Generation to create journal entries, the system performs the following actions:

- Uses data selection and processing options to select workfile transactions to process.
- Creates journal reclassification entries if Journal Reclassification control flag is set in the Billing Constants.
- Processes these workfile transactions against the Billing AAI's to retrieve accounting rules.
- Uses the accounting rules from Billing AAI's to create the detail journal entries stored in the Detail Journal Workfile (F48S910).
- Summarizes the journal entries stored in the Detail Journal Workfile (F48S910) into the Compressed Journal Workfile (F48S911).
- Prints the Journal Edit Register (R48300), which also edits the summarized preliminary journal entries.

If G/L Journal Generation is run in final mode and no errors are detected, the system will continue processing the final steps:

- Uses the Billing Batch Header information (F48011) to create a batch header in the general accounting system (F0011).
- Uses the Compressed Journal Workfile journal entries (F48S911) to write the final journal entries to the Account Ledger (F0911).
- Uses the Detail Journal Workfile journal entries (F48S910) to update the G/L Link file (F48S912).
- Uses the P/R Reclassification Workfile entries (F48S0618) to update the Payroll History File (F0618).
- Updates the workfile transactions as being processed for G/L journal entries. If the Eligibility Code of the workfile transaction is '2' (revenue and cost only) or '4' (cost only), the system copies this workfile transaction to the Billing Workfile History (F4812H) and deletes it from the Billing Workfile (F4812).
- Clears the journal entries from the respective workfiles - Detail Journal Workfile (F48S910), Compressed Journal Workfile (F48S911), and P/R Reclassification Workfile (F48S0618).

- Removes the Billing Batch Header (F48011).

See Also

- *Setting Up Automatic Accounting Instructions*
- *Understanding the Billing Types*
- *See Appendix E: Accounting For The Billing Cycle*

Before You Begin

- ☐ Verify that the following information is set up prior to running G/L Journal Generation.
 - Multicurrency, if you are processing invoices using different currencies. See *Setting Up Multi-currency* in the *General Accounting Guide*.
 - Master information for each business unit (job) in the Business Unit Master table (F0006). See *Working with Business Units* in the *General Accounting Guide*.
- ☐ Define all accounts in the chart of accounts.
- ☐ Define the accounting rules in the Billing AAI's.

Processing Options: G/L Journal Generation (R48132)

Defaults Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. G/L Date

Use this processing option to enter the G/L Date for revenue journal generation. This date is assigned during revenue journal generation and is used when posting the journals to the general ledger files. If you leave this field blank, the application uses the G/L date of the source transaction. This date is validated against the current fiscal period identified in the company constants.

2. Journal Description

Use this processing option to specify the description assigned to the journal entry. Valid Values are:

Blank Use the description from the Account Master file

- 1 Use the description from the AAI table description
- 2 Use the description associated with the subledger value

Select Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. Cut-Off Date

Use this processing option to specify the cut-off date when selecting billing detail transactions for revenue journal generation. The system selects the billing detail transactions if the Table Basis Date is less than or equal to this cut-off date. If you leave this field blank, the application uses the system date.

Versions Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. Journal Edit Register Version (R48300)

Use this processing option to specify the version of the Journal Edit Register for journal batch processing. If you leave this option blank, the system uses version XJDE0001.

2. Journal Audit Report Version (R48S490)

Use this processing option to specify the version of the Journal Audit Report. If you leave this option blank, the system does not print the report.

Process Tab

For information about a processing option, right-click the processing option field and choose What's This? from the menu. Or, click the processing option field and press F1.

1. Create G/L Entries Version (R48198)

Use this processing option to determine whether journals are generated in final mode. Enter the version of the Create G/L Entries to run. If you leave this option blank, the Create G/L Entries does not run.

Working with G/L Batches

Batch Review is the form used for accessing all batches in the billing system. You use this form to select the batch of transactions to prepare it for further processing. Processing options exist to allow you to setup default versions for the batch processing.

Note: If you delete a batch, the system does not keep an audit trail for the batch number, which comes from the Foundation Environment (system 00).

Working with G/L Batches consists of the following tasks:

- ☐ Reviewing preliminary G/L journal entries
- ☐ Revising preliminary G/L journal entries
- ☐ Deleting preliminary G/L journal entries
- ☐ Creating final G/L journal entries
- ☐ Posting G/L batches

Note: To manage the integrity of batch processing in the billing system, the system updates the current activity of the batch header record while the batch is actively being processed. For example, when you select a batch and run the Journal Edit Register, the system updates the current activity, indicating the batch is actively being processed. This setting prevents other users from accessing this batch until the Journal Edit Register process has completed, at which time the system will reset the current activity back to 0. The batch is then available for subsequent processing.

The current activity will need to be reset manually for the following situations:

- If a batch process does not complete successfully, the system does not reset the current activity.
- If you select a batch for processing and then cancel the batch processing action from the Report Output Destination form.

Use Batch Header Revisions from the Row menu to revise the current activity of a batch. For example, you might need to do this if the generation program does not complete normally due to power failure. In this case, the current activity status would prevent you from accessing the batch for further processing. See *Working with Batch Headers* in the *General Accounting Guide* for additional information on resetting the current activity for a batch header record.

Reviewing Preliminary G/L Journal Entries

You can print the Journal Edit Register to view the preliminary summarized journal entries. You can use this report to verify your accounting entries. Use the Employee Work Center to view any error messages encountered during the edit.

To print the Journal Edit Register

From the Revenue Recognition menu (G5222), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A

The system displays the batches in ascending batch number order.

2. To print the Journal Edit Register for a specific batch, choose the batch and click the Journal Edit Register row exit.

See Also

- *Processing options for Journal Edit Register (R48300)*

Revising Preliminary G/L Journal Entries

Due to the complexity and volume of preliminary journal entries in a batch, you cannot revise preliminary detail journal entries. To understand how to correct batches in error, you need to understand the types of errors detected by the system. However, you can correct errors and reset the error status of a batch, as outlined below:

When you create a batch of preliminary journal entries, the system validates these entries. Any resulting errors are of two types:

Correcting General Accounting Setup Errors

These errors are caused by incorrect setup information in general accounting. These errors can usually be corrected without having to delete the preliminary journal entries. You can make the necessary corrections in the general accounting system and re-run the Journal Edit Register. The preliminary journal entries are edited again and if no errors are detected, the batch status will be updated to indicate no errors. You can then create final journal entries.

Correcting Billing System Setup Errors

These errors are caused by incorrect setup information in the billing system. These errors require that you delete the batch of preliminary journal entries and make the necessary corrections to setup information in the billing system. You must then re-run G/L Journal Generation to create the preliminary journal entries. Note that each time you run journal generation, the system assigns a new batch number. If no errors are detected, the batch status will indicate no errors and you can continue processing final journal entries.

Deleting Preliminary G/L Journal Entries

You can delete a batch of preliminary journal entries and re-run G/L journal generation as often as needed.

To delete preliminary journal entries

From the Revenue Recognition menu (G5222), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A

The system displays the batches in ascending batch number order.

2. To delete the preliminary journal entries for a specific batch, choose the batch and click Delete.

Creating Final G/L Journal Entries

You complete the revenue recognition process in the billing system by creating final journal entries in the Account Ledger table (F0911). After you create the final G/L journal entries, you must post these journal entries using the General Ledger Post program in the general accounting system.

When you create final G/L entries, the system performs the following actions:

- Writes a Batch Header record (F0011) in general accounting
- Changes the journal status for the related workfile transactions

- Moves the workfile transactions from the billing workfile to the billing workfile history if the eligibility code is 2 (revenue /costing only) or 4 (costing only)
- Deletes the transactions from the Detail Journal Workfile, Compressed Journal Workfile, and the P/R Reclassification Workfile.
- Removes the batch header record in the billing system

To create final G/L Journal Entries

From the Revenue Recognition menu (G5222), choose Batch Review.

1. On Work With Batches, complete one or more of the following fields to locate batches:
 - Batch Number
 - Generation Type
 - C A

The system displays the batches in ascending batch number order.

2. To create final G/L journal entries for a specific batch, choose the batch and click the Create G/L Entries row exit.

See Also

- *Processing options for Create G/L Entries (R48198)*

Posting G/L Batches

After you create the final G/L entries, you complete the overall revenue recognition process by reviewing, approving, and posting the final journal entries to the Account Ledger.

When you post a batch of journal entries, the system creates the automatic offsetting entries and updates the Account Ledger table entries as being posted.

The journal review and post programs are the same programs you use in the General Accounting systems. See *Basic Journal Entry Processing* in the *General Accounting* guide for additional information.

You can start the Post General Journal program from either of two menu selections:

- Choose Post General Journal to start posting directly from the menu.

- Choose General Journal Review to start posting without exiting the General Journal Review program.

The menu selection you choose depends on the method of posting you want to use. If you post from the Post General Journal program, you can:

- Post all approved batches
- Post using manual data selection

If you post from the General Journal review program, you can:

- Post using automated data selection (available from General Journal Review only)
- Post using automated data selection and a subsystem (available from General Journal Review only)

See Also

- *Processing options for Batch Review (P48221)*

Setup



System Setup

Before you can use the Contract Billing system, you must define the constants and rules that you want the system to use during the revenue recognition and billing processes. The information that you set up in the system constants and rules determines:

- How the system uses dates to process source transactions, such as the service/tax date or G/L date, compared to the effective dates for the markup, account derivation, and tax derivation rules
- How the system uses account derivation rules to create journal entries
- How the system processes payroll transactions

Setting up the Contract Billing system consists of the following tasks:

- ☐ Setting up system constants
- ☐ Defining markup rules
- ☐ Defining billing AAI's
- ☐ Defining component rules
- ☐ Assigning component information
- ☐ Setting up automatic accounting instructions
- ☐ Understanding user defined codes
- ☐ Understanding the Invoice Cross-Reference table
- ☐ Setting up invoice formats
- ☐ Understanding multicurrency setup for Contract Billing



What Do These Setup Features Do?

System Constants	Control the global processing of the following: <ul style="list-style-type: none">• Billable costs• Customer information• Dates• Invoices• Journals• Default markup
Markup rules	Define the calculation for the amount that you add to costs to account for overhead and profit.
Billing AAI's	Define the accounting rules that the system uses to process journal transactions for billing, revenue recognition, and reallocations.
Component rules	Define an additional type of markup that is based on amounts and units. The markup rules and Billing AAI's also use this information.
Automatic accounting instructions (AAIs)	Define accounting information and general ledger relationships.
User defined codes	Define custom codes for the system, such as condition codes and adjustment reasons.

Setting Up System Constants

You set up the system constants to represent your company's decisions on how source transactions and related billing are processed. The constants control how the system processes the following:

- Billable costs
- Customer information
- Dates
- Invoices
- Journals
- Default markup percentage
- Multi-currency transactions

After you set up the constants, you should not change them. The system stores the constants in the System Constants table (F48091).

Before You Begin

- ☐ Verify that the default document type for invoices is set up on user defined codes tables 00/DT (Document Type – All Documents) and 00/DI (Document Type – Invoices Only).



To set up system constants

From the System Setup menu (G5240), choose Billing Constants.

Bill Burden	1	Independent Revenue/Invoice	0
Bill Unposted	1	Revenue on Contract non T & M's	0
Effective Date Basis	1	Invoice Summary Access Control	<input type="checkbox"/>
Labor Effective Basis	1	Invoice Date Override Control	1
Customer Number Basis	1	Draft/Final Invoice Gen. Control	0
Service Date Basis	0	Default Invoice Document Type	RI
Exchange Rate Date Basis	2	<input checked="" type="checkbox"/> Foreign	
Journal Generation Control	1		
Journal Reclassification Control	0		
PDDBA Code Override	1		
Default Markup Percentage	10.000		

1. On Contract Billing Constants, complete the following fields on the Workfile Generation Controls tab:
 - Bill Burden
 - Bill Unposted
 - Exchange Rate Date Basis
2. To specify that the currency mode is foreign, complete the following option:
 - Foreign
3. On the Date Processing tab, complete the following fields:
 - Effective Date Basis
 - Labor Effective Basis
 - Service Date Basis
4. On the Invoicing Controls tab, complete the following fields:
 - Customer Number Basis
 - Invoice Summary Access Control
 - Invoice Date Override Control
 - Draft/Final Invoice Gen. Control
 - Default Invoice Document Type
5. On the Journaling Controls tab, complete the following fields:
 - Journal Generation Control
 - Journal Reclassification Control

- PDBA Code Override
6. On the Markup Controls tab, complete the following fields:
- Default Markup Percentage
 - Independent Revenue/Invoice

Field	Explanation
Bill Burden	<p>Burden is any cost that a company incurs as a direct consequence of employing labor (for example, company paid taxes, insurance, and fringe benefits). Burden can also include allowances for small tools, consumables, or other overhead costs that are allocated or assessed as a function of direct labor costs.</p> <p>The Bill Burden constant controls whether the system includes burden during workfile generation for the Service Billing and Contract Billing systems. If you do include burden, be aware of the following:</p> <ul style="list-style-type: none"> • The system processes all the burden associated with billable payroll transactions. • The burden account must be a billable account. <p>Valid codes are:</p> <ul style="list-style-type: none"> 0 The system does not include burden. 1 The system includes burden.
Bill Unposted	<p>A constant that controls whether the system includes unposted billable transactions from the G/L Account Ledger table during workfile generation for the Service Billing and Contract Billing systems. Valid values are:</p> <ul style="list-style-type: none"> 0 Only posted billable transactions in the Account Ledger are processed. 1 Both unposted and posted entries in the Account Ledger are processed. <p>NOTE: Since unposted billable transactions are subject to change or deletion, it is not recommended that they be included during workfile generation. However, if there is very little time between the entry of costs and the billing of the invoice, you might find it helpful to generate workfile for unposted transactions.</p>
Exchange Rate Date Basis	<p>This value controls which date the system uses to retrieve the exchange rate for the invoice.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> 1 Use the invoice date (default). 2 Use the G/L date of the invoice.

Field	Explanation
Foreign	<p>A code that specifies whether amounts are in the domestic currency of the contract or the foreign currency of the supplier.</p> <p>For conversions, Domestic indicates domestic to foreign, and Foreign indicates foreign to domestic.</p> <p>..... <i>Form-specific information</i></p> <p>Choose the Domestic or Foreign button to select the currency mode. This currency mode manages how amounts are calculated and stored within the billing system.</p>
Effective Date Basis	<p>A constant that determines whether the system uses the G/L date or the service/tax date from a billable source (cost) transaction as the basis for comparison with the effective dates for the tables. Valid codes are:</p> <ul style="list-style-type: none"> 1 G/L date 2 Service/tax date <p>NOTE: The Service Billing and Contract Billing systems use tables, such as the Billing Rate/Markup Table and Billing AAI's, during the billing process. A range of dates can control when the table information is valid.</p>
Labor Effective Basis	<p>A constant that determines which date, from a billable source transaction originating in the Payroll system, is used as the basis for comparison with the effective dates for the tables. Valid codes are:</p> <ul style="list-style-type: none"> 1 G/L date 2 Service/tax date 3 Work date 4 Ending date of the pay period <p>If your billing process does not involve payroll, the system ignores this constant.</p> <p>NOTE: The Service Billing and Contract Billing systems use tables, such as the Billing Rate/Markup Table and Billing AAI's, during the billing process. A range of dates can control when the table information is valid.</p>
Service Date Basis	<p>A constant that determines whether the system uses the G/L date or the invoice date from an A/R transaction as the service/tax date. Valid codes are:</p> <ul style="list-style-type: none"> 0 G/L date 1 Invoice date

Field	Explanation
Customer Number Basis	<p>All workfile transactions must include a customer number to bill the transactions. You must identify a customer number on individual jobs or work orders.</p> <p>For Service Billing only, a constant that determines which customer number the system retrieves for a billing detail transaction. Valid values are:</p> <ul style="list-style-type: none"> 0 Owner address number from the Job Master (F0006). 1 Customer number from the Work Order Master (F4801). If the customer number is blank, the system retrieves the owner address number from the Job Master. <p>If you set this field to 0 and do not specify a customer number for the job, the system creates an invoice without a customer number.</p> <p>The address book number on the Single Business Unit form is not the customer number.</p>
Invoice Summary Access Control	<p>A constant that determines whether the system builds and maintains the Invoice Summary Access table (F48520). This table contains cumulative billing amounts that are summarized by G/L Date, Employee/Supplier, Cost Account Number, and Contract Owner Pay Item. If you choose to maintain this table, it requires extra disk space. You can use the summarized billing information for various reporting purposes, such as displaying billed-to-date amounts on your Service/Contract Billing invoices. Valid values are:</p> <ul style="list-style-type: none"> Blank Do not build and maintain the table. 1 Build and maintain the table. <p>The system stores billed-to-date amounts in the Invoice Summary table (F4822) by Owner Pay Item. The Invoice Summary Access table (F48520) stores the billed-to-date amounts in more detail than the Invoice Summary table (F4822).</p>
Invoice Date Override Control	<p>A constant that determines whether you can override the invoice date and the G/L date when you use the Invoice Journal Generation and Create A/R & G/L programs. Valid values are:</p> <ul style="list-style-type: none"> 0 You cannot access the Date Override window. 1 The Date Override window is optional. 2 The system automatically displays the Date Override window.

Field	Explanation				
Draft/Final Invoice Gen. Control	<p>For future use. A flag that determines whether the system assigns to the final invoices:</p> <ul style="list-style-type: none">• New invoice numbers that are sequential• Different document types <p>Valid values are:</p> <table><tr><td>0</td><td>Use the same invoice numbers and document types</td></tr><tr><td>1</td><td>Assign new invoice numbers and document types</td></tr></table> <p>In some countries, you are required to assign the invoice numbers sequentially and without gaps in the numbering. If you choose to assign new numbers, you must use at least two different document types. The system assigns the first document type to preliminary invoices and assigns the subsequent document types when you create final A/R and G/L entries.</p> <p>The setup for this involves the following:</p> <ul style="list-style-type: none">• Set up the document types as the following user defined codes: Document Type – All Documents (00/DT) and Document Type – Invoices Only (00/DI).• Reference the document type for the final invoices to the respective document type for the preliminary invoices. To do this, enter the final document type in the first two positions of the Description 2 field for the respective document type in the user defined code table (00/DI).• Set up Next Numbers by Company/Fiscal Year in the General Accounting system so you can assign different document types within the same invoice batch. This applies to all invoices, whether they are preliminary or final. If the Next Number Constant field contains 1, the system automatically enters the document types for the invoices to the Next Numbers table. If the field contains 2, you must manually enter the document types to the table.	0	Use the same invoice numbers and document types	1	Assign new invoice numbers and document types
0	Use the same invoice numbers and document types				
1	Assign new invoice numbers and document types				

Field	Explanation
Default Invoice Document Type	<p>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.</p> <p>The reserved document types are:</p> <ul style="list-style-type: none"> P_ Accounts Payable Documents R_ Accounts Receivable Documents T_ Payroll Documents I_ Inventory Documents O_ Order Processing Documents <p>NOTE: For invoice entry, if you are using a document type in UDC table 00/DI, the document type must also be defined in UDC table 00/DT.</p>
Journal Generation Control	<p>A constant that controls the process for journal generation in the Service Billing and Contract Billing systems. Valid codes are:</p> <ul style="list-style-type: none"> 1 Invoicing only 2 Revenue recognition only 3 Revenue recognition and invoicing, without requiring revenue reconciliation 4 Revenue recognition and invoicing, requiring revenue reconciliation <p>The following functions are also affected:</p> <ul style="list-style-type: none"> • The initial value of the eligibility code (ELGC) for the billing detail transactions • The edit for the table type (TBTY) when you enter information on the Billing AAI's utilized in processing.
Journal Reclassification Control	<p>A constant that controls whether the system performs journal reclassification as a function within the journal generation process. Valid values are:</p> <ul style="list-style-type: none"> 0 Do not perform journal reclassification. 1 Perform journal reclassification. <p>NOTE: Journal Reclassification occurs within Service/Contract Billing to allow you to reclassify the original cost entry to a different account and automatically create the correcting entries in the Account Ledger (F0911). If you are correcting a billing entry that originated from payroll, then the system creates an adjusting entry in the Payroll Transaction History file (F0618).</p>
PDBA Code Override	<p>A code that overrides the pay type of the original payroll transaction. During journal reclassification, the system uses this code when creating an adjusting payroll history record.</p> <p>NOTE: Pay types are numbered from 1 to 999.</p>

Field	Explanation
Default Markup Percentage	<p>The percentage you use to mark up amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This percentage rate will not affect the employee's paycheck. This percentage rate is set up in the Billing Rate/Markup Table.</p> <p>Enter percentages as whole numbers. For example, 50.275% would be entered as 50.275.</p> <p>..... <i>Form-specific information</i></p> <p>Use this field to enter a markup percentage that the system will use as a default value when a source (cost) transaction has no associated markup table entry.</p> <p>Note: If you leave this constant blank, and the system does not find a markup table entry for a source transaction, the system processes that transaction at cost (without any markup).</p>
Independent Revenue/Invoice	<p>A constant that determines whether you can mark up the invoice and revenue amounts in the billing detail transactions independent of each other. Valid values are:</p> <ul style="list-style-type: none"> 0 The system ensures that the invoice amounts and the revenue amounts in the billing detail transactions are always equal. 1 You can manipulate and process invoice amounts without affecting the associated revenue amounts, and vice versa.

Defining Markup Rules

The markup is an amount that you add to costs for overhead and profit. The system calculates markup amounts when you accumulate costs or revise workfile transactions based on the markup rules that you define when you set up the billing system.

When you accumulate costs or revise workfile transactions, the system marks up costs as follows:

1. Accesses the billing rate/markup rules
2. Searches and selects specific source transactions that match the values you specified for the major key
3. Continues the search, narrowing the selection of source transactions based on the value you specified for the minor key
4. Calculates the markup amount for individual transactions based on the applicable markup calculation rules
5. Updates the workfile transaction with the applicable markup amount

The system stores markup information in the Billing Rate/Markup Information table (F48096).

When you define markup rules, you specify the following information:

- Major key
- Minor key
- Markup calculations
- Compound markup

Complete the following task:

- Defining markup rules

You define markup rules by specifying major and minor key values. The system uses these values in combination to identify the specific markup rules that apply to individual source transactions.

When you accumulate costs or revise workfile transactions, the system matches the key values in the markup rules with the same values in the transactions. The system uses the most specific rule that it can locate to calculate the markup for a transaction.

Typically, you define general markup rules that apply to most of the source transactions that you process in the billing system. You can also define additional markup rules for the transactions that are exceptions. For example, you can define rules that specify alternative markup rates for an individual customer or work order.

If you do not want to mark up a source transaction, the system processes it at cost. To include a source transaction in the Billing Workfile at cost, you must include the following for the markup rules:

- An account range that includes the account associated with the transaction
- Blank fields for the markup calculations

If you do not include these, the system marks up the transaction using a default markup rule or the default percentage in the system constants.

The system uses default markup rules to calculate the markup amounts for transactions that do not match the key values for any specific markup rules. You can define two types of default markup rules:

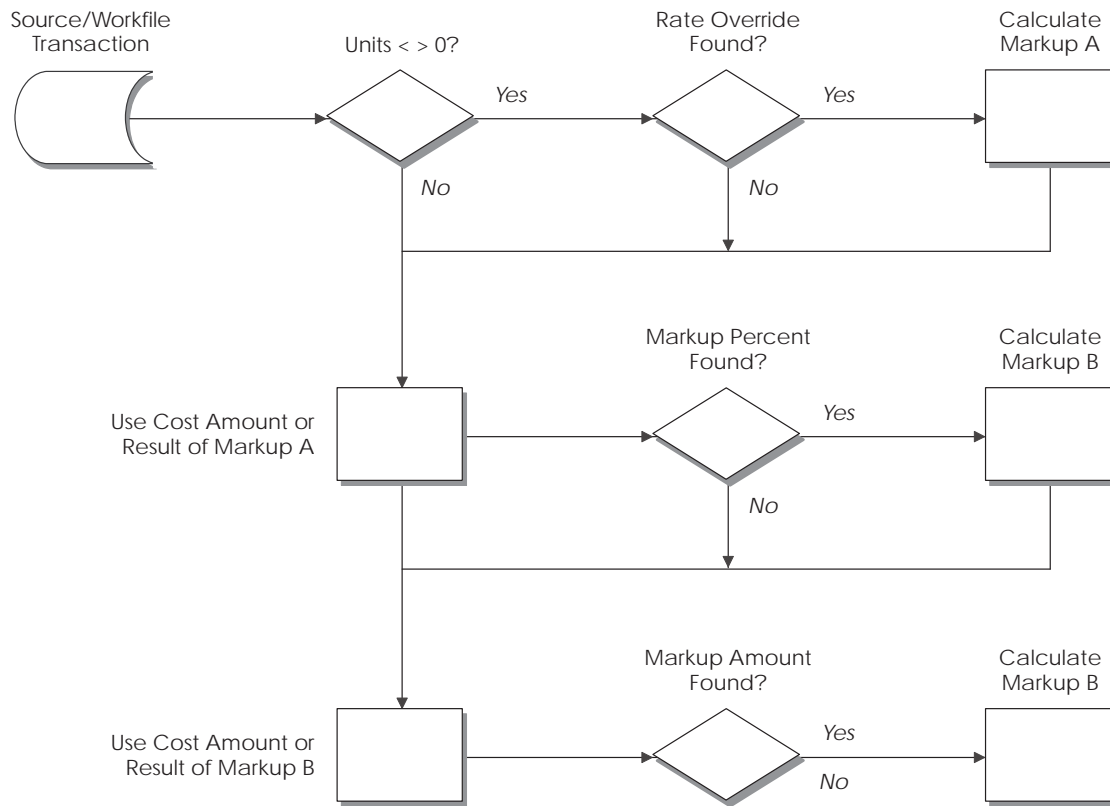
- Major key
- Minor key

For a major key default markup rule, specify 9 as the key type and *ALL as the table key. Leave the account range blank and specify a markup calculation.

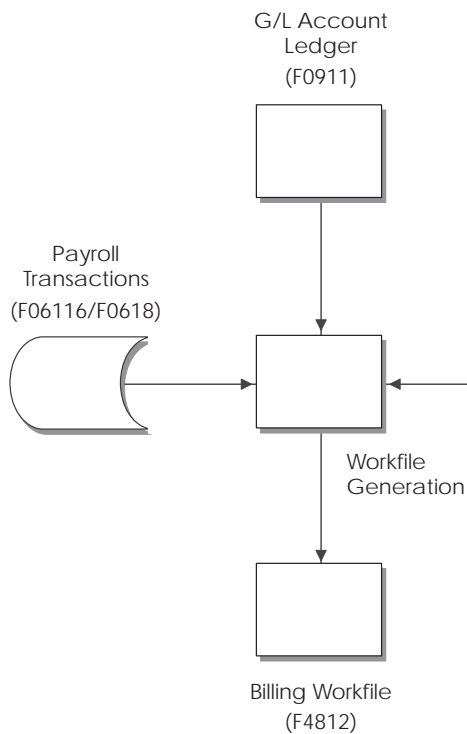
Before you generate or revise a workfile transaction, you must set up markup rules in the Billing Rate/Markup Table. The billing rate is defined as the rate multiplied by the number of units worked to calculate the amount you invoice your customer for goods or services rendered. The markup is defined as a percent or an amount that you add to costs for overhead and profit. The system stores this markup information in the Billing Rate / Markup Table (F48096).

The Billing Rate/Markup Table is accessed during workfile generation and workfile re-extension to apply markup information to the workfile transaction. The following graphic illustrates these processes:

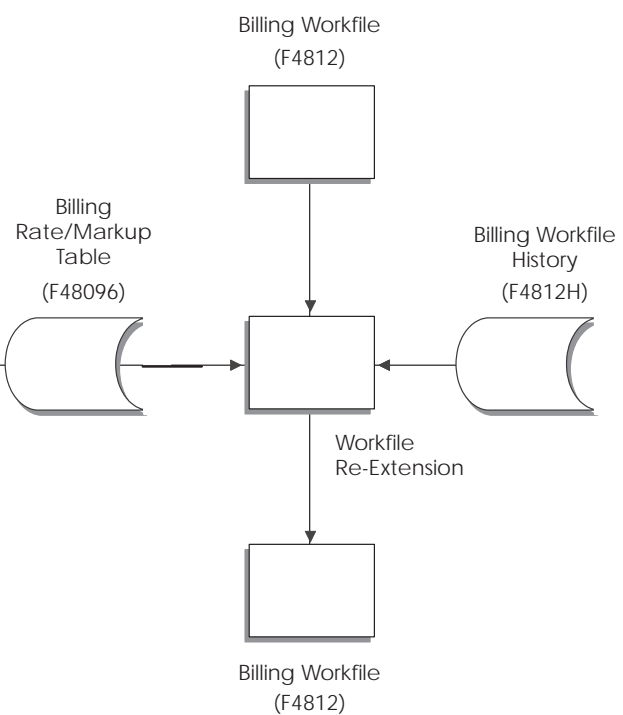
Markup Calculation Diagram



Workfile Generation



Workfile Re-Extension



Major Key

You must specify a major key for each billing Rate/Markup Table you define. The major key will include the following information:

Currency Code

Controls the currency decimals of the markup amount defined in the Billing Rate/Markup Table.

Generation Type

Specifies whether the markup rule applies to calculating the invoice amount, revenue amounts, or component amounts. Depending on how you set your system constants, you might want different markup rules to apply to different amounts.

Key Type

Defines the type of major key value for the markup table. The system recognizes nine hard-coded values.

Table Key

Further defines the major key value, based on the key type.

Effective Dates

Specifies when the markup table is effective. The Table Basis Date of the workfile transaction is compared to these dates when searching the Billing Rate/Markup Table.

How the Currency Code is Used in Searches

The currency code of the Billing Rate/Markup Table is used to identify the currency of the billing rates and markup amounts that comprise the markup rules for that table.

The system stores the domestic currency, the foreign currency, and the currency mode on each workfile transaction. The domestic currency represents the currency of the company. The foreign currency represents the currency of the customer. The currency mode indicates which currency is used to access the correct Billing Rate/Markup Table.

For example, a workfile transaction with a domestic currency of US dollars (USD) and a foreign currency of French francs (FRF), with the currency mode of 'F' will search for a Billing Rate/Markup Table set up for French francs (FRF).

All markup calculations will be made in French francs and will use the exchange rate to calculate the U.S. dollars.

Workfile transaction before markups are applied:

Business Unit (USD)	Dom Curr	For Curr	Curr Mode	Exch Rate	Dom Cost	Units	For Cost	Dom In-voice	For In-voice
501	USD	FRF	F	5.68	50.00	10	284.00	0.00	0.00

Billing Rate/Markup Table

Business Unit (USD)	Curr Code	Markup Override Rate	Markup Percent	Markup Amount
501	FRF	284.00	10	142.00

Workfile transaction after markups are applied

Business Unit (USD)	Dom Curr	For Curr	Curr Mode	Exch Rate	Dom Cost	Units	For Cost	Dom In-voice	For In-voice
501	USD	FRF	F	5.68	50.00	10	284.00	575.00	3266.00

Generation Types of the Billing Rate/Markup Table

The generation type of the Billing Rate/Markup Table is used to control how the markups are applied to the workfile transaction

1 - Invoice/Revenue/Component Billing Rate/Markup Rules

You would setup a billing rate / markup table as Generation Type 1 when both the invoice and revenue amount are calculated the same.

2 - Override Revenue Billing Rate/Markup Rules

You would setup a Billing Rate/Markup table with a Generation Type 2 when you need to calculate the revenue amount differently than the invoice amount. You setup the markup rules for the invoice amount using Generation Type 1 and the markup rules for the revenue amount using Generation Type 2. If no Generation Type 2 markup table is found, the calculations found on Generation Type 1 will be used for the revenue amount. (Note that the Independent Invoice/Revenue flag in the Billing Constants must be set to a '1' for a Generation Type '2' billing rate / markup table to be valid.)

3 - Override Component Billing Rate/Markup Rules

You would setup a billing rate / markup table with a Generation Type 3 when you need to create components

Key Types and Table Keys

You use the following key types in combination with the table key to define a markup table:

'1' - Work Order

'2' - Work Order Class

'3' - Contract Number

'4' - Parent Contract Number

'5' - Customer Number

'6' - Business Unit Number

'7' - Business Unit Class

'8' - Company Number

'9' - Default

For example, if you need to define markup rules by work order, you would use a key type '1' with the table key of the specific work order. If you have three work orders that require different markup rules to set up a default markup table, you would use a key type '9' and allow the system to default *ALL in the table key.

Minor Key

You must specify a minor key for each markup rule you define on billing rate / markup table. The minor key will include the following information:

Account Range

Specifies the range of objects and subsidiaries used to apply markup rules. The object and subsidiary of the workfile transaction must fall within the specified range to use this markup rule.

Payroll Information

Specifies the payroll information used to apply markup rules. The payroll information of the workfile transaction must match to use this markup rule.

Equipment Information

Specifies the equipment information used to apply markup rules. The equipment information on the workfile transaction must match to use this markup rule.

You can specify a combination of payroll OR equipment information. Payroll and equipment information are mutually exclusive.

To setup a default markup rule, leave the account range blank and specify the default markup calculation rule.

If you do not specify markup calculations for the minor key, the system processes the transactions at cost. If the transaction does not match the major or minor key values for any of the markup rules you have defined, the system uses the default markup percentage you have defined in the Billing Constants.

Markup Calculations

You can relate three markup calculations to a minor key. To markup workfile transactions, the system applies the following calculations for a minor key in the order shown:

Rate Override Calculation

This override rate is multiplied by the number of units from the workfile transaction to calculate the invoice/revenue amount. This calculation is NOT performed if the number of units is equal to zero.

Percentage Markup Calculation

This percent is multiplied by the cost amount from the workfile transaction to calculate the invoice/revenue amount.

Amount Markup Calculation

This amount is added to the cost amount from the workfile transaction to calculate the invoice/revenue amount.

Compound Markup

A compound markup results when you define more than one markup calculation on a minor key.

For example, a workfile transaction with 10 units might use a minor key with the following markup calculations:

- Rate Override of 50 dollars per unit
- Percentage markup of 10 percent
- Amount markup of 25 dollars

The system calculates the compounded markup as follows:

- 10 units X 50 dollars = 500 dollars
- (500 dollars X 10 percent) + 500 dollars = 550 dollars
- 550 dollars + 25 dollars = 575 dollars

Using the same compounded markup rule, a workfile transaction with zero units but 200 dollars cost would be calculated by the system as follows:

- No rate calculation because units equal zero
- 200 dollars X 10 percent + 200 dollars = 220 dollars
- 220 dollars + 25 dollars = 245 dollars

Component Information

The system processes the component information as an additional markup for the workfile transactions. As part of system setup, you define component rules within a component table. You then assign the component table to a markup rule on the Billing Rate / Markup Table.

The system creates separate component workfile transactions for each component rule defined on a component table.

Before You Begin

☐ Verify Billing Constants setting for the following controls:

- Independent Invoice/Revenue Flag: This value controls whether the system allows generation type 2 Billing Rate/Markup Tables.
- Currency Mode: This value controls whether the domestic or foreign currency of a workfile transaction is used to search the Billing Rate/Markup Table.
- Effective Date: This value identifies which date from non-payroll billable cost entries is used to search the Billing Rate/Markup Table.
- Labor Effective Date: This value identifies which date from payroll-based billable cost entries is used to search the Billing Rate/Markup Table.

- ☐ Determine the major key values used to define markup tables. These values are edited for validity when adding or updating a Billing Rate/Markup Table.
- ☐ Determine minor key values used to define markup rules. These values are edited for validity when adding or updating a Billing Rate/Markup Table.
- ☐ Define the billing rates and markup calculations to apply to workfile transactions.
- ☐ Determine component rules used in the calculation of component workfile transactions.

► To define markup rules

From the Table Information menu (G48S41), choose Billing Rate/Markup Table.

1. On Work With Billing Rate/Markup Table, click Add.

Obj From	Obj Thru	Sub From	Sub Thru	Markup Rate Override	Cap	Markup Percent	Markup Amount	Job Type	J S
1340	1341	01000	04000			22.000	165.00		

2. To identify the major key for a Billing Rate/Markup Table on Billing Rate/Markup Revisions, complete the following fields.
 - Generation Type
 - Key Type
 - Table Key
 - Currency Code

- Begin Date
 - Ending Date
3. To specify the account range for each markup rule, complete the following fields:
- Obj From
 - Obj Thru
 - Sub From
 - Sub Thru

If you leave the account ranges blank, the system applies the markup rule to all account ranges within the major key.

4. To define markup calculations for each markup rule, complete the following fields:
- Markup Rate Override
 - Cap or Override Rate
 - Markup Percent
 - Markup Amount
5. To define a markup rule specific to payroll, complete any of the following fields:
- Job Type
 - Job Step
 - Cost Pool
 - Business Unit – Home
 - Employee Number
 - Pay Type
6. To define a markup rule specific to equipment, complete any of the following fields:
- Equip Number
 - Rate Group
 - Rate Code

Payroll and equipment information are mutually exclusive.

7. To associate component calculations with this markup rule, complete the following fields:
- Cost Comp Tbl
 - Inv/Rev Comp Tbl

8. Complete the following optional field to override the descriptions from the related source transactions and click OK:
- Override Description

Field	Explanation
Generation Type	<p>A value that controls the type of entries for a batch and also the markup rules for the Billing Rate/ Markup Table (P48096).</p> <p>Types of Entries: The system assigns the generation type of a batch at the time the batch is created. Valid values are:</p> <ul style="list-style-type: none"> 1 For invoice processing. 2 For revenue processing. <p>Billing Rate/Markup Processing: The system uses the generation type to determine the markup rules for invoice, revenue, and component amounts. Depending on how you define the billing constants, different markup rules can apply to different amounts.</p> <p>Type 1: When the billing constants specify that invoice and revenue amounts are always the same, the markup rule applies to revenue, invoice, and component amounts. If the billing constants specify that the invoice and revenue amounts can be different, the markup rule still applies to revenue, invoice, and component amounts if no Type 2 rule exists.</p> <p>Type 2: When the billing constants specify that the invoice and revenue amounts can be different, the markup rule applies to revenue, and component amounts only.</p> <p>Type 3 This type applies to component amounts. This rule is not dependent on the billing constants settings.</p>

Field	Explanation
Key Type	<p>A code that the system uses in combination with the table key to locate and edit the source and workfile transactions against the various tables and user defined codes in the Service Billing and Contract Billing systems.</p> <p>Valid key type codes and their related tables or user defined codes are:</p> <ol style="list-style-type: none"> 1 Work order number - Work Order Master (F4801) 2 Work order class - User Defined Code (00/W7) 3 Contract number - Contract Master (F5201) 4 Parent contract number - Contract Master (F5201) 5 Customer - Address Book Master (F0101) 6 Job or business unit - Business Unit Master (F0006) 7 Job class - User Defined Code (00/11) 8 Company - Company Constants (F0010) 9 Default
Table Key	<p>A value that the system uses in combination with the key type to locate and edit workfile transactions against the various tables in the Service Billing and Contract Billing systems.</p> <p>The value you enter in the Key Type field determines the valid values for the Table Key field. For example, if you specify the key type for work order number (1), you must enter a valid work order number from the Work Order Master (F4801) in the Table Key field.</p> <p>The key type you specify also controls the search window that you access from the Table Key field when you use field sensitive help. For example, when you select Key Type 1, you can use the field sensitive help for the Table Key field to access the Work Order Search window. With Key Type 2, you access the User Defined Codes window for work order class.</p> <p>..... <i>Form-specific information</i></p> <p>The system uses the Table Key field in conjunction with the Key Type to locate the applicable Billing Rate/Markup table for each transaction workfile.</p>

Field	Explanation
Currency Code	<p>A code that indicates the currency of a customer's or a supplier's transactions.</p> <p>..... <i>Form-specific information</i></p> <p>Specify a currency code in conjunction with the key type, table key, and effective dates to define a major key for your markup table. The system uses the major key to search for the applicable markup table during the workfile generation and re-extension processes.</p> <p>The system retrieves default currency codes for the following key types:</p> <ul style="list-style-type: none"> • Company – default currency from the Company Information table (F0010) • Customer – default currency from the Customer Information table (F0301) • Job – default currency from the Business Unit Master table (F0006) • Work Order – default currency from the Work Order Master table (F4801) <p>You must enter a currency code for the following key types:</p> <ul style="list-style-type: none"> • Work Order Class • Job Class • Default <p>The currency code that you specify in this field controls the decimal display on the Billing Rate/Markup Table form.</p> <p>Note: The currency code that you set up for the markup tables must correspond to the currency code that you set up for any related component tables.</p>
Begin Date	<p>The date on which an address, item, transaction, or table becomes active, or the date from which you want transactions to appear.</p> <p>..... <i>Form-specific information</i></p> <p>This field identifies an effective begin date for a Billing Rate/Markup Table.</p> <p>Note: The effective dates for Billing Rate/Markup tables with the same key values cannot overlap.</p>
Ending Date	<p>The date on which the item, transaction, or table becomes inactive or the date through which you want transactions to appear.</p> <p>..... <i>Form-specific information</i></p> <p>This field identifies an effective end date for a Billing Rate/Markup table.</p> <p>Note: The effective dates for Billing Rate/Markup tables with the same key values cannot overlap.</p>

Field	Explanation
Obj From	The portion of a general ledger account that 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.
Obj Thru	Identifies the ending object account in a range of accounts.
Sub From	A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account.
Sub Thru	Identifies the ending subsidiary account in a range of accounts.
Markup Rate Override	<p>The rate the system uses to mark up the revenue amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This rate does not affect the employee's paycheck. You can use this markup rate as an override rate or as a maximum rate.</p> <p>The Override Rate Calculator for the Total Revenue markup is:</p> $(\text{Override Rate} * \text{Unit}) * (1 + \text{Markup \%}) + \text{Markup Amount}$ <p>When you specify a Maximum or Cap Rate, the system compares the override rate with the rate from the cost transaction and uses the lower rate as the override rate.</p> <p>You set up the override/maximum unit rate in the Billing Rate/Markup Table using generation type 1 to specify a table for revenue/invoice markup rates.</p> <p>You can mark up the revenue amount at a different rate than the invoice amount by using the Billing Rate/Markup Table with a generation type 2. The value in the Independent Revenue/Invoice field in the constants controls this function.</p> <p>(Not currently applicable in OneWorld.)</p>
Cap or Override Rate	<p>This flag indicates whether the associated amount is the override rate or the cap of the rate.</p> <p>Values are:</p> <ul style="list-style-type: none"> blank Override Rate. 1 Cap of the Rate. If the cost rate is less than the cap rate, the cost rate will be used; if the cost rate is greater than the cap rate, the Cap Rate will be used.

Field	Explanation
Markup Percent	<p>The percentage you use to mark up the amount reflected in the billing of professional services, such as draftsmen, engineers, or consultants fees. This percentage rate will not affect the employee's paycheck.</p> <p>Enter percentages as whole numbers. For example, 50.275% would be entered as 50.275.</p> <p>..... <i>Form-specific information</i></p> <p>The field lets you include a markup percentage for the amount of invoicing. Enter a markup percentage for costs whose override rates should be marked up further or for direct markup of non-unit costs.</p>
Markup Amount	<p>A number that identifies the actual amount. Enter debits with no sign or a plus sign. Enter credits with a minus sign either before or after the amount. You can use decimals, dollar signs, and commas. The system ignores nonsignificant symbols.</p> <p>..... <i>Form-specific information</i></p> <p>Enter an amount that should be used as a direct amount adjustment to the cost transaction.</p>
Job Type	<p>A user defined code (07/G) that defines the jobs within your organization. You can associate pay and benefit information with a job type and apply that information to the employees who are linked to that job type.</p>
Job Step	<p>A user defined code (07/GS) that designates a specific level within a particular job type. The system uses this code in conjunction with job type to determine pay rates by job in the Pay Rates table.</p>
Home Business Unit	<p>The number of the business unit in which the employee generally works.</p> <p>..... <i>Form-specific information</i></p> <p>This field tells the system to apply the specified markup rates only to accounts (costs) with the designated home business unit within the Cost Type, Cost Code, or Job specified.</p>
Employee Number	<p>A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, a location, and any other address book members.</p>
Pay Type	<p>A code that defines the type of pay, deduction, benefit, or accrual.</p> <p>Pay types are numbered from 1 to 999. Deductions and benefits are numbered from 1000 to 9999.</p>

Field	Explanation
Cost Pool	Category code 12 associated with the Business Unit Master file (F0006). This is a user defined code (00,12) for use in flex account mapping and in printing selected information on reports.
Equip Number	An 8–digit number that uniquely identifies an asset.
Rate Group	A user defined code (12/C0) that groups similar items for billing. If you are an Equipment Management client and you use Equipment Billing, you must use this category code for rate group purposes only.
Rate Code	<p>A user defined code (00/RC) that indicates a billing rate, such as DY for daily, MO for monthly, and WK for weekly. You can set up multiple billing rates for a piece of equipment.</p> <p>If you leave this field blank, the system searches for a valid billing rate in the following sequence:</p> <ol style="list-style-type: none"> 1. Account Ledger Master (F0901) – This table contains the most detailed rate information. You can assign multiple rates for a job. For example, you can set up separate rates for different equipment working conditions. 2. Job or Business Unit Master (F0006) – This table contains less detailed rate information than the Account Ledger Master. You can only set up a single rate for a job based on this table. 3. Rental Rules (F1302) – This table contains the least detailed rate code information. The system searches this table according to the criteria you establish when setting up the table. <p>..... <i>Form-specific information</i></p> <p>The code lets you apply multiple billing rates per equipment item. For example, you might want to set up a markup for the maintenance on a vehicle that is different from the markup for the cost of gasoline for that same vehicle.</p>
Override Description	<p>A description, remark, explanation, name, or address retrieved from the following cost (source) transactions:</p> <ul style="list-style-type: none"> • Journal entry (Explanation 2 field) • A/P voucher entry (Explanation field) • Payroll (pay type description; regular, overtime, and so on) <p>..... <i>Form-specific information</i></p> <p>A description, remark, explanation, name, or address that you want to apply to the billable detail transaction.</p>

Field	Explanation
Cost Comp Tbl	A code that identifies a component cost rate table to use for this Billing Rate/Markup Table entry. The component table identifies the components and their calculation rules. These component amounts are applied as overhead to the original cost. You set up component tables on the Component Table Definition form.
Inv/Rev Comp Tbl	<p>A code that identifies a component invoice/revenue table to use for this Billing Rate/Markup Table entry. The component table identifies the components and their calculation rules. These component amounts are recognized as invoice/revenue in addition to any invoice/revenue markups.</p> <p>The generation type of the Billing Rate/Markup Table, in conjunction with the value set up for the Independent Invoicing flag in the Billing Constants, will determine whether this is a component table for invoice amounts or revenue amounts, or both. You set up component tables on the Component Table Definition form.</p>

See Also

- *R48096B, Billing Rate/Markup Table Listing* in the *Reports Guide* for a report sample

Processing Options: Billing Rate/Markup Table (P48096)

Security Tab

1. Key Type 1

Use this processing option to determine whether the user will be allowed access to Work Order Number Key Types in this application. Valid values are:

Blank Allow access
 1 Do not allow access

2. Key Type 2

Use this processing option to determine whether the user will be allowed access to Work Order Class Key Types in this application. Valid values are:

Blank Allow access
 1 Do not allow access

3. Key Type 3

Use this processing option to determine whether the user can access Contract Number Key Types in this application. Valid values are:

Blank Allow access

1 Do not allow access

4. Key Type 4

Use this processing option to determine whether the user can access Parent Contract Number key types in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

5. Key Type 5

Use this processing option to determine whether the user can access Customer Number Key Types in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

6. Key Type 6

Use this processing option to determine whether the user can access Job/Business Unit Key Types in this application. Valid values are:

Blank Allow access.

1 Do not allow access

7. Key Type 7

Use this processing option to determine whether the user can access Job Class Key Types in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

8. Key Type 8

Use this processing option to determine whether the user can access Company Number Key Types in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

9. Key Type 9

Use this processing option to determine whether the user can access the default Markup Table Key Type in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

10. Table Generation Type 10

Use this processing option to determine whether the user can access the Invoice, Revenue, and Component Markup Table Generation Type in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

11. Table Generation Type 1

Use this processing option to determine whether the user can access the Revenue Markup Override Table Generation Type in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

12. Table Generation Type 2

Use this processing option to determine whether the user can access the Component Markup Override Table Generation Type in this application. Valid values are:

Blank Allow access.

1 Do not allow access.

Defining Billing AAI's

Before you generate accounting entries in proof or final mode, you must set up your accounting rules in the Billing AAI's. These AAI's are the links between your day-to-day accounting functions, chart of accounts, and financial reports. The system uses AAI's to determine how to distribute G/L entries that the system generates. For example, in the Contract Billing system, the Billing AAI's identify how to record the transaction when you invoice a customer for goods or services rendered.

Each AAI is associated to a specific G/L account that consists of a business unit, object, and optionally, a subsidiary and/or a subledger and subledger type.

If you are required to collect taxes on customer invoices, you use the AAI's to distribute the tax amounts to the correct G/L accounts.

The system stores the AAI's in the Billing AAI's table (F48S95).

Understanding Billing AAI's consists of the following topics:

- ☐ Major keys
- ☐ AAI's for the Contract Billing system
- ☐ Key type/table key
- ☐ Minor keys
- ☐ AAI processing in Contract Billing
- ☐ Working with billing AAI's

Major Keys

You must specify a major key for each Billing AAI table you define. The major key will include the following information:

Billing AAI's - Corresponds to the type of accounting entry created. For example, AAI 4811 tells the system which G/L account to credit for revenue when you process invoices or revenue recognition.

Key Type - Defines the type of major key value for the Billing AAI's. The system recognizes the use of nine hard-coded values.

Table Key - Further defines the major key values, based on the key type.

Effective Dates - Specifies when the Billing AAI table is effective. The Table Basis Date of the workfile transaction is compared to these dates when searching the Billing AAI's.

AAI's for the Contract Billing System

The following pre-defined AAI's are available in the Contract Billing system:

- Actual Revenue - Required
- Tax Liability
- Taxable Receivables
- Accrued Revenue
- Accrued Receivables
- Work In Progress
- Cost Of Goods Sold
- Revenue Margin
- Invoice Margin

Actual Revenue Account (4811) - Required

The AAI number 4811 for the revenue account is required. This AAI defines the actual revenue account that the system assigns to the accounting journal.

You use this AAI to credit revenue to a revenue account. If the Journal Generation Control flag in the Billing Constants is set to a '1' - Invoicing Only or a '4' - Invoicing / Revenue Recognition with Reconciliation, the revenue will be credited to this account during Create A/R Entries. If the Journal Generation Constant is set to a '2' - Revenue Only or '3' - Invoicing / Revenue Recognition, this account will be credited during Create G/L Entries.

Tax Liability Accounts (4815)

The AAI number 4815 for the tax liability account is optional. This AAI defines the tax liability account that the system assigns to the accounting entry. The tax amount from the workfile transaction is credited to this account. If you do not set up this AAI, the tax amount will be credited to the revenue account set up for AAI - 4811 Actual Revenue.

You use this AAI to distribute the sales tax or PST tax independently of the revenue when you generate invoice journals. You use the A/R AAI's to distribute VAT or GST taxes. Note that the system does not allow reallocation rules with this AAI.

Taxable Receivables Accounts (4822 and 4823)

The AAI numbers 4822 and 4823 for taxable receivables accounts are optional. You use these AAI's to create accounting entries for the taxable invoice amount from the workfile transaction.

- 4822 - Defines the taxable receivables account to credit when creating invoice journals.
- 4823 - Defines the taxable receivables account to debit when creating invoice journals.

The system debits and credits these accounts when you generate invoice journals. Note that these AAI's are optional, but if you setup an AAI - 4822, you must setup a balancing AAI - 4823.

Accrued Revenue Accounts (4831)

The AAI number 4831 for accrued (unbilled) revenue accounts is required if the Journal Generation Control flag in the Billing Constants is set to a '4' - Invoicing / Revenue Recognition with Reconciliation.

You use this AAI to credit revenue to an accrued revenue account during revenue recognition. Then, during invoice journal generation, the revenue amount is debited from this account and the taxable invoice amount is credited to AAI number 4811 - Actual Revenue. Note that the system does not allow reallocation rules with this AAI.

Accrued Receivable Accounts (4832)

The AAI number 4832 for accrued (unbilled) receivable accounts is required if the Journal Generation Control flag in the Billing Constants is set to a '2' - Revenue Only, '3' - Invoicing With Revenue Recognition, or '4' - Invoicing / Revenue Recognition with Reconciliation.

You use this AAI to debit revenue to an accrued receivable account during revenue recognition. If the Journal Generation Control flag is set to a '3' or a '4', the revenue amount is credited from this account during invoice journal generation. Note that the system does not allow reallocation rules with this AAI.

Work In Progress Accounts (4841)

The AAI number 4841 for work in progress accounts is optional. This AAI defines the work in progress account that the system assigns to the accounting entry. The cost amount from the workfile transaction is credited to the account. If you enter a work in progress account, you must setup AAI number 4842 - Cost Of Goods Sold to instruct the system to create balanced accounting entries.

You use this AAI to credit cost to your work in progress accounts. This accounting entry will reduce the cost in your work in progress accounts.

Cost Of Goods Sold Accounts (4842)

The AAI number 4842 for cost of goods sold accounts is optional unless you have set up base rules for AAI - 4841 Work In Progress; then an entry to this AAI is required to instruct the system to create balanced accounting entries.

You use this AAI to debit the cost to your cost of goods accounts. This accounting entry will increase the cost in your cost of goods accounts.

The system debit this account in two processes: if the Journal Generation Control Flag in the Billing Constants is set to a '1', the system credits this account when you Create A/R Entries; any other setting in the Journal Generation Control Flag will cause the system to debit this account when you Create G/L Entries.

Revenue Margin Accounts (4871 and 4872)

The AAI numbers 4871 and 4872 for revenue margin accounts are optional. You use these AAI's to create accounting entries for the revenue margin amount. The system calculates the revenue margin amount by subtracting the cost amount from the revenue amount of the workfile transaction.

- 4871 - Defines the revenue margin account to credit when creating G/L journals.
- 4872 - Defines the revenue margin account to debit when creating G/L journals.

The system debits and credits these accounts when you Create G/L Entries. Note that these AAI's are optional, but if you setup an AAI - 4871, you must setup a balancing AAI - 4872.

Invoice Margin Accounts (4873 and 4874)

The AAI numbers 4873 and 4874 for invoice margin accounts are optional. You use these AAI's to create accounting entries for the invoice margin amount. The system calculates the invoice margin amount by subtracting the cost amount from the total invoice amount of the workfile transaction.

- 4873 - Defines the invoice margin account to credit when creating invoice accounting entries.
- 4874 - Defines the invoice margin account to debit when creating invoice accounting entries.

The system debits and credits these accounts when you Create A/R Entries. Note that these AAI's are optional, but if you setup an AAI - 4872, you must setup a balancing AAI - 4873.

Key Type/ Table Key

You use the following key types in combination with the table key to further define a Billing AAI table:

- '1' - Work Order
- '2' - Work Order Class
- '3' - Contract Number
- '4' - Parent Contract Number
- '5' - Customer Number
- '6' - Business Unit Number
- '7' - Business Unit Class
- '8' - Company Number
- '9' - Default

For example, if you need to define accounting rules by work order, you would use key type '1', with a table key of the specific work order. If you have three work orders that require different accounting rules, you must set up three different base accounting rules, each with '1' as the key type and a specific work order as the table key.

Minor Keys

You must specify at least one minor key for each Billing AAI table you define. The minor key will include the following information:

Account Range

Specifies the range of objects and subsidiaries used to assign accounting rules. The object and subsidiary of the workfile transaction must fall within the specified range to use this accounting rule. If you leave the object range blank, all objects are eligible for this rule. If you leave the subsidiary range blank, all subsidiaries are eligible for this rule.

Subledger and Subledger Type

Identifies the specific subledger and subledger type used to assign accounting rules. The subledger and subledger type of the workfile transaction must match these entries to use this accounting rule. If you leave the subledger and subledger type blank, all subledgers/types are eligible for this rule. If you enter a subledger, you must enter a subledger type; conversely, if you enter a subledger type, you must enter a subledger. NOTE: If you are defining this accounting rule for key type '1', the work order assigned as the table key value will default into the subledger with a subledger type 'W'.

G/L Offset

Identifies the G/L offset used to assign accounting rules. If you leave the G/L offset blank, all G/L offsets are eligible for this rule. The G/L Offset of the workfile transaction is compared to this value except for AAI number 4815 - Tax Liability where we use the G/L offset of the tax authorities established in the tax rate area table.

Component Code

Identifies the component code used to assign accounting rules. You leave this field blank to allow base AND component workfile transactions to use this accounting rule. You update this field with a valid component code to assign accounting rules to component workfile transactions that are different than the accounting rules setup for the base workfile transactions. If a component workfile transaction does not find an exact match, the accounting rule setup for the base workfile transaction will be used. Note that you may use the hard-coded value, '*BASE', to designate this accounting rule applies to base workfile transactions only.

For example, if a base workfile transaction has three component workfile transactions; OVH (overhead), G&A (general and administrative), and FEE (fees), and you want the OVH revenue assigned to an accounting rule different than that of the base or the other component workfile transactions, you would set up two accounting rules; one accounting rule with OVH entered in the component code field to process the OVH revenue and another accounting rule with a blank component code to process the base, G&A, and FEE workfile transactions.

Types of Accounting Rules

You can define the following types of accounting rules in the Billing AAI's:

- Base rules
- Reallocation rules

Base Rules

Base rules indicate which accounts you want the system to use when it creates accounting entries for the invoicing, costing, and revenue recognition processes. The system uses base rules to create accounting entries for 100% of the amounts on the base and component workfile transactions. **NOTE:** The system requires that the Percent To Include for base rules be set to 100%.

Reallocation Rules

Reallocation Rules are used to move amounts from one account to another. A reallocation rules consists of two or more offsetting accounting entries that must balance.

For example, the first offset accounting entry can represent a reduction to the accounting entry set up in the base rule. The second entry can represent the increase to the new account. Note that the system requires that the total of the Percent To Include for reallocation rules must net to 0. You do not need to enter a negative percent for credit reallocation rules; the system assumes a negative percent for these entries.

You can define reallocation rules on any base rule for any AAI, with the exception of 4831 - Accrued (unbilled) Revenue and 4832 - Accrued (unbilled) Receivables. Reallocation rules are not allowed for these AAI's because these AAI's are credited AND debited, depending on the Journal Generation Control setting in the Billing Constants; therefore, the credit/debit flag on the reallocation rules would be misleading.

It is recommended that you use AAI 4811 - Actual Revenue or 4822 - Taxable Receivables to assign reallocation rules for revenue or taxable receivables distribution accounting entries.

AAI Processing in Contract Billing

The system processes AAI's differently for G/L journal generation than for invoice journal generation. The following table is an example of how the system processes different AAI's for invoice and G/L journal generation with regard to the Journal Generation Control setting in the Billing Constants and the Eligibility Code assignment of the workfile transaction. The debit and credit amounts

represent sample monetary values for each accounting entry, based on these amounts stored on the non-taxable workfile transaction:

Cost Amount (WDAA)	\$750.00
Revenue Amount (WDBTOL)	\$1000.00
Taxable Amount (WDITXA)	\$1000.00
Tax Amount (WDITAM)	\$.00
Invoice Amount (WDITOL)	\$1000.00

G/L Journal Generation						
Jrnl Gen Constant	Elig Code	AAI Table Number	G/L Account	Amount Retrieval	Usage	Entry Amount
These entries are processed as a 'tag-along' g/l batch associated with the invoice batch						
1,3,4	'1'	4822	Taxable Receivable	WDITXA	Opt	1,000.00 cr
	'1'	4823	Taxable Receivable	WDITXA	Opt	1,000.00 dr
	'1'	4841	Work In Process	WDAA	Opt	750.00 cr
	'1'	4842	Cost Of Goods	WDAA	Opt	750.00 dr
	'1'	4873	Invoice Margin	WDITOL - WDAA	Opt	250.00 cr
	'1'	4874	Invoice Margin	WDITOL - WDAA	Opt	250.00 dr

G/L Journal Generation						
Jrnl Gen Constant	Elig Code	AAI Table Number	G/L Account	Amount Retrieval	Usage	Entry Amount
2, 3, 4	'2'	4811	Actual Revenue	WDBTOL	Req'd	1,000.00 cr
	'2'	4832	Accrued Receivables	WDBTOL	Req'd	1,000.00 dr
	'2'	4841	Work In Process	WDAA	Opt	750.00 cr
	'2'	4842	Cost Of Goods	WDAA	Opt	750.00 dr
	'2'	4873	Revenue Margin	WDBTOL -WDAA	Opt	250.00 cr
	'2'	4873	Revenue Margin	WDBTOL -WDAA	Opt	250.00 dr
'3'	'0'	4811	Actual Revenue	WDBTOL	Req'd	1,000.00 cr
	'0'	4822	Taxable Receivable	WDITXA	Opt	1,000.00 cr
	'0'	4823	Taxable Receivable	WDITXA	Opt	1,000.00 dr
	'0'	4832	Accrued Receivables	WDBTOL	Req'd	1,000.00 dr
	'0'	4841	Work In Process	WDAA	Opt	750.00 cr
	'0'	4842	Cost Of Goods Sold	WDAA	Opt	750.00 dr
	'0'	4871	Revenue Margin	WDBTOL -WDAA	Opt	250.00 cr
	'0'	4872	Revenue Margin	WDBTOL -WDAA	Opt	250.00 dr
	'0'	4873	Invoice Margin	WDITOL -WDAA	Opt	250.00 cr
	'0'	4874	Invoice Margin	WDITOL -WDAA	Opt	250.00 dr

G/L Journal Generation						
Jrnl Gen Constant	Elig Code	AAI Table Number	G/L Account	Amount Retrieval	Usage	Entry Amount
'4	'0'	4822	Taxable Receivable	WDITXA	Opt	750.00 cr
	'0'	4823	Taxable Receivable	WDITXA	Opt	1,000.00 dr
	'0'	4831	Accrued Revenue	WDBTOL	Req'd	1,000.00 cr
	'0'	4832	Accrued Receivables	WDBTOL	Req'd	1,000.00 dr
	'0'	4841	Work In Process	WDAA	Opt	750.00 cr
	'0'	4842	Cost Of Goods Sold	WDAA	Opt	750.00 dr
	'0'	4871	Revenue Margin	WDBTOL -WDAA	Opt	250.00 cr
	'0'	4872	Revenue Margin	WDBTOL -WDAA	Opt	250.00 dr
	'0'	4873	Invoice Margin	WDITOL -WDAA	Opt	250.00 cr
	'0'	4874	Invoice Margin	WDITOL -WDAA	Opt	250.00 dr
Costing transactions						

G/L Journal Generation						
Jrnl Gen Constant	Elig Code	AAI Table Number	G/L Account	Amount Retrieval	Usage	Entry Amount
1,2,3,4	'4'	4841	Work In Process	WDAA	Opt	750.00 cr
	'4'	4842	Cost Of Goods Sold	WDAA	Opt	750.00 dr
Eligibility Code '5' - Currently, No G/L Journal Creation						

Invoice Journal Generation						
Jrnl Gen Constant	Elig Code	AAI Table Number	G/L Account	Amount Retrieval	Usage	Entry Amount
'2' No Invoice Journal Generation						
1, 3, 4	'1'	4811	Actual Rev- enue	WDITOL	Req'd	1,000.00 cr
	'1'	4815	Taxes	WDITAM	Opt	.00 cr
		RC + GLC	Trade A/R	W4THPD	Req'd	1,000.00 dr
'3'	'0'	4832	Accrued Receivables	WDITOL	Req'd	1,000.00 cr
	'0'	4815	Taxes	WDITAM	Opt	.00 cr
		RC + GLC	Trade A/R	W4THPD	Req'd	1,000.00 dr
'4'	'0'	4831	Accrued Revenue	WDITOL	Req'd	1,000.00 dr
	'0'	4832	Accrued Receivables	WDITOL	Req'd	1,000.00 cr
	'0'	RC + GLC	Trade A/R	W4THPD	Req'd	1,000.00 dr
	'0'	4811	Actual Revenue	WDBTOL	Req'd	1,000.00 cr
	'0'	4815	Taxes	WDITAM	Opt	.00 cr
	'0'	4831	Accrued Revenue	WDBTOL	Req'd	1,000.00 dr
	'0'	4822	Taxable Receivable	WDITXA	Opt	1,000.00 cr
	'0'	4823	Taxable Receivable	WDITXA	Opt	1,000.00 dr

	'0'	4873	Invoice Margin	WDITOL -WDAA	Opt	250.00 cr
	'0'	4874	Invoice Margin	WDITOL -WDAA	Opt	250.00 dr

Working With Billing AAI's

Working with Billing AAI's consists of the following tasks:

- Defining base rules
- Defining reallocation rule

See Also

- *Setting Up Tax Information* for information about setting up automatic accounting instructions for tax information

Before You Begin

- Verify Billing Constants setting for Journal Generation Control.
- Determine the major key values used to define Billing AAI rules. These values are edited for validity when adding or updating the Billing AAI rules.
- Determine the minor key values used to define Billing AAI rules. These values are edited for validity when adding or updating the Billing AAI rules.



To define a base rule

From the Table Information menu (G48S41), choose Billing AAI's.

1. On Work With AAI's, choose an AAI number and choose Billing AAI's from the Row menu.
2. On Work with Billing AAI's, click Add.
3. On AAI Base Rule Revisions, complete the following fields:
 - Key Type
 - Table Key
 - Effective Start Date
 - Effective End Date
4. Complete the following optional fields:

- Obj From
 - Obj Thru
 - Sub From
 - Sub Thru
 - Subledger – G/L
 - Subledger Type – Cost
 - G/L Offset
 - Component Code
5. To specify the account for which the system creates accounting entries, complete any of the following fields:
 - Resulting Bus Unit
 - Resulting Object
 - Resulting Subsidiary
 - Resulting Subledger
 - Resulting SBL Type
 6. To add a description for the accounting entry, complete the following field:
 - Description
 7. To update the employee number on the accounting entry, complete the following:
 - Employee Control Flag
 8. To update the units on the accounting entry, complete the following:
 - Units Cntrl Flg
 9. To update the equipment on the accounting entry, complete the following:
 - Equipment Cntrl Flg

Field	Explanation
Key Type	<p>A code that the system uses in combination with the table key to locate and edit the source and workfile transactions against the various tables and user defined codes in the Service Billing and Contract Billing systems.</p> <p>Valid key type codes and their related tables or user defined codes are:</p> <ol style="list-style-type: none"> 1 Work order number - Work Order Master (F4801) 2 Work order class - User Defined Code (00/W7) 3 Contract number - Contract Master (F5201) 4 Parent contract number - Contract Master (F5201) 5 Customer - Address Book Master (F0101) 6 Job or business unit - Business Unit Master (F0006) 7 Job class - User Defined Code (00/11) 8 Company - Company Constants (F0010) 9 Default
Table Key	<p>A value that the system uses in combination with the key type to locate and edit workfile transactions against the various tables in the Service Billing and Contract Billing systems.</p> <p>The value you enter in the Key Type field determines the valid values for the Table Key field. For example, if you specify the key type for work order number (1), you must enter a valid work order number from the Work Order Master (F4801) in the Table Key field.</p> <p>The key type you specify also controls the search window that you access from the Table Key field when you use field sensitive help. For example, when you select Key Type 1, you can use the field sensitive help for the Table Key field to access the Work Order Search window. With Key Type 2, you access the User Defined Codes window for work order class.</p>
Effective Start Date	The date on which an address, item, transaction, or table becomes active.
Effective End Date	The date on which the item, transaction, or table becomes inactive or through which you want transactions to appear.
Obj From	The portion of a general ledger account that 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.
Obj Thru	Identifies the ending object account in a range of accounts.

Field	Explanation
Sub From	A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account.
Sub Thru	Identifies the ending subsidiary account in a range of accounts.
Sub-ledger	A code that identifies a detailed auxiliary account within a general ledger account. A subledger can be an equipment item number or an address book number. If you enter a subledger, you must also specify the subledger type.
Subledger Type	<p>A user defined code (00/ST) that is used with the Subledger field to identify the subledger type and subledger editing. On the User Defined Codes form, the second line of the description controls how the system edits the subledger. This can be either hard-coded or user defined. Valid values include:</p> <ul style="list-style-type: none"> A Alphanumeric field, do not edit N Numeric field, right-justify and zero fill C Alphanumeric field, right-justify and blank fill
G/L Offset	<p>The table of Automatic Accounting Instruction accounts that allows you to predefine classes of automatic offset accounts for Accounts Payable, Accounts Receivable, and other systems.</p> <p>If you leave this field blank during data entry, the system uses the default value from the Customer Master by Line of Business table (F03012) or the Supplier Master table (F0401). The post program uses the G/L Offset class to create automatic offset entries.</p> <p>Note: Do not use code 9999. It is reserved for the post program and indicates that offsets should not be created.</p>
Component Code	A component code identifies a provisional burden that is accounted for at the billing detail transaction level.

Field	Explanation
Resulting Bus Unit	<p>This field determines the business unit for the resulting transactions. You can specify a business unit or use one of the following values:</p> <p>blank — The business unit from the default revenue account in the master information for the customer.</p> <p>*SRC — The business unit from the source transaction.</p> <p>*WO — The charge-to business unit from the master information for the work order.</p> <p>*HOME — The home business unit from the source transaction. If no home business unit exists, the system uses the business unit from the source transaction.</p> <p>*PROJ — The project number from the master information for the job.</p> <p>*CO — The company number from the source transaction.</p> <p>*HOST — The host business unit from the workfile transaction.</p> <p>*EHMCU — The responsible business unit from the master information for the equipment.</p>
Resulting Object	<p>This field determines the object account for the resulting transactions. You can use one of the following methods:</p> <ul style="list-style-type: none"> Specify an object account. Use an asterisk (*) as a positional wildcard in a definition that relates to the source transaction. For example, the object from the source transaction is 3106. If you define the object account for the resulting transaction as 4***, the resulting object account is 4106. Use one of the following values: <ul style="list-style-type: none"> blank – The object account from the default revenue account in the master information for the customer *SRC – The object account from the source transaction
Resulting Subsidiary	<p>This field determines the subsidiary for the resulting transactions. You can specify a subsidiary or use one of the following values:</p> <p>blank — The subsidiary from the default revenue account in the master information for the customer.</p> <p>*BLANK — The subsidiary is blank for the resulting transactions.</p> <p>*SRC — The subsidiary from the workfile transaction.</p> <p>*WO — The cost code (subsidiary) from the master information for the work order.</p>

Field	Explanation
Resulting Subledger	<p>A code that determines the subledger and subledger type for the resulting transactions. You can specify a subledger and subledger type or use one of the following values:</p> <ul style="list-style-type: none"> *SRC Use the subledger and subledger type from the workfile transaction. *WO Use the work order number and the subledger type W. *CUST Use the address number for the customer and the subledger type A. *CC Use the business unit from the workfile transaction and the subledger type C. *EMP Use the employee/supplier address number from the workfile transaction and the subledger type A. *AUTH Use the address book number of the Tax Authority and the subledger type A. The Tax Authority is associated with the tax rate area assigned to the workfile transaction.
Resulting SBL Type	A user defined code (00/ST) that is used with the Subledger field to identify the subledger type and how the system performs subledger editing. On the User Defined Codes form, the second line of the description controls how the system performs editing. This is either hard-coded or user defined.
Description	A user defined name or remark.
Employee Control Flag	<p>Use this field to control the update of the employee number on the accounting entry.</p> <p>Valid values are:</p> <ul style="list-style-type: none"> Blank Do not update the employee number on the accounting entry. 1 Update the employee number on the accounting entry.
Units Cntrl Flg	<p>Use this field to control whether the system records units on the accounting entry. Valid values are:</p> <ul style="list-style-type: none"> Blank Do not record units on the accounting entry. 1 Record units on the accounting entry.
Equipment Cntrl Flg	<p>Use this field to control the update of the equipment number on the accounting entry. Valid values are:</p> <ul style="list-style-type: none"> Blank Do not update the equipment number on the accounting entry. 1 Use the number of the Equipment Worked to update the asset number on the accounting entry. 2 Use the number of the Equipment Worked On to update the asset number on the accounting entry.

To define reallocation rules for a base rule

From the Table Information menu (G48S41), choose Billing AAI's.

1. On Work With AAI's, choose an AAI number and choose Billing AAI's from the Row menu.
2. On Work with Billing AAI's, choose an AAI table and click Select.
3. On the AAI Base Rule Revisions, choose a base rule and choose Reallocation Rules from the Row menu.
4. To specify the account for which the system creates accounting entries, complete any of the following fields:
 - Ledger Type
 - Resulting Business Unit
5. Complete any of the following fields:
 - Resulting Object
 - Resulting Subsidiary
 - Resulting Subledger
 - Subledger Type
6. To add a description for the accounting entry, complete the following field:
 - Description
7. To update the employee number on the accounting entry, complete the following:
 - Employee Control Flag
8. To update the units on the accounting entry, complete the following:
 - Units Cntrl Flg
9. To update the equipment on the accounting entry, complete the following:
 - Equipment Cntrl Flg
10. To specify the percent of the amount to use on the accounting entry, complete the following:
 - Percent To Include
11. To specify whether to create a credit or debit accounting entry, complete the following:
 - Credit/Debit

NOTE: The system requires the debits and credits for your reallocation rules to balance. The percentages for your credit reallocation rules must equal the percentages for your debit reallocation rules. You do not need to enter negative

percentages - the system calculates the amount of the accounting entry based on the credit/debit assignment.

Field	Explanation
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.
Percent To Include	Use this field to specify the percentage of the workfile transaction amount to use as the basis for the accounting entry. You enter this percentage as a decimal. For example, 100% is "1.000" and 45% is ".4500".
Credit Debit	Use this field to indicate whether this AAI accounting rule is used to write a credit or debit accounting entry.

See Also

- *R48S95, Billing AAI's Listing* in the *Reports Guide* for a report sample
- *Working with AAI's for General Accounting* in the *General Accounting Guide*
- *Working with AAI's for A/R* in the *Accounts Receivable Guide*

Processing Options: Work with Billing AAI's (P48S95)

Defaults Tab

1. AAI Table Number

Use this processing option to specify whether the AAI Table Number is used as a 'Skip To' field.

Security Tab

1. Key Type 1

Use this processing option to prevent or allow access to AAI Base Rules set up by work order number. Valid values are:

Blank Allow access to AAI Base Rules
1 Prevent access to AAI Base Rules

2. Key Type 2

Use this processing option to prevent or allow access to AAI base rules set up by work order class. Valid values are:

Blank Allow access to AAI base rules

1 Prevent access to AAI base rules

3. Key Type 3

Use this processing option to prevent or allow access to AAI base rules set up by contract number. Valid values are:

Blank Allow access to AAI base rules

1 Prevent access to AAI base rules

4. Key Type 4

Use this processing option to prevent or allow access to AAI base rules set up by parent contract number. Valid values are:

Blank Allow access to AAI base rules

1 Prevent access to AAI base rules

5. Key Type 5

Use this processing option to prevent or allow access to AAI base rules set up by customer number. Valid values are:

Blank Allow access to AAI base rules

1 Prevent access to AAI base rules

6. Key Type 6

Use this processing option to prevent or allow access to AAI base rules set up by business unit (job) number. Valid values are:

Blank Allow access to AAI base rules

1 Prevent access to AAI base rules

7. Key Type 7

Use this processing option to prevent or allow access to AAI base rules set up by business unit (job) class. Valid values are:

Blank Allow access to AAI base rules

1 Prevent access to AAI base rules

8. Key Type 8

Use this processing option to prevent or allow access to AAI base rules set up by company number. Valid values are:

Blank Allow access to AAI base rules
1 Prevent access to AAI base rules

9. Key Type 9

Use this processing option to prevent or allow access to AAI base rules set up for default processing. Valid values are:

Blank Allow access to AAI base rules
1 Prevent access to AAI base rules

Defining Component Rules

Components are a type of markup that the system calculates based on amounts and units. For example, the billing for labor might include a component to partially offset the cost of borrowing money. Component rules work in conjunction with markup rules. After you set up a component rule, you must associate it with a markup rule.

Defining component rules consists of the following tasks:

- Setting up component calculation rules
- Setting up compound components

When you accumulate costs, the system calculates the component amount using the component rules you define to create component transactions. Component transactions are always associated with a parent workfile transaction. The system assigns both transaction types the same billing control ID number and a component link number that associates each component calculation with its related workfile transaction.

You define component rules using the following information:

- A name to identify a set of component calculation rules
- An effective date range
- One or more calculation rules based on an amount, a unit rate, or both

Compound Components

You can cross-reference component calculation rules to define compound components. For example, a 2 percent component rate might be cross-referenced to a 40 percent component rate. The system calculates the component amount for a cost of 1000 as follows:

1. $1000 \times 2 \text{ percent} = 20$
2. $1000 \times 40 \text{ percent} = 400$
3. $400 \times 2 \text{ percent} = 8$

The total cost plus the component amounts are calculated as follows:

4. $1000 + 20 + 400 + 8 = 1428$

You can include unit-based component calculation rules in a cross-reference, but you cannot use them as the basis for your cross-reference information.

Before You Begin

- ☐ Set up the component codes (48/CM) with the codes that you want to use to identify individual component calculation rules on the Component Table form.

See Also

- *Reviewing Component Transactions* for more information about components and workfile transactions
- *Adding Component Rules to Markup Rules*
- *R4860, Component Table Listing* in the *Reports Guide* for a report sample

To set up component calculation rules

From the Table Information menu (G5241), choose Component Tables.

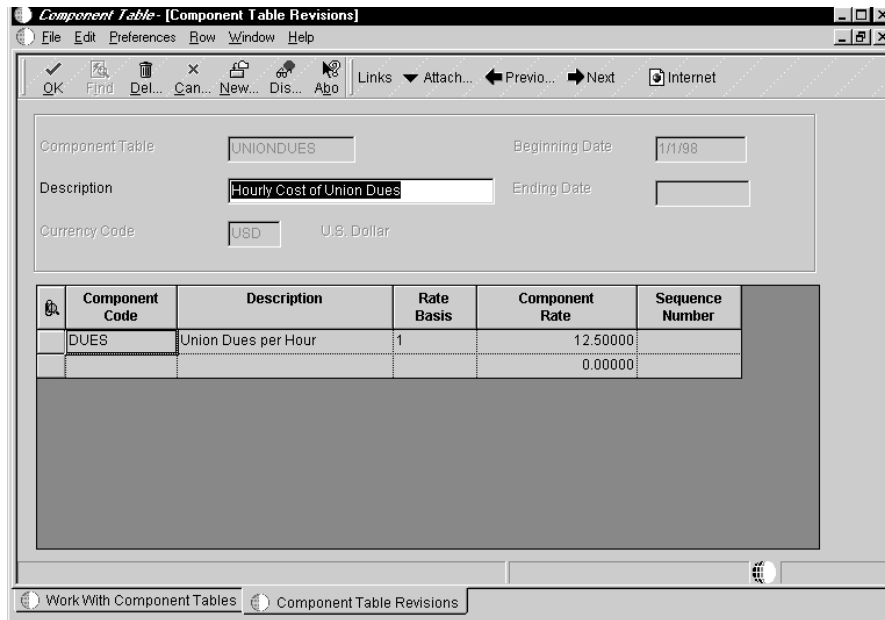
1. On Work With Component Tables, click Add.
2. On Component Table Revisions, complete the following fields to identify a specific set of component calculation rules:
 - Component Table
 - Currency Code
 - Description
 - Beginning Date
 - Ending Date
3. To define one or more component calculation rules, complete the following fields:
 - Component Code
 - Rate Basis
 - Component Rate

Field	Explanation
Component Table	<p>A user-specified code that identifies a set of component rules.</p> <p>If you work in a multi-currency environment, the system displays only the codes that are related to markup tables with the same currency code in the Component Table Selection window.</p>
Description	A user defined name or remark.
Component Code	A component code identifies a provisional burden that is accounted for at the billing detail transaction level.
Rate Basis	<p>A code that determines whether the calculation of the components is based on the unit(s) or amount(s) of the base billing detail transaction.</p> <ol style="list-style-type: none"> 1 Amount Basis. The number in the Component Rate field is treated as a percentage. The system calculates the component amount by multiplying the component rate percentage by the cost, invoice or revenue amount from the base billing detail transaction. 2 Unit Basis. The number in the Component Rate field is treated as a flat amount. The system calculates the component amount by multiplying the component rate flat amount by the number of units from the base billing detail transaction. <p>Note: You can enter C for 1 or U for 2.</p>
Component Rate	<p>The rate that the system applies when it creates the individual component records. This field can be either a percentage or a flat amount, depending on the value entered in the "Component Rate Basis" (UORC) field.</p> <p>If the component rate basis is units, then the component rate is a flat amount which is multiplied by the number of units from the base billing detail transaction.</p> <p>If the component rate basis is amount, then the component rate is a percentage which is multiplied by the cost, invoice, or revenue amount from the base billing detail transaction.</p>

► To set up compound components

From the Table Information menu (G48S41), choose Component Tables.

1. To locate a set of component rules on Work with Component Tables, click Find.
2. Choose a specific component calculation rule and click Select.



3. On Component Table Revisions, select a component and choose Cross Reference from the Row menu.
4. On Component Cross Reference, choose each component calculation rule that you want to include in the cross-reference and choose Add Cross Reference from the Row menu.

A component link number associates component calculations with its related workfile transaction.

You can include only previously defined component calculation rules in your cross-reference information.

The system marks the component calculation rules that include cross-reference information with a check mark.

Assigning Component Information

The system processes the component information as a markup for the amounts in the source transactions. As a part of system setup, you define component rules. You then assign the component rules to the rules on the Billing Rate/Markup Table.

Assigning component information consists of the following tasks:

- ☐ Adding component rules to markup rules

Before You Begin

- ☐ Define component rules. See *Defining Component Rules*.

Adding Component Rules to Markup Rules

If you want the system to create separate workfile transactions for cost amounts and markup amounts, you can assign a component rule to a markup rule.

The system calculates the component amounts based on the following:

- Cost amount when generation type is 1 or 2 with a cost table. If both types 1 and 2 exist with a cost table, the system uses the information from the table for generation type 2 for the revenue amount.
- Invoice amount when generation type is 1 with an invoice/revenue table.
- Revenue amount when generation type is 2 with an invoice/revenue table.
- Default component information when the generation type is 3 with either a cost table or invoice/revenue table.



To add component rules to markup rules

From the Table Information menu (G5241), choose Billing Rate/Markup Table.

1. On Work With Billing Rate/Markup Table, locate the markup rules to which you want to add components.

See Defining Markup Rules.

2. On Billing Rate/Markup Revisions, enter a 3 in the following field:
 - Generation Type
3. Complete the following fields to add a component rule:
 - Key Type
 - Table Key
 - Begin Date
 - Ending Date
 - Obj From
 - Obj Thru
 - Sub From
 - Sub Thru
4. Complete the following fields to assign the component rule to the new markup rule:
 - Cost Comp Tbl
 - Inv/Rev Comp Tbl

Related Tasks

You can assign a component rule to an existing markup rule with a generation type of 1 or 2. To do this, locate the markup rule on the Billing Rate/Markup Table form. You can specify a component rule for one or more lines on the form using the Cost Table field, Invoice/Revenue Table field, or both.

See Also

- *Defining Markup Rules*

Field	Explanation
Component Cost Rate Table	A code that identifies a component bill table to use for this Billing Rate/Markup Table entry. The component table identifies the components and their calculation rules. These component amounts are applied as overhead to the original cost. You set up component tables on the Component Table Definition form.
Component Revenue Rate Table	A code that identifies a component bill table to use for this Billing Rate/Markup Table entry. The component table identifies the components and their calculation rules. These component amounts are recognized as revenue in addition to any revenue markups. You set up component tables on the Component Table Definition form.

Setting Up Automatic Accounting Instructions

You must set up the RC (receivables class) AAI to define the rules by which the Contract Billing and Accounts Receivable systems interact. The Contract Billing system uses the RC AAI (receivables class accounts) to determine the G/L account for the debit side of a journal entry for accounts receivable and retainage.

The system stores the information for AAIs in the Automatic Accounting Instructions table (F0012).

You should be thoroughly familiar with AAIs before you change them.

The Contract Billing System uses the following AAI's:

RC	Receivables Class accounts
RCxxxx	Receivables where xxxx represents the G/L offset set up in the customer or offset table.

See Also

- *Working with AAIs for General Accounting* in the *General Accounting Guide*
- *Working with AAIs for A/R* in the *Accounts Receivable Guide*

Understanding User Defined Codes

Many fields throughout the Contract Billing system accept only user defined codes. When you enter an invoice, for example, the system uses a user defined code to specify the document type of an invoice. The system does not accept user defined codes that are not defined in a user defined list.

For detailed information about user defined codes, see *User Defined Codes* in the *OneWorld Foundation Guide*.

Some of the user defined codes used in the Contract Billing system are:

- Change Status (52/CH)
- Contract Status (52/CS)
- Tax Explanation Codes (00/EX)
- Component Codes (48/CM)
- Adjustment Reasons (48/AR)
- Billing Line Category Code 1 (52/A1)
- Billing Line Category Code 2 (52/A2)
- Billing Line Category Code 3 (52/A3)
- Contract Category Code 1 (52/01)
- Contract Category Code 2 (52/02)
- Contract Category Code 3 (52/03)
- Contract Category Code 4 (52/04)
- Contract Category Code 5 (52/05)
- Contract Category Code 11 (52/11)
- Contract Category Code 12 (52/12)
- Contract Category Code 13 (52/13)
- Contract Category Code 14 (52/14)
- Contract Category Code 15 (52/15)
- Category Codes - Business Unit (Job) Class (00/11)
- Category Codes - Cost Pool (00/12)
- Category Codes - Work Order Class (00/W7)

Change Status (52/CH)

Change status codes identify the current change order status of a contract. Examples are:

- AP - Approved Change
- OR - Original Contract
- PL - Planned Change
- PN - Pending Change

Contract Status (52/CS)

Contract status codes identify the current status of a contract. Examples are:

- 10 - Bid Submitted
- 15 - Contract Accepted
- 20 - Released - Not Started
- 30 - Work In Progress
- 35 - Active Contract

Tax Explanation Codes (00/EX)

You can assign codes for various methods of calculating taxes. The valid codes for Contract Billing are:

- C - VAT + Sales Tax
- S - Sales Tax
- V - VAT
- E - Exempt
- V+ - Same as V, but calculated as tax on tax

Change Order Category Codes 1 - 2 (52/A1 - A2)

You use change order category codes as reporting or grouping mechanisms for change orders.

Billing Line Category Codes 3 - 5 (52/A3 - A5)

You use billing line category codes as reporting or grouping mechanisms for billing lines.

Contract Category Codes 1 - 5 (52/01 - 05)

You use contract category codes as reporting or grouping mechanisms for contracts. This code is three characters in length.

Contract Category Codes 11 - 15 (52/11 - 15)

You use contract category codes as reporting or grouping mechanisms for contracts. This code is ten characters in length.

Component Codes (48/CM)

Component codes represent the types of components that the system creates when you generate or revise a workfile transaction. Examples are:

- COM - Cost Of Money
- DUES - Union Dues Per Hour
- FEE - Fees
- FRG - Fringe
- OVH - Overhead

Adjustment Reasons (48/AJ)

Adjustment reason codes indicate the reason a workfile transaction was revised. Examples are:

- DP - Disputed Item
- SP - Workfile transaction split
- R - Re-activated

Business Unit (Job) Class (00/11)

The business unit class represents category codes used to group business units. These category codes are used throughout all J.D. Edwards systems. Within the Contract Billing system, you can use these user defined codes a major key when setting up various tables.

For example, you would use this user defined code as the table key in the Billing Rate/Markup table when the markup rules apply for all business units that share this category code. Examples are:

- 112 - Southeast
- 113 - Northeast
- 114 - Northwest

- 115 - Southwest
- 116 - Northcentral

Cost Pool (00/12)

The cost pool represents category codes used to group cost pools. These category codes are used throughout all J.D. Edwards systems. Within the Contract Billing system, this category code is used to group cost pools. You can use these user defined codes to group billable activity, such as labor or equipment charges, when applying markup information.

For example, you would use this user defined code as the minor key in the Billing Rate/Markup table when the markup rules apply for all home business units that share this category code. Examples are:

- 100-Eastern technical group
- 200-Central technical group
- 300-Western technical group

Work Order Class (00/W7)

The work order class represents category codes used to group work orders. These category codes are used throughout all J.D. Edwards systems. Within the Contract Billing system, this category code is used to group work orders. Within the Contract Billing system, you can use these user defined codes a major key when setting up various tables.

For example, you would use this user defined code as the major key in the Billing Rate/Markup table when the markup rules apply for all work orders that share this category code. Examples are:

- PER-Perimeter Guard
- SCR-Screener Guard
- SUP-Supervisor

Working With User Defined Codes for Contract Billing

From the System Setup menu (G5242), choose User Defined Codes (UDC). Choose the UDC that you want to set up from the menu.

To customize J.D. Edwards systems to meet the needs of your business environment, you define the codes that are valid for many of the fields in the programs.

User defined codes exist in tables based on a specific system and code type. If you use a code that is not set up in the table related to a field, the system

displays an error. To work with user defined codes, you can access them through a single user defined code form. After you select a user defined code form from a menu, change the values in the system code field and user defined codes field to access another user defined code table.

You should be thoroughly familiar with user defined codes before you change them.

See Also

- *Changing User Defined Codes* in the *OneWorld Foundation Guide*
- *Customizing User Defined Codes* in the *OneWorld Foundation Guide*

Understanding the Invoice Cross Reference Table

When you print invoices, the system uses the Invoice Print Version Cross Reference information you set up to identify the invoice print version you want to use for printing each invoice within a batch of generated invoices. An invoice print version consists of an application, for example, R48506 or R48507 a version of that application, and an invoice type. There are two ways to set up information in the Invoice Print Cross Reference table.

1. Assign key type and table key combinations to an invoice print version that the system then uses to match with the values of the billing transactions that make up individual invoices. For example, you might assign a key type and table key combination, indicating a specific customer number (3333), to a specified invoice print version. When you print invoices, all selected invoices that belong to customer number 3333 will be printed using the specified invoice print version. The table key you enter depends on the key type. For example, if you enter a 1 for Work Order, you would then enter a valid work order number in the table key. The system uses the following hierarchy to search for invoice print versions.
 - Work order number
 - Work order class
 - Contract number
 - Parent contract number
 - Customer
 - Job or business unit
 - Job class
 - Company number
 - Default
2. Assign invoice format codes to an invoice print version that the system uses to match with invoice format codes that are stored in the Invoice Summary table (F4822) or in the Contract Master table (F5201). When you create a format code, the key type and table key will default to 9 and *All respectively. For example, you might assign an invoice format code (FORMAT) to a specified invoice print version XJDE0005, type D. When you print invoices, all selected invoices that have FORMAT stored in their invoice format code fields will be printed using the XJDE0005, invoice type D.

► **To add an Invoice Print Version in the cross reference table**

From System Setup (G5240), choose Invoice Print Version Cross Reference.

1. On Work With Invoice Print Version Cross Reference, click Add.

2. On Invoice Print Version Cross Reference Revisions, complete the following fields:
 - UBE Name
 - Invoice Type
 - Version Name
 - Workfile Detail Selection
3. If you want the system to find this Invoice Print Version by Key Type/Table Key combination, complete the following fields:
 - Key Type
 - Table Key
 - Con Typ
 - Contract Co

Key Type Description and Table Key Description are populated automatically.

Invoice Format Code and Format Code Description are not used when entering a Key Type/Table Key combination.

Contract Type and Contract Company are only used with Key Type 3 (Contract number) and Key Type 4 (Parent contract number).

4. If you want the system to find the invoice print version by Invoice Format Code, complete the following fields:
 - Invoice Format Code
 - Description

Key Type, Key Type Description, Table Key, and Table Key Description will be populated automatically.

Note: Entries using Key Type/Table Key combinations and entries using Invoice Format Codes can be used to determine the same invoice print version.

5. Click OK.

Understanding the Invoice Printing Process

Invoice printing can be accessed from various areas within Contract Billing. It can be accessed directly from the Contract Billing menus under Invoice Processing. It can also be accessed within Batch Review. Within Batch Review, a complete batch of invoices can be printed from the Work with Contract Billing Batches form when you choose Invoice Print from the Row menu. A specific invoice can be printed from the Work with Invoices form when you choose Invoice Print from the Row menu.

When invoice printing is accessed, Invoice Printing Selection (R48504) will run. This is not the application that is associated with the various invoice print versions that came with the system or copies of these you may have modified. Those are versions of the Invoice Print (R48506 and R48507) which will be called individually from Invoice Printing Selection (R48504) for each invoice being printed.

Understanding How the System Determines Which Invoice Print Version To Use

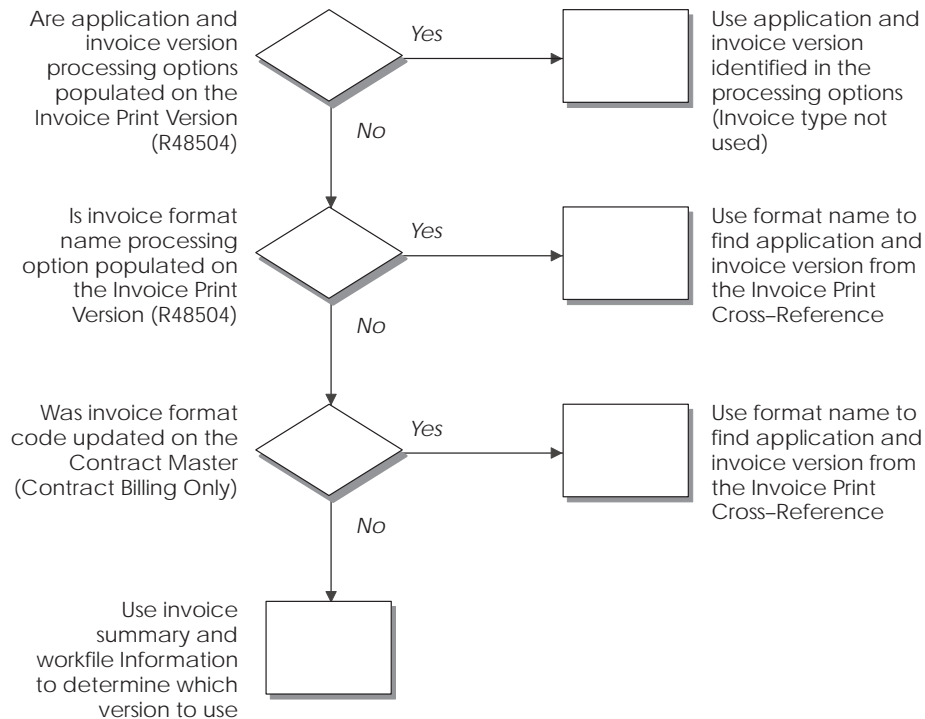
To determine which report and version to use for an invoice, the invoice printing report first looks at the Invoice Version report and Invoice Version fields located on Invoice Printing Selection processing options (R48504). If those two fields are populated, the system will use that combination for all invoices selected for printing, overriding any other table setup.

If those two fields are not populated, the system uses the Invoice Format Type field and the Invoice Format Name field located on Invoice Printing Selection processing options (R48504) to determine an invoice print version using the Invoice Print Version Cross Reference table (F48S58).

If the Invoice Format Name field is not populated, the system will use specific information from the individual invoices to determine an invoice print version. First it will determine if the Invoice Format Code in the Invoice Summary record is populated. If so, it will use it and the Invoice Format Type to determine an invoice print version using the Invoice Print Version Cross Reference table (F48S58). If the Invoice Format Code is not populated, it will use the other information from the individual invoices, along with the Invoice Format Type to determine an invoice print version using the Print Version Cross Reference table (F48S58).

The following graphic illustrates how the system determines which invoice version to use:

Note: In all case except where noted, the Invoice Type will be identified on the Select tab of the Invoice Print Version (R48504) processing options. Invoice Type is used together with Format name to determine which program and print version to use.



Currency Processing Option

The Currency processing option is used in conjunction with the Amount Smart Field (SFAMT). If you have used SFAMT to retrieve and print amounts from the Billing Workfile (F4812/F4812H), you can use this processing option to control whether the system will print the domestic values, the foreign values, or let the mode of the record determine which to print.

Setting Up Invoice Formats

After the invoice is generated, the invoice printing feature can be used to create custom-designed printouts for a customer invoice.

In OneWorld Contract Billing, invoice formats are versions you create using the Report Design Aid. The Invoice Print Version Cross-Reference application allows you to determine which invoice format should be printed for a customer's invoice.

Before You Begin

- Set up the invoice format. See *Revising the Invoice Format*.
- Set up the Invoice Print Version Cross-Reference. See *Setting Up the Invoice Print Version Cross-Reference*.

Setting up invoice formats consists of the following topics:

- ☐ Understanding invoice format revisions
- ☐ Modifying the invoice format template without smart fields
- ☐ Modifying the invoice format template with smart fields
- ☐ Including smart fields on an invoice
- ☐ Copying versions

Understanding Invoice Format Revisions

A company may need to print a variety of invoice formats, including, an informal format that is different from the templates delivered with J.D. Edwards OneWorld software. Examples of a company's need for informal formats include the following:

- Customers may want invoice information printed in specific areas of a document.
- The company may require different invoice formats for internal and external distribution.
- The company may want different invoice formats for different types of billing.

Invoice Format Templates

An invoice format template is the base version that includes all of the special fields and characteristics that can be used to customize invoices. To customize an invoice format, you copy an existing version of a template, and then modify it. OneWorld Contract Billing is installed with the following templates:

R48506

This template and its associated versions use Event Rules to retrieve and print fields on the invoice. Many of the fields that might be on a typical invoice have been programmed and placed on the base template version.

R48507

This template and its associated versions use smart fields, which are variables that can be inserted in an invoice format during Report Design Aid. Smart fields are similar to business view fields with their associated constants or calculations. Smart fields prompt you for input when created in a format. During invoice printing, the system uses your changes, along with some programming logic, to retrieve and print user-defined information on invoices.

You can change the look of an invoice by hiding, showing, and moving the typical invoice fields using the Report Design Aid (RDA). An extensive knowledge of RDA or event rules is not necessary. If your company does not need extensive subtotalling, you can also use the R48506 version. Several generic versions created from the base template version of the R48506 template are available. The standard versions of R48506 are XJDE0001 through XJDE0005; with XJDE0001 displaying all retrieved fields.

Standard versions of R48507 are XJDE0001 through XJDE0009. Version XJDE0001 is the template version. While invoice printing with smart fields allows different fields to be printed on the invoice, there is no way to include all of the fields that may be printed on an invoice. The template version of R48507 does not contain any fields and allows you to customize the invoice format. It has a blank header section, a blank column detail section, and a blank footer section.

If no existing versions of R48507 resemble your desired invoice, you can create a copy XJDE0001 and customize it. The detail section of XJDE0001 displays all selected billing workfile records. If your desired invoice format requires that detail records be summarized or segregated, you may need to include conditional sections that are accessed at user defined level breaks.

See Also

- *OneWorld Enterprise Report Writing.*

Modifying the Invoice Format Template without Smart Fields (R48506)

You can access and modify a version from the Contract Billing Setup Menu (G48S40/Invoice Format Revisions).

► To modify a template or version

1. Copy a standard version of the template.
2. Select the new version.
3. Select Advanced from the Row menu.
4. Select Design Version from the Row menu.

Report Design Aid will open and you can make changes and additions to your invoice template or invoice version.

For each section, you will have to override version specifications to modify the layout of event rules, data selection or sequencing.

► To override version specifications

1. Highlight a section and right click.
2. Select Override Version Specifications.
3. Select the items you want to change. Select OK.

You can modify your desired invoice print version by hiding and showing existing report variables, adding and deleting Business View fields, and adding and deleting constants. If your design requires more changes (i.e. different data sequencing, different data selection, adding sections for subtotalling, modifying Event Rule logic, etc.), see the OneWorld Enterprise Report Writing manual for more information.

Modifying the Header Section

The following table lists the available fields in the header section, the source from where the field is retrieved, and the business function that is used to retrieve and format the field.

Field	Source	Business Function Used
Business Unit Description	F0006	N48S0320
Company Address - Line 1	F0116	B0100021
Company Address - Line 2	F0116	B0100021

Company Address - Line 3	F0116	B0100021
Company Address - Line 4	F0116	B0100021
Company Address - Line 5	F0116	B0100021
Company Address - Line 6	F0116	B0100021
Company Address - Line 7	F0116	B0100021
Company Name - Alpha	F0116	B0100021
Company Phone Number	F0115	B0100004
Contact Name	F0111	N48S0360
Customer Address - Line 1	F0116	B0100021
Customer Address - Line 2	F0116	B0100021
Customer Address - Line 3	F0116	B0100021
Customer Address - Line 4	F0116	B0100021
Customer Address - Line 5	F0116	B0100021
Customer Address - Line 6	F0116	B0100021
Customer Address - Line 7	F0116	B0100021
Customer Name - Alph	F0116	B0100021
Customer Number	F4812/F4812H	
Customer Purchase Order Number	F4812/F4812H	
Customer Text - Line 1	F0301/F03B01 - Media Objects	SysFuc-ABGT
Customer Text - Line 2	F0301/F03B01 - Media Objects	SysFuc-ABGT
Customer Text - Line 3	F0301/F03B01 - Media Objects	SysFuc-ABGT
Document Company	F4812/F4812H	
Invoice Date	F4812/F4812H	
Invoice Due Date	F4822	N48S0340
Invoice Number	F4812/F4812H	
Last Invoice Date	F0301/F03B01	N0100042
Page Number	Calculated	
Payment Terms	F0014	N48S0350
Ship to Address - Line 1	F0116	B0100021
Ship to Address - Line 2	F0116	B0100021
Ship to Address - Line 3	F0116	B0100021
Ship to Address - Line 4	F0116	B0100021
Ship to Address - Line 5	F0116	B0100021
Ship to Address - Line 6	F0116	B0100021

Ship to Address - Line 7	F0116	B0100021
Ship to Name	F0116	B0100021
Work Order Completion Date	F4801	B3100310
Work Order Number	F4812/F4812H	

Modifying the Detail Section

The detail section is different from both the header and totals section because it is comprised of columns only. However, not all of these columns are visible.

The following table lists the available fields in the detail section and the source from where the field is retrieved.

Field	Source
Document Company	F4812/F4812H
Document Type	F4812/F4812H
Explanation Remark	F4812/F4812H
General Ledger Date	F4812/F4812H
Invoice Discount Available	F4812/F4812H
Invoice Tax	F4812/F4812H
Invoice Taxable Amount	
Item Number (short)	F4812/F4812H
Order Number	F4812/F4812H
Pay Item	F4812/F4812H
Total Invoiced Amount	F4812/F4812H
Unit of Measure	F4812/F4812H
Unit Price	F4812/F4812H
Units	F4812/F4812H

Modifying the Totals Section

In addition to the fields in the header section, the totals section includes the following fields:

- Total Invoice Amount
- Total Tax Amount
- Total Taxable Amount

The following table lists the available fields in the totals section, the source from where the field is retrieved, and the business function that is used to retrieve the field.

Field	Source	Business Function Used
Business Unit Description	F0006	N48S0320
Company Address - Line 1	F0116	B0100021
Company Address - Line 2	F0116	B0100021
Company Address - Line 3	F0116	B0100021
Company Address - Line 4	F0116	B0100021
Company Address - Line 5	F0116	B0100021
Company Address - Line 6	F0116	B0100021
Company Address - Line 7	F0116	B0100021
Company Name	F0116	B0100021
Company Phone Number	F0115	B0100004
Contact Name	F0111	N48S0360
Customer Address - Line 1	F0116	B0100021
Customer Address - Line 2	F0116	B0100021
Customer Address - Line 3	F0116	B0100021
Customer Address - Line 4	F0116	B0100021
Customer Address - Line 5	F0116	B0100021
Customer Address - Line 6	F0116	B0100021
Customer Address - Line 7	F0116	B0100021
Customer Name	F0116	B0100021
Customer Number	F4812/F4812H	
Customer Purchase Order Number	F4812/F4812H	
Customer Text - Line 1	F0301/F03B01 - Media Objects	System Function - ABGT
Customer Text - Line 2	F0301/F03B01 - Media Objects	System Function - ABGT
Customer Text - Line 3	F0301/F03B01 - Media Objects	System Function - ABGT
Document Company	F4812/F4812H	
Invoice Date	F4812/F4812H	
Invoice Due Date	F4822	N48S0340
Invoice Number	F4812/F4812H	
Last Invoice Date	F0301	N0100042
Page Number	Calculated	
Payment Terms	F0014	N48S0350
Ship to Address - Line 1	F0116	B0100021
Ship to Address - Line 2	F0116	B0100021

Ship to Address - Line 3	F0116	B0100021
Ship to Address - Line 4	F0116	B0100021
Ship to Address - Line 5	F0116	B0100021
Ship to Address - Line 6	F0116	B0100021
Ship to Address - Line 7	F0116	B0100021
Ship to Name	F0116	B0100021
Total Invoice Amount	Calculated	
Total Tax Amount	Calculated	
Total Taxable Amount	Calculated	
Work Order Completion Date	F4801	B3100310
Work Order Number	F4812/F4812H	

See Also

- *Creating Calculation Columns in the Enterprise Report Writing Guide*
- *Modifying Properties of Report Objects in the Enterprise Report Writing Guide*
- *Working with Event Rules in the Enterprise Report Writing Guide*

Modifying the Invoice Format Template with Smart Fields (R48507)

You can access and modify a version from the Contract Billing Setup menu (G48S40/Invoice Format Revisions w/Smart Fields (R48507). See *Modifying the Invoice Format Template without Smart Fields* (R48506) for the steps to modify a template version.

You can create your desired invoice print version, adding Business View fields, constants and smart fields. If your design requires more extensive changes (i.e. different data sequencing, different data selection, adding sections for subtotalling, modifying Event Rule logic, etc.), see the OneWorld Enterprise Report Writing manual for more information.

Invoice Print Smart Fields

There are over 80 smart fields that are available to insert on an invoice during invoice design. These smart fields are named using an SF prefix, followed by the table number, and then followed by data type indication character ((A)lpha, (C)haracter, (D)ate, (N)umeric). For example, the smart field used to retrieve and print numeric information from the Business Unit Master table (F0006) is named: SF0006N. A majority of the smart fields are used to retrieve information that is stored in various tables for print out on the invoice. For each table that contains

invoice related information, smart fields are available and are used to do the following:

- Retrieve and print alpha information
- Retrieve single character information
- Retrieve date information
- Retrieve numeric information
- Print amounts from the F4812/F4812H
- Print blocks of text
- Calculate and print values based on other fields
- Print accumulated values that have been stored in user defined memory locations

The following smart fields that can be used for retrieving table information are available during invoice design.

Table	Table Name	Alpha Smart Field	Character Smart Field	Numeric Smart Field	Date Smart Field
F0006	Business Unit Master Information	SF0006A	SF0006C	SF0006N	SF0006D
F0014	Payment Terms Master Information	SF0014A	SF0014A	SF0014N	SF0014D
F0101	Address Book Master Information	SF0101A	SF0101C	SF0101N	SF0101D
F0111	A/B Who's Who Information	SF0111A	SF0111C	SF0111N	SF0111D
F0115	A/B Phone Number Information	SF0115A	SF0115C	SF0115N	SF0115D
F0116	A/B Address By Date Information	SF0116A	SF0116C	SF0116N	SF0116D
F03012	Customer Master By Line of Business Information	SF03012A	SF03012C	SF03012N	SF03012D
F0401	Supplier Master Information	SF0401A	SF0401C	SF0401N	SF0401D
F0692	Business Unit Supplemental Information	SF0692A	SF0692C	SF0692N	SF0692D
F0901	Account Master Information	SF0901A	SF0901C	SF0901N	SF0901D
F1201	Equipment Master Information	SF1201A	SF1201C	SF1201N	SF1201D
F1721	CSMS Service Contract Detail	SF1721A	SF1721C	SF1721N	SF1721D
F4801	Work Order Master Information	SF4801A	SF4801C	SF4801N	SF4801D
F4812	Billing Workfile Detail Information	SF4812A	SF4812C	SF4812N	SF4812D
F4822	Invoice Summary Information	SF4822A	SF4822C	SF4822N	SF4822D
F48520	Invoice Summary Access	--	--	SF48520N	--
F5201	Contract Master Information	SF5201A	SF5201C	SF5201N	SF5201D
F5202	Contract Billing Line Information	SF5202A	SF5202C	SF5202N	SF5202D
F5216	Milestone/Progress	SF5216A	SF5216C	SF5216N	SF5216D

F04201	Prepayment Amount			SF4201N	
F00693	Business Unit Supplemental Text	SF0693A	--	--	--
F4802	Work Order Text	SF4802A	--	--	--
F00165	Address Book Related Text	SFABTXT			
Media	Contract Related Text	SFCNTTXT			
Objects	Invoice Batch Related Text	SFINVTXT			
F0005	UDC Description	SF0005A			

Special smart fields that provide information not stored in tables are:

Smart Field	Smart Field - Name	Function
SFAMT	Amount	This smart field is used to print amounts from the F4812/F4812H. It allows you to include or exclude burden and component amounts. It also works in conjunction with the Currency Processing Option on Invoice Print (R48504) to allow you to variably print Foreign or Domestic amounts.
SFADD	Calculate - Add	To Add various fields and print the sum.
SFSUB	Calculate - Subtract	To Subtract various fields and print the difference.
SFMUL	Calculate - Multiply	To Multiply various fields and print the product.
SFDIV	Calculate - Divide	To Divide various fields and print the quotient.
SFTOTAL	Register Total	Many of the numeric smart fields allow the invoice designer to store and accumulate the value of the smart field in a variable memory location (register). This smart field is used to print those accumulated amounts on the field and to initialize the register if desired.
SFCALC	Register Calculate	Many of the numeric smart fields allow the invoice designer to store and accumulate the value of the smart field in a variable memory location (register). This smart field is used to perform calculations using multiple register values and then print the result.

See *Appendix D: Smart Fields* for more detail on the invoice printing related smart fields and their parameters.

Including Smart Fields on an Invoice

Once you are in Report Design Aid, you can add smart fields to your version of the R48507.

► To add smart fields to a template version

1. Locate the section where you want to include the smart field, and click on Smart Field from the Insert menu.
2. Choose the smart field that you want to add from the displayed list of smart fields and click Next. These are the available invoice printing related smart fields.

See *Appendix D: Smart Fields* for an explanation of available smart fields.

3. On Smart Field Name, you can change the default name of the smart field variable name for future reference and click Next.
4. Based on the smart field that you selected, the system will prompt you with questions that will help define the information that this smart field will retrieve and display. Enter an answer to each question and click Next.

Note: For file field descriptions, make sure to enter the literal using all capitals. There is no validation on what you enter in the file field descriptions. Confirm the accuracy of the information that you enter before clicking Next.

5. After you have completed all questions, the smart field will be displayed next to the location where you last clicked. If the smart field is not positioned correctly, drag and place the smart field in appropriate area of the section.

See Also

- *Appendix C - Invoice Design*
- *Modifying Properties of Report Objects* in the *Enterprise Report Writing Guide*
- *Working with Event Rules* in the *Enterprise Report Writing Guide*

Copying Versions

Caution: J.D. Edwards recommends that you should not make changes to any of the versions or templates shipped with OneWorld. You should make a copy of one of the standard versions, and then make your changes to that new version.

You can create a new invoice version that is not based on an existing version. For example, you might create a new version because the supplied versions do not meet your billing requirements. You can create your own versions by first copying an XJDE version. By doing this, you keep the original versions intact, using them only as templates. You can select any version to copy from the following list:

**Invoice Versions
without Smart Fields
(R48506)**

- XJDE0001 Template Version (Use this only as a template)
- XJDE0002 Invoice Version Number 2 (Usable version)
- XJDE0003 Invoice Version Number 3 (Usable version)
- XJDE0004 Invoice Version Number 4 (CSMS Contracts Only) (Usable version)
- XJDE0005 Invoice Version Number 5 (CSMS Contracts Only) (Usable version)

**Invoice Versions with
Smart Fields (R48507)**

- XJDE0001 Invoice Print with Smart Fields (Blank template)
- XJDE0002 Generic Sample Invoice #1 (Usable version)
- XJDE0003 AIA - Summary Text Version (Usable version)
- XJDE0004 AIA - Columnar Version (Usable version)
- XJDE0005 - Comment version.
- XJDE0006 - Workorder version.
- XJDE0007 - Account version.
- XJDE0008 - Pay Item version.
- XJDE0009 - Progress Billing version.

All are usable versions.

Note: Versions XJDE0004 and XJDE0005 are designed to be used with CSMS Service Contract invoices. These versions will not work with CSMS Service Order invoices. These two versions (XJDE0004 and XJDE0005) were created using a joined business view over the Billing Detail Print Workfile (F48SUI01) and the

CSMS Contract Detail file (F1721). This means these two versions require a one to one relationship between records in the F4812 (or F4812H) and the F1721. Only CSMS Service Contract invoices will have this relationship. These two versions were created to make designing a CSMS Service Contract invoice easier. These versions allow the invoice designer to insert CSMS Contract Detail fields on the invoice (business view fields) without having to do any Event Rule modification. If your invoices are not going to be used for CSMS Service Contract invoices and/or you will not need to have any CSMS Service Contract Detail (F1721) fields on the invoice, you should start with one of the other versions (XJDE0001 through XJDE0003).

When you copy an invoice version, like base report specifications, the specification records for that version exist only on your workstation. To make the version available to other users, you must check the version into the server. When you check in a version, the system copies the version's specification records to the central objects data source (server) according to the path code of your current environment.

To submit version specifications and check version into the server

1. When you are finished with your modifications, save your changes and exit RDA.
2. On Advanced Operation, click Cancel.
3. On Available Version, choose your newly modified version, and click Select.
4. On Version Prompting, click Advanced from the menu.
5. On Advanced Version Prompting, select the Submit Version Specifications Only box.
6. Click OK.
7. On Version Prompting, click Submit.
8. On Available Version, click Submit Jobs from the menu.
9. On Submitted Job Search, click Find until your job has a (D)one status associated with it. When your job displays with a (D)one status, click Close.
10. On Available Version, choose your new version. Click Advanced from the Row menu.
11. On Advanced Operations, check your version into the server. Choose your version. Click Check In Version from the Row menu.

See Also

- *Batch Versions for Reports in the OneWorld Foundation Guide*
- *Copying a Batch Version in the OneWorld Foundation Guide*

- *Checking Out or Checking In a Batch Version in the OneWorld Foundation Guide*
- *Erasing the Check-Out Record of a Version in the OneWorld Foundation Guide*

Understanding Multicurrency Setup for Contract Billing

Understanding multicurrency is vital to establishing a global customer network. The concepts presented here will help you understand how Contract Billing processes multicurrency transactions.

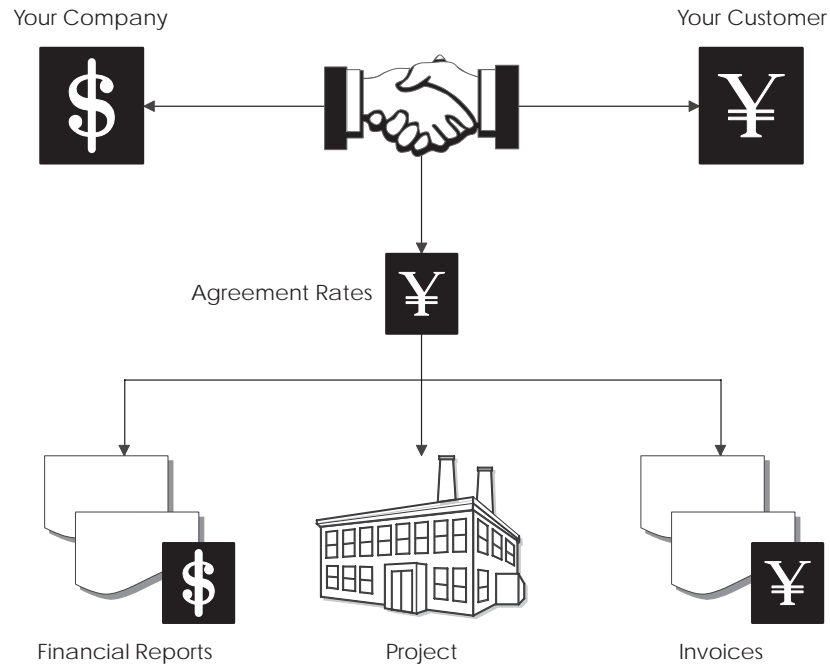
Multicurrency setup for Contract Billing consists of the following topics:

- ☐ Choosing modes
- ☐ Calculating fixed and non-fixed amounts
- ☐ Choosing modes for invoicing
- ☐ Creating multicurrency transactions

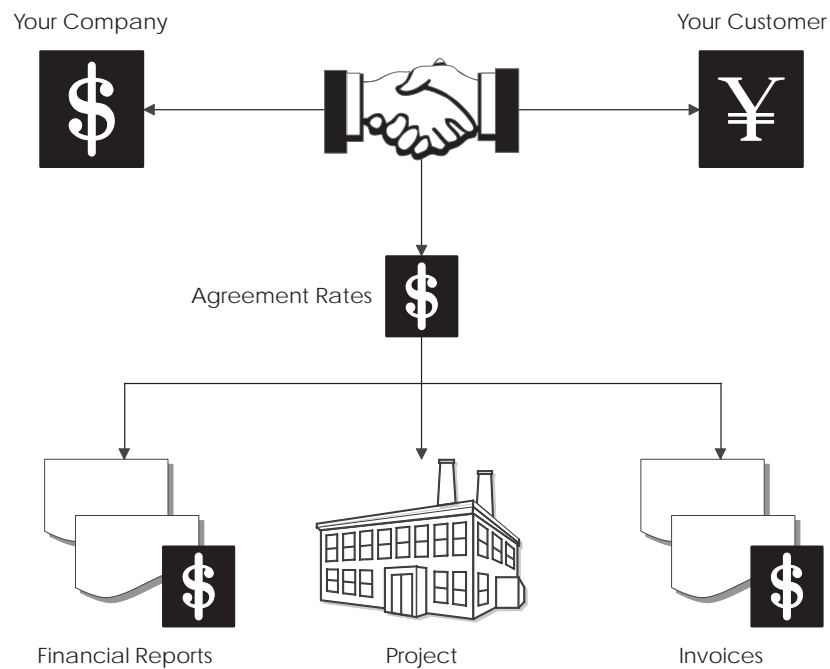
Choosing Modes

In Contract Billing, you must select either foreign or domestic mode. The mode manages how amounts are calculated and stored within the billing system. The mode is a global setup in your constants, and, as with all constants, it is recommended that you not change the constants after you set them up. The global setup can be overridden on the Contract Master. If the constant is set to foreign mode but a particular job needs to be managed in the domestic currency, you can set up the contract for that job in the domestic mode. The following graphics illustrate the foreign and domestic modes.

Multicurrency Foreign (F) Mode



Multicurrency Domestic (D) Mode



Calculating Fixed and Non-Fixed Amounts

When Currency is on and a transaction has two currencies, amounts are calculated and stored in both currencies within the billing system. In Contract Billing, the domestic amount fields are always displayed in the currency of the company to which the job belongs, and the foreign amount fields are displayed in the customer currency unless overridden on the Contract Master. One of these currencies must be defined as fixed, based on the currency mode setup in Billing Constants. The fixed currency becomes the control currency for the workfile transactions and is system maintained. While the fixed amounts remain static, fluctuations in currency can affect the non-fixed amounts.

Choosing Modes for Invoicing

For invoicing, your company must decide in which currency to manage billing relationships with customers. For example, your company is in the USA using the US Dollar (USD) as your domestic currency. Your sales representative signs a new project in Canada where the customer wants to receive all invoices in Canadian Dollars (CAD). Regardless of fluctuating exchange rates, the customer has agreed on rates for the particular services in CAD. In this particular example, you are probably going to be operating your billing system in a foreign mode. Conversely, if you negotiate most of your deals in USD regardless of your customers' currencies, you will probably set your billing system to the domestic mode.

Creating Multicurrency Transactions

In a multicurrency environment, transactions can be created in many different currencies throughout the system. Regardless of the currency of the originating entry, the Workfile Generation or G/L Selection programs retrieve the cost amount from the AA (Actual Amount) ledger of the Account Ledger table (F0911) and place this value into the domestic cost field of the workfile.

In contrast, J.D. Edwards payroll entries are brought in from the Employee Transaction History table (F0618). The employee is paid in the currency of the home business unit. This currency is compared to the currencies of the job or work order for which you are billing and to your customer's currency. For example, assuming that the currency of the job is USD, that of the customer is French francs (FRF), and that of the home business unit is USD, then the cost amount from the F0618 is retrieved into the domestic cost amount and the foreign amount is converted. Conversely, if the home business unit is FRF, then the cost amount from the F0618 is retrieved into the foreign cost amount and the domestic amount is converted. If the home business unit currency is equal to Belgian francs (BEF) then the cost is first converted to USD and is then retrieved into the domestic cost amount and the foreign amount is converted.

After the cost amount is updated in the Billing Workfile table (F4812), the other cost amount is calculated using the exchange rate table for the date basis you specify in your Billing Constants. The program then retrieves the markup information for the record in the fixed currency as defined in the Billing Constants. Markup information is retrieved only for the fixed currency. The fixed cost amount plus the markup amount becomes the taxable amount of the transaction. The non-fixed taxable amount is calculated using the exchange rate on the fixed taxable amount. Tax and discount rates are then calculated independently for each of the currencies.

Assuming a non-payroll type entry, the equations below describe the process by which domestic and foreign amounts are calculated. (Calculations are not necessarily performed in the exact order in which they appear below.)

Domestic Mode Calculations

Domestic Cost Amount	+	Markup Amount	= Domestic Taxable Amount
Domestic Taxable Amount	x	Tax Rate	= Domestic Tax Amount
Domestic Taxable Amount	+	Domestic Tax Amount	= Total Domestic Invoice Amount
Domestic Taxable Amount	x	Discount Rate	= Domestic Discount Amount
Domestic Cost Amount	x	Exchange Rate	= Foreign Cost Amount
Domestic Taxable Amount	x	Exchange Rate	= Foreign Taxable Amount
Foreign Taxable Amount	x	Tax Rate	= Foreign Tax Amount
Foreign Taxable Amount	+	Foreign Tax Amount	= Total Foreign Invoice Amount
Foreign Taxable Amount	x	Discount Rate	= Foreign Discount Amount

Foreign Mode Calculations

Domestic Cost Amount	x	Exchange Rate	= Foreign Cost Amount
Foreign Cost Amount	+	Markup Amount	= Foreign Taxable Amount
Foreign Taxable Amount	x	Tax Rate	= Foreign Tax Amount
Foreign Taxable Amount	+	Foreign Tax Amount	= Total Foreign Invoice Amount
Foreign Taxable Amount	x	Discount Rate	= Foreign Discount Amount
Foreign Taxable Amount	x	Exchange Rate	= Domestic Taxable Amount
Domestic Taxable Amount	x	Tax Rate	= Domestic Tax Amount
Domestic Taxable Amount	+	Domestic Tax Amount	= Total Domestic Invoice Amount
Domestic Taxable Amount	x	Discount Rate	= Domestic Discount Amount

Invoice Amount Calculations (Domestic Mode)

		Domestic			Foreign
Cost from F0911 record ***		AA	X Exchange Rate		AA2
Markup Amount	+	<u>ADCI</u>			
Taxable Amount	=	ITXA	X Exchange Rate		CITA
(ITXA * Tax Rate) = Tax Amount	+	<u>ITAM</u>	(CITA * Tax Rate) = Tax Amount	+	<u>CITX</u>
Total Amount	=	ITOL	Total Amount	=	CITL
(ITXA * Disc Rate) = Discount Amt		IDSC	(CITA * Disc Rate) = Discount Amt		CIDS
(AA/Units) = Unit Price		PRIC	(AA2/Units) = Unit Price		PRIF

Invoice Amount Calculations (Foreign Mode)

		Domestic			Foreign
Cost from F0911 record		AA	X Exchange Rate		AA2
			Markup Amount	+	ADCI
X Exchange Rate		ITXA	Taxable Amount	=	CITA
(ITXA * Tax Rate) = Tax Amount	+	ITAM	(CITA * Tax Rate) = Tax Amount	+	CITX
Total Amount	=	ITOL	Total Amount	=	CITL
(ITXA * Disc Rate) = Discount Amt		IDSC	(CITA * Disc Rate) = Discount Amt		CIDS
(AA/Units) = Unit Price		PRIC	(AA2/Units) = Unit Price		PRIF

*** Assumes that the home business unit of payroll transaction does not have a different currency from the job currency.

Understanding multicurrency setup and processing for Contract Billing includes understanding the following functions:

- Setup of constants for multicurrency
- Setup of billing rate/markup tables for multicurrency
- Setup of components for multicurrency
- Setup of contract for multicurrency
- Multicurrency processing of workfile generation
- Multicurrency processing of billing revisions
- Multicurrency processing of invoice generation
- Multicurrency processing of invoice revisions
- Invoice revisions for time and material billing lines
- Invoice revisions for non-time and material billing lines
- Multicurrency processing of printing invoices
- Multicurrency processing of invoice journal generation
- Multicurrency processing of create A/R and G/L entries
- Multicurrency processing of general ledger post reports
- Multicurrency processing of invoice voids

See Also

For a complete resource of setting up your system for multicurrency, please refer to *Multicurrency Setup* in the *General Accounting* guide for the following tasks:

- *Activating Multicurrency*
- *Defining Currency Codes*
- *Working with Exchange Rates*

- *Assigning a Domestic Currency to a Company*
- *Assigning Currency Codes to Monetary Accounts*
- *Assigning Currency Codes to Customers and Suppliers*
- *Setting Up AAI's for Multicurrency*

Understanding Setup of Constants for Multicurrency

Field	Value	Field	Value
Bill Burden	1	Independent Revenue/Invoice	0
Bill Unposted	0	Revenue on Contract non T & M's	0
Effective Date Basis	1	Invoice Summary Access Control	
Labor Effective Basis	1	Invoice Date Override Control	1
Customer Number Basis	1	Draft/Final Invoice Gen. Control	0
Service Date Basis	0	Default Invoice Document Type	RI
Exchange Rate Date Basis	1	<input checked="" type="checkbox"/> Foreign	
Journal Generation Control	1		
Journal Reclassification Control	0		
PDBA Code Override	1		
Default Markup Percentage	10.000		

On Contract Billing Constants, ensure the following two controls are set correctly:

- Exchange Rate Date Basis

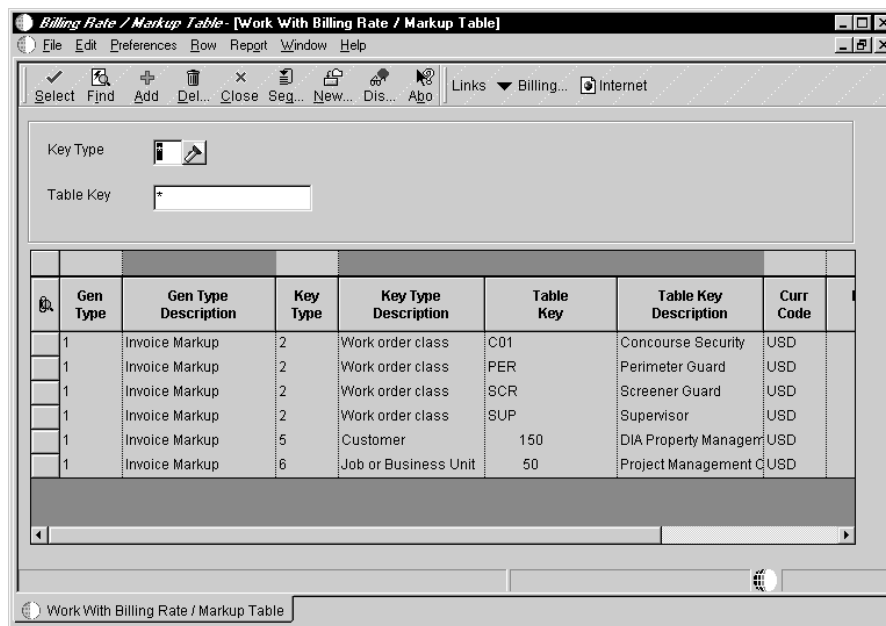
This date determines which exchange rate is used for Workfile Generation and the re-extension of the workfile records.

- Foreign

This determines which currency will be fixed during the process. If you select this box in the constants, then the customer currency will be the fixed currency, and the business unit or company currency will be considered non-fixed. In this case, the markups will be calculated on the customer currency, and the domestic amount will be restated based on the foreign amounts calculated.

If the box is unchecked, then the domestic or company currency will be fixed for the billing process. In this case, the markups will be calculated on the company currency, and the foreign amount will be restated based on the domestic amounts calculated. This field also drives the mode that will default into the Billing Revisions form.

Understanding Setup of Billing Rate/Markup Tables for Multicurrency



On Work With Billing Rate/Markup Table, ensure the following control is set correctly:

- Curr Code

On Work With Contract Billing Rate/Markup Table, the currency code will control the decimal display on this screen and will be used as part of the key when this table is processed by the Workfile Generation and the re-extension functions. The Curr Code field displays only when Currency is on.

The currency code will default in for the following key types based on the following files but can be overridden when adding a new table:

1-Work Order	Work Order Master (F4801)
3-Contract	Contract Master (F5201)
4-Parent Contract	Contract Master (F5201)
5-Customer	Customer Master (F0301 or F03B01)
6-Business Unit (Job)	Business Unit Master (F0006)
8-Company	Company Master (F0010)

When Currency is on, you need to enter the currency code for the following key types:

- 2-Work Order Class (WR07)
- 7-Job Class (RP11)
- 9-Default

Example: Billing Rate/Markup Table Processing

The table selected during the Workfile Generation and re-extension processes is determined by the mode set up in the Billing Constants or on Contract Master, as well as by the key fields of the Billing Rate/Markup table. Because Currency is a key field, it will be used to search for a match between the cost transaction and the Billing Rate/Markup table. This process is illustrated in the following example.

- Business Unit 1234 belongs to company 00062 with a currency code of BEF.
- Customer number 3333 has been set up with a currency of FRF.
- Customer number 3333 has been properly attached to Business Unit 1234 as the Owner.
- A transaction was posted into the billable account: 1234.1350.02200 for 300 BEF.

The following two Billing Rate/Markup tables have been set up.

Table 1

Generation Type	1
Key Type	5
Table Key	3333
Currency Code	FRF
Date Range	01/01/05 to 12/31/05
Object Account Range	1340 to 1399
Markup Percentage	150

Table 2

Generation Type	1
Key Type	6
Table Key	1234
Currency Code	BEF
Date Range	01/01/05 to 12/31/05
Object Account Range	1340 to 1399
Markup Percentage	150

Note: If Currency is off, Currency Code is not a visible field and the values for each of the tables would have been updated as blank during a table ADD.

If Currency had been off and currency codes had not been entered, Table 1 would have been used as the markup because currency code would not have been part of the search key. Therefore, key type 5 would have been found first in the hierarchical ordering of the remaining major keys.

If Currency was on and the system constants were set to Foreign mode, then Workfile Generation would calculate the billable amount of the transaction using Table 1, which was set up in the foreign or customer currency.

If the system constants were set to domestic mode, then Workfile Generation would calculate the billable amount of the transaction using Table 2, which was set up in the domestic or company currency.

If the currency for the table does not match the currency defined as fixed by the system constants, or is overridden on Contract Master, the table does not match. The system will search through the table hierarchy until a complete match is found. If a complete match is not found, the default markup percentage set up in the constants will be used.

When Currency is off, the Currency Code is not visible on the Billing Rate/Markup table form. Any tables added when Currency is off will have a blank value in the file record for the currency code. If Currency is then turned on and a transaction is entered with a valid currency code attached to it, the Workfile Generation program will not find a valid match to a Billing Rate/Markup table with a blank value.

The opposite is also true. If you enter a Billing Rate/Markup table with a valid currency code while Currency is on and then turn it off to enter your transactions, your Transaction Currency field is now blank and your markup tables are not blank. Again, the system will not find a match. For this reason, it is important to not change your system back and forth from Currency on and off without identifying the files that will need to be updated accordingly.

Understanding Setup of Components for Multicurrency

Component Table	Description	Cur Cod	Beginning Date	Ending Date
G&AADDONS	G&A with Additional Burden			
JULIE	test	USD	1/1/98	12/1/98
LABOR	Labor Markup Components		1/1/98	
OVH_&_COM	Overhead and Cost of Money		1/1/98	
UNIONDUES	Hourly Cost of Union Dues	USD	1/1/98	

On Work With Component Tables, the currency code must match the currency code of the Billing Rate/Markup table to which it is attached.

The currency code on the component table will control the decimal display on this screen and will be used as part of the key when this table is processed by the Workfile Generation and re-extension functions. The Currency Code field displays only when Currency is on.

Understanding Contract Setup for Multicurrency

When you add a new contract, the domestic currency always defaults to that of the associated job. The billing currency defaults to that of the customer and the mode defaults from the constants.

You can change the billing currency and mode until you add a change order and billing line. After you enter the billing line, you cannot change the currency code or mode. The system populates the exchange rate on the Contract Master based on the rate for the date associated with the original change order of the contract. The system uses the billing currency you enter on the contract master to calculate all of the foreign amounts of your workfile transactions.

You can update the minimum threshold amount on the Additional Detail tab of the Contract Master only in fixed mode. The system calculates the alternate mode of the threshold amount using the exchange rate derived from the change date of the original change order.

After you set up the Contract Master, you must set up change orders and billing lines. After you add the first billing line, the system updates the currency exchange rate on the Contract Master and Billing Line tables. You can enter the schedule of values only in fixed mode. The system calculates the alternate mode using the derived exchange rate.

Note: The system derives the exchange rate from the daily exchange rate tables based on the date entered in the change date of the original change order. The system does not update the exchange rate when you enter change orders with new dates and rates. The exchange rate, once derived, remains constant throughout the life of the contract.

Understanding Multicurrency Processing of Workfile Generation

Workfile Generation is not affected by Currency being on or off. Likewise, when you choose G/L Select from the Billing Details application, you do not have to make any setup or data selection changes for multicurrency processing. Any changes to the multicurrency processing are determined by your setup of constants, Billing/Rate Markup tables, and the contract.

Understanding Multicurrency Processing of Billing Revisions

The screenshot shows the 'Workfile Revisions - [Work With Billing Details]' application window. The window has a menu bar (File, Edit, Preferences, Form, Row, Window, Help) and a toolbar with icons for Select, Find, Add, Del..., Close, Seg..., New..., Dis..., and Abo. The main form contains fields for Customer, Account Number, Subledger, Contract Number, G/L Date From, Billing Control ID, Job Type, Job Step, Employee/Supplier, and Billing Currency. Below the form is a table with the following columns: Invoice w/Comp, Billing Currency, Foreign Cost, Foreign Cost w/Comp, Base Foreign Invoice, Foreign Inv w/Comp, and C. The table contains three rows of data:

Invoice w/Comp	Billing Currency	Foreign Cost	Foreign Cost w/Comp	Base Foreign Invoice	Foreign Inv w/Comp	C
892.04	USD					1
280.26	USD					1
373.68	USD					1

At the bottom of the window, there is a 'Find records' field and a 'Work With Billing Details' button.

On Work With Billing Details, if Currency is on, you will have both the domestic and foreign amounts available for inspection on the initial detail display. If Currency is off, you will see only the domestic amounts.

Note: If the job and customer have the same currency code, regardless of how you set up your mode in the Billing Constants, the mode will be considered domestic throughout the billing process. From Work With Billing Details, you will see only the domestic values in the grid; the foreign amounts will be blank.

The screenshot shows the 'Workfile Revisions - [Billing Detail Revisions]' window. The 'Invoice Amounts' tab is selected. The 'Cost Information' section shows 'Unit/UOM' as blank, 'Unit Price' as blank, and 'Cost Amount' as 1,234.56. The 'Markup Information' section shows 'Inv Ovr Rate/Cap' as blank, 'Inv Markup %' as 22.000, and 'Inv Mark Up Amt' as 165.00. The 'Invoice Amounts' section shows 'Inv Txbl Amt' as 1,671.16, 'Tax' as 121.99, and 'Total Invoice' as 1,793.15. The 'Tax/Discount Information' section shows 'Tax Y/N' as Y, 'Tax Area/Expt' as DEN, and 'Disc %/Amt' as blank.

When you select a transaction from the Work With Billing Details form, Billing Detail Revisions will default in the mode of the record that was updated based on the Billing Constants or Contract Master. You can then click on the Foreign box to see the opposite mode (foreign or domestic). Notice that you see only the markup amounts of the fixed currency in the Invoice Markup Percentage field. Amount fields are changeable only in the mode of the transaction. Cost fields cannot be updated in either currency.

In the non-fixed mode, no markup amounts are displayed, and all of the amount fields have been disabled for any changes.

Understanding Multicurrency Processing of Invoice Generation

The screenshot shows a software window titled "Invoice Processing - [Service Billing Invoice Generation]". It has a menu bar with "File", "Edit", "Preferences", "Form", "Window", and "Help". Below the menu bar is a toolbar with icons for "OK", "Cancel", "Dismiss", "Apply", "Links", "Edit In...", "OLE...", and "Internet". The main area is a form titled "Invoice Generation" with the following fields:

- Customer: [Empty text box]
- Bill From Date: [Empty date box]
- Bill Through Date: [Empty date box]
- G/L Date: [Empty date box]
- Invoice Date: [Empty date box]
- Document Type: [Empty text box]
- A/R Company: [Empty text box]
- Exchange Rate Date Basis: [1]
- Invoice/Pay Item Seq: [S002]
- Job/Object (by Customer): [Empty text box]
- Initial Invoice Version: [ZJDE0001]
- Override Invoice Print Version: [Empty text box]

On Contract Billing Invoice Generation, ensure the following control is set correctly:

- Exchange Rate Date Basis

This field identifies whether you want to find the exchange rate table based on the date of the invoice or on the G/L Date as identified on this same form. If you choose to post all transactions to the last day of the month, but you change your exchange rate tables daily, you probably want to select your exchange rate tables based on the invoice date.

Conversely, if you want all currency transactions to be calculated based on the date you post, you would select to retrieve the exchange rate based on G/L date. The Exchange Rate Date Basis control is required whether you create the invoices using the batch or interactive method. If you do not make an initial selection, the default is 1 or Invoice Date. The exchange rate used for Invoice Generation is updated in the Invoice Exchange Rate field of the Billing Workfile.

The report that is produced after the batch process of Invoice Generation reflects the invoice amount in the currency of the company or in the domestic currency.

Understanding Multicurrency Processing of Invoice Revisions

Invoice Number	Do Ty	Customer	Customer Name	G/L Date	Gross Amount	Base Curr	Foreign Amount
1269	RI	50	Project Management Comp	6/30/05	118.03	USD	
Total					118.03		

The Total amount displayed on the Batch Review form will always be in the domestic currency. However, on Work With Invoices you will see both amounts in their respective currencies, but you will not see a total on the form.

Pay Itm	Gross Amount	Taxable Amount	Tax Amount	Percent Retainage	Retainage Amount	Discount Available
001	118.03	110.00	8.03			

On Contract Billing Invoice Entry, the system displays both domestic and foreign amounts within the grid.

Understanding Invoice Revisions for Time and Material Billing Lines

Billing Details - [Billing Detail Revisions]

File Edit Preferences Form Window Help

OK Cancel Dis... Abort Links Source... Internet

G/L Date: 6/19/98 Re-Extend Option: ☐ Foreign: ☐
 Eligibility Code: 1 Adj Reason: ☐ No Adjustment

Invoice Information

Units/UOM	
Unit Price	
Cost Amount	597.58
Ovr Rate/Cap	<input type="checkbox"/>
Mark Up %	10.000
Mark Up Amt	
Inv Txbl Amt	657.34
Tax	
Total Invoice	657.34

Job/Customer Contract Additional Currency

Customer: 5070
 Account Number: 5002 1366 02210 Potomac Hotel
 SubledgerType: ☐

Display all errors currently logged 1 Error - 0 Warnings

When you access the billing details of time and material transactions included in the invoice, you will be at Billing Detail Revisions. On Billing Detail Revisions, review the following fields:

- Original Exchange Rate

On the Currency tab, this rate is the one used during Workfile Generation or the most recent re-extension, if applicable.

- Invoice Exchange Rate

This rate is the one used for Invoice Generation.

- Exchange Rate Date Basis and Exchange Rate Date

These fields are updated during Workfile Generation or re-extension, and they identify the basis for the Original Exchange Rate.

During Invoice Generation, if the exchange rate has changed, the records to be included in the invoice first have their non-fixed amounts copied to historical amount fields. Then the non-fixed amounts are recalculated using the new exchange rate selected during Invoice Generation. These non-fixed amounts are then accumulated for the Invoice Review screens. When you access an invoice to audit the individual transactions, you are seeing the recalculated amounts based on the Invoice Exchange Rate. Original amounts are stored in historical amount fields of the workfile so that if an invoice is deleted, the current non-fixed amounts can be updated from the amounts that had been copied to historical amount fields.

As with the Workfile Revisions after Workfile Generation, you can change only the amounts or markup in the mode in which the transaction was created. When you click on the Foreign box, and go to the non-fixed mode, the amount fields are disabled for entry.

During the deletion process, the non-fixed amounts are updated from the historical amount fields. This way, the transactions in the Workfile Detail Transactions table (F4812) are in the same amounts as they were prior to the Invoice Generation.

Understanding Invoice Revisions for Non-Time and Material Billing Lines

When you access the billing details of a non-time and material billing line from the invoice revision form, the system displays the billing line revisions forms. On Billing Line Revisions, review the following fields:

- Exchange Rate
- Foreign

When you select a billing line to review, the Billing Line Revisions form defaults in the mode of the contract. You can then click on the Foreign box to review the opposite mode (foreign or domestic). Notice that you can change amount fields only in the mode of the contract. In non-fixed mode, the system disables all amount fields for any changes.

Understanding Multicurrency Processing of Printing Invoices

You can set up the desired version in the currency of the invoice you wish to print for your customers. You can choose from three different methods. First, on the Contract Billing Entry form, you can override the Version and Invoice Type you wish to print for that one particular invoice. Second, you also can use the processing options from the Invoice Print program to override the amounts you would like to have printed on the invoice based on the data selection of your Invoice Print program version. Third, you can select a Version and Invoice Type on the Invoice Print Version Cross-Reference table you set up for a particular key type and table key.

During the print process, the system will first determine whether there is an invoice type on the Invoice record. If not, the system will look to the processing options of the version of the program you are running and then it will look to the cross-reference table. If it does not find an Invoice Type identified for printing, the invoice will print out based on the mode from the billing transactions. If the Type is set to D, the domestic amounts will print. If the Type is set to F, the foreign amounts will print.

Understanding Multicurrency Processing of Invoice Journal Generation

The reports that print out (including the Invoice Register) during Invoice Journal Generation are printed in domestic amounts, regardless of the currency mode.

Understanding Multicurrency Processing of Create A/R and G/L Entries

For this process, you receive the same reports that you received for the Invoice Journal Generation. These reports are created in the domestic currency, regardless of what mode you have set up for your currency processing.

When accessing the batch from the Invoice Journal Review option, you will see that the gross amounts in the domestic currency and the currency amount reflect the foreign currency of the invoice.

Pay Item	Gross Amount	Taxable Amount	Tax Amount	Percent Retainage	Retainage Amount	Discount Available	Rate
001	1,100.00						

On Contract Billing Invoice Entry, the foreign invoice defaults the view to the foreign mode, and you can change amounts by clicking on the Foreign box.

Insert G/L distribution Screen

The G/L distribution of the record also displays in the currency that was visible on the Standard Invoice entry when the Form Exit was completed.

On both of the above reports, the Exchange Rate is that which was used during Invoice Generation to calculate the translation of amounts.

Understanding Multicurrency Processing of General Ledger Post Reports

When you post the transactions, the domestic amounts are posted into the AA ledger and the foreign amounts are created and then posted into the CA ledger. Both ledgers must balance for the batch to post.

Understanding Multicurrency Processing of Invoice Voids

Once the invoice has been created, it can be voided if no payments have been recorded against it. When the invoice is voided, the Billing Workfile Transactions are retrieved from history with the amounts that were calculated using the currency exchange rate of the last re-extension or of the original workfile generation, whichever came later.

Appendix



Appendix A: 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)
- Contract Billing
- Service Billing

Caution: 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, the J. D. Edwards tax calculation software, or both. 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 tax processing 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)	<p>For U.S. and Canadian taxes, you use the AAI code PT __ __ __ for the company.</p> <p>For non-United States and non-Canadian taxes, you assign an AAI to each taxing authority within each tax rate/area.</p>
Tax rules by company	<p>You can define tax rules for the Accounts Receivable, Accounts Payable, Sales Order Management, Procurement, CSMS, General Accounting, Contract Billing, and Service Billing systems. When you enter transactions for these systems, taxes are calculated according to these rules. The system uses these tax rules to:</p> <ul style="list-style-type: none">• 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. <p>This feature applies to taxes for all countries.</p>

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 predefined 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, the Quantum interface recognizes only 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, contract or service billing invoice; and 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, CSMS, Contract Billing, and Service Billing 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.

Vertex researches and maintains the data contained in the file by remaining in constant contact with all jurisdictions that levy a tax. Every month, Vertex 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 and also override customer and product exemptions. You can access 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, CSMS, Contract Billing and Service Billing 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.

Quantum Tax Register file

From the Quantum 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 whether 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.

Coexistence Considerations

Although you can work with OneWorld and WorldSoftware in a coexistent environment, the Vertex Sales and Use Tax Compliance product for WorldSoftware and Quantum for Sales and Use Tax for OneWorld do not coexist with each other. Quantum, however, has utilities that allow you to copy and merge information from the Compliance product to Quantum.

If you are coexistent, you can:

- Manage and maintain the TDM in the legacy Compliance system. Then, you can copy the Compliance TDM to the Quantum TDM using Quantum utilities.
- Merge the register tables created in both the Compliance and Quantum products into the Quantum product with Quantum utilities.

Note: The Compliance product has no utilities to copy the Quantum TDM or merge the Quantum register tables into the legacy system.

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 coexist 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
- ☐ Testing the Quantum Connection
- ☐ Activating Quantum Logging
- ☐ Setting up automatic accounting instructions for Quantum
- ☐ Setting up user defined codes 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* in the *Sales Order Management and Procurement Guides*.
- ☐ Review order activity rules. See *Setting Up Order Activity Rules in the Sales Order Management and Procurement Guides*.
- ☐ 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 interface prior to using the Quantum system with J.D. Edwards OneWorld software.

Note: Constants settings load during software initialization. Therefore, in order for the constants settings to take effect, you must exit and restart OneWorld.

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 Vertex Quantum Sales and Use Tax menu (G731), choose Constants.

1. On Work with Quantum Constants Revision, 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
 - Product Category/ID
3. Complete the following fields for use tax category codes and click OK:
 - Division Code
 - Customer Class Code
 - Product Category/ID

Field	Explanation
Quantum Active	This value determines whether the system uses Quantum Sales and Use Tax for tax calculations.
Y	Use Quantum system to calculate taxes.
N	Do not use Quantum system to calculate taxes. Instead, use JDE tax calculations.

Field	Explanation
U.S. Country Code	The code that indicates the United States in the Quantum Sales and Use Tax system. This code must match the value in the Country field on the Mailing tab on the Address Book Revision form. For U.S. domestic customers, this field is typically blank.
Canada Country Code	The code that indicates Canada in the Vertex Sales and Use Tax System. This value must be CA, and must match the value in the Country field on the Mailing tab on the Address Book Revisions form.
Division Code	The Address Book Category Code that the Quantum Tax Interface uses for Division/Store Code for Sales Tax. The Address Book Category Code is passed to Quantum and matched to the Division/Store Code in the Quantum Tax Decision Maker module.
Customer Class Code	The Address Book Category Code that the Quantum Tax Interface uses for Customer Class Code for Sales Tax. The Customer Class Code is passed to Quantum and matched to the Customer Class Code in the Quantum Tax Decision Maker module.
Product Category/ID	The Item Branch/Plant Category Code that the Quantum Tax Interface uses for Product Category/ID for Sales Tax. The Item Branch/Plant Category Code is passed to Quantum and matched to the Product Category/ID field in the Quantum Tax Decision Maker module.
Division Code	The Address Book Category Code that the Quantum Tax Interface uses for Division/Store Code for Use Tax. The Address Book Category Code is passed to Quantum and matched to the Division/Store Code in the Quantum Tax Decision Maker module.
Customer Class Code	The Address Book Category Code that the Quantum Tax Interface uses for Customer Class Code for Use Tax. The Customer Class Code is passed to Quantum and matched to the Customer Class Code in the Quantum Tax Decision Maker module.
Product Category/ID	The Item Branch/Plant Category Code that the Quantum Tax Interface uses for Product Category/ID for Use Tax. The Item Branch/Plant Category Code is passed to Quantum and matched to the Product Category/ID field in the Quantum Tax Decision Maker module.

Testing the Quantum Connection

After you activate Quantum and set the country codes, J.D. Edwards recommends that you conduct a test to determine whether you have successfully connected to the Quantum system.

Before You Begin

- ☐ You must exit and restart OneWorld in order for the constants settings to take effect.

▶ To test the Quantum connection

1. Enter P73GEO in the fast path.

Geo Code	County	City	Begin Zip Code	End Zip Code

2. On Retrieve GeoCode, complete the following fields as follows:
 - Type CO in the State field
 - Type Denver in the City field
3. Click Find.
 - If you are properly connected to the Quantum system, 060310140 appears in the GeoCode column.
 - If nothing appears in the GeoCode column, a setup or configuration error might have occurred. Check the following:
 - The Quantum Active field must be set to Y, and the Canada Country Code set to CA, on Work With Quantum Constants Revision.
 - The constants values are initialized by exiting and restarting OneWorld.
 - The Data Source, Server, User ID, and Password must be set up properly in the Database Connections table. See *Setting Up Database Connections* in the *OneWorld Installation Guide*.

- All of the required business functions must be mapped to the server where the Quantum software is located. See OCM Mapping in the *OneWorld Installation Guide*.

Activating Quantum Logging

You might want to review the values you send to the Quantum interface, and then review the values generated by Quantum after processing. The Quantum Logging feature provides you with the ability to review these Before and After values.

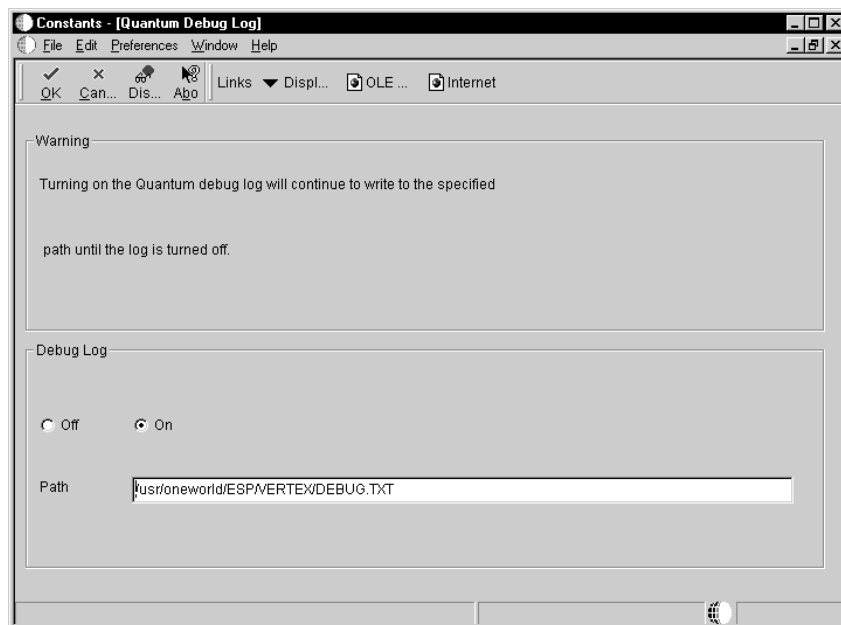
The Quantum Logging feature creates a two-page text file with the Before values you send on the first page, and the After values Quantum generates on the second page.

Caution: Use this feature with caution, because two pages of data are printed for every transaction going through the Tax Calculator for all users. Keeping this feature turned on after initial testing and setup negatively impacts system performance.

► To activate Quantum logging

From the Vertex Quantum Sales and Use Tax menu (G731), choose Constants.

1. On Work With Quantum Constants Revision, choose Quantum Log from the Form menu.



2. On Quantum Debug Log, complete the following fields and click OK:

- Debug Log
- Path

Field	Explanation
Debug Log	An option that determines whether to enable the Quantum debug log. If you choose On, the Vertex Link Parm Area will be printed before and after calling the Vertex Tax Calculator Program. Use this feature with caution, because two pages of data are printed for every transaction going through the Tax Calculator for all users.
Path	The path and file name where the Quantum debug log will reside, such as C:\Debug\QuantumDebug.txt.

See Also

- *Quantum for Sales and Use Tax - Reference Manual* for more information about Quantum Logging

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.

Hierarchy for Quantum AAI Values

OneWorld identifies the proper G/L account according the following hierarchy:

1. The system retrieves the Business Unit and Object that the PT____ or RT____. AAIs indicate based on the company on the invoice or voucher.
2. The system retrieves the value in the State portion of the GeoCode.
3. The system attaches the State value to the Business Unit and Object as the Subsidiary.
4. The system searches the Account Master for that Business Unit, Object, and Subsidiary combination. If found, the system uses this account combination as the G/L account.
5. If still not found, the system searches the Account Master using just the Business Unit and Object. If found, the system uses this account combination as the G/L account.
6. If still not found, it searches the Account Master using the Business Unit and Object for Company 00000 for that particular PT____ or RT____ AAI. If found, the system uses this account combination as the G/L account.

See Also

- *Understanding AAIs for General Accounting* in the *General Accounting Guide*

Setting Up User Defined Codes for Quantum

The Quantum interface uses a user defined code (UDC) table (73/ST) that contains all of the address book Search Types that have GeoCodes assigned to them or that can have their GeoCodes revised. GeoCodes can be assigned only if the Search Type on the address book record is found in the GeoCode Assignment Search Type UDC table.

Typically, people who use Quantum set up the following Search Types:

- C - Customer
- V - Supplier
- E - Employee
- F - Facilities

Assigning Non-Stock Product Categories to Order Types

Quantum processes the taxing of both stock and non-stock items. Stock items are typically products that need to have records in the J.D. Edwards Inventory Master tables (F4101 and F4102). Non-stock items are not required to have records in these master tables, but still can exist on an order and have taxes

assigned to them. For both stock and non-stock items, Quantum looks for a value for the Product Category/ID and Transaction Type to be used in the TDM.

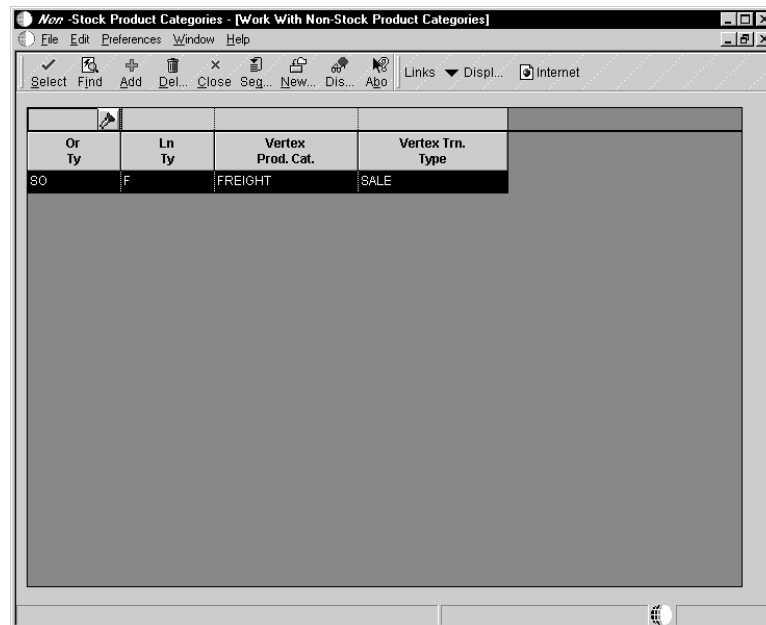
You can specify a Quantum product category or a Quantum transaction type for each order type and line type combination. The Quantum product category is used for product exceptions in TDM. The Quantum transaction type indicates to Quantum the type of transaction that is being processed (for example, sales, purchase, rental, or service) so Quantum can apply the appropriate tax type.

For stock items, the Product Category/ID is typically derived from the Category Code on the Item Branch/Plant record. The Transaction Type is usually derived from the System Code of the order. For Accounts Payable and Procurement, the Transaction Type is PURCH, and for Accounts Receivable and Sales Order Management, the Transaction Type is SALE.

For non-stock order lines (such as freight or lease charges), use the Non-Stock Product Categories program (P7307) to specify the Product Category/ID and Transaction Type.

► To assign non-stock product categories to order types

From Vertex Quantum Sales and Use Tax menu (G731), choose Non-Stock Product Categories.



1. On Work with Non-Stock Product Categories, click Add.

2. On Non-Stock Product Categories Revision, complete the following fields and click OK:
 - Order Type
 - Line Type
 - Vertex Product Category
 - Vertex Transaction Type

Hierarchy for Product Category/ID and Transaction Type Values

OneWorld derives the specific values to be passed to the Quantum Product Category/ID and Transaction Type in TDM according to the following hierarchy:

1. The system scans the value in the Item Balance Category field of the Quantum Constants.
 - If the field is blank, the system goes to step 2.
 - If the field is not blank, the system goes to step 3.
2. If the value in the Item Balance Category field of the Quantum Constants is blank:
 - The system goes to the Quantum Non-Stock Product Categories table (F7307) and uses the Document Type and Line Type of the order.
 - If a record exists in the F7307 table for that Document Type and Line Type combination, the system uses the Product Category/ID and Transaction Type corresponding to that record.

- If no record exists in the F7307 table for that Document Type and Line Type combination, the system uses a blank for the Product Category/ID, and the Transaction Type is determined by the System Code of the order.
3. If the value in the Item Balance Category field of the Quantum Constants is *not* blank, the system goes to the corresponding Category Code in the Item Branch/Plant record for that item on the order. Then:
- If an Item Branch/Plant record does not exist, or if the respective Category Code on the Item Branch/Plant record is blank, the system goes to step 2 to determine *both* the Product Category/ID and the Transaction Type.
 - If the Item Branch/Plant record does exist, and if the respective Category Code on the Item Branch/Plant record is not blank:
 - The system uses the Category Code value for the Product Category/ID.
 - The system uses step 2 to determine the 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 Master/Transactions menu (G4111), choose Item Branch/Plant.

1. On Work With Item Branch, 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, complete 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, complete 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:

XXYYYYZZZZ

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.

Note: 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 GeoCode Tax Processing 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. The system does not enter a value in the field if:

- An address book record crosses multiple tax jurisdictions.
- Not enough information is available on the address to find a GeoCode.
- The country code on the address does not match the codes set up in the Constants for the United States and Canada.
- The state code on the address is incorrect.

The system produces reports that specify the number of GeoCodes that were not updated. The GeoCodes are categorized by the type of issue that prevented them from being updated. Additionally, the system sends 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 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 by Line of Business (F03012) or the Supplier Master (F0401) table.

When you perform a batch update based on effective dates, the system populates the Tax Rate/Area field with the appropriate GeoCode. The Effective Address Update does not update the Supplier Master and Customer Master records if the:

- Tax Explanation Code is missing the correct code of S, U, or E
- Tax Rate/Area field contains a value that is not a GeoCode or is blank
- Geocode cannot be assigned because of incomplete information or an address book record crossing multiple tax jurisdictions

The system produces reports that show both unmatched records and records that you might want to match. Additionally, the system sends 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:

- Records were not updated when you ran the Update Address Book GeoCodes and Effective Address Update processes due to data errors.
- 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.
- An existing Address Book Record was changed.

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. If any of the following conditions exist, the Tax Rate/Area field is not updated:

- The proper Tax Explanation code is not assigned (S, U, or E).
- Errors occurred.
- The mailing address resides in multiple tax jurisdictions.
- The current value in the Tax Rate/Area field is blank or is an existing GeoCode.

Depending on the type of address book record, perform one of 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

Note: When you access the Search and Select Window from the visual assist for the Tax Rate/Area field on 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.

1. On Work with Business Units, locate the business unit and click Select.
2. On Revise Business Unit, click the More Detail tab.

3. Complete the following field and click OK:

- 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 Daily Processing menu (G01), choose Address Book Revisions.

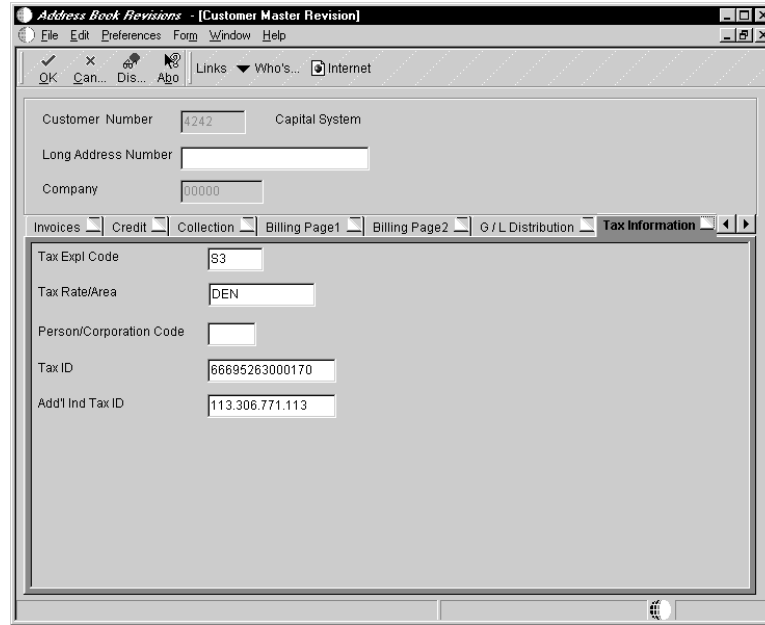
1. On Work with Addresses, locate the address book record whose GeoCode you want to change or add.
2. Choose A/P from the Row menu.

3. On Supplier Master Revision, click the Tax Information tab and complete the following fields:
 - Tax Expl (Explanation) Code 2
 - Tax Rate/Area

To manually assign GeoCodes to a customer

From the Daily Processing menu (G01), choose Address Book Revisions.

1. On Work with Addresses, locate the address book record whose GeoCode you want to change or add.
2. Choose A/R from the Row menu.



Address Book Revisions - [Customer Master Revision]

File Edit Preferences Form Window Help

OK Cancel Dis... Abort Links Who's... Internet

Customer Number: 4242 Capital System

Long Address Number:

Company: 90000

Invoices Credit Collection Billing Page1 Billing Page2 G / L Distribution **Tax Information**

Tax Expl Code: S3

Tax Rate/Area: DEN

Person/Corporation Code:

Tax ID: 66695263000170

Add'l Ind Tax ID: 113.306.771.113

3. On Customer Master Revision, click the Tax Information tab and complete the following fields:
 - Tax Expl (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.

The GeoCode Hierarchy

When you enter an address book number to represent a customer (Sold To, Ship To), supplier or branch/plant (Ship From), the system uses different rules for each system.

Accounts Payable - Use or Exempt Tax

OneWorld uses the following hierarchy for accruing Use Tax:

Ship To

- GeoCode assigned to the Business Unit on the voucher. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Business Unit on the voucher. If no Address Number is assigned to the Business Unit, or if no GeoCode is assigned to the Supplier Master record, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Company of the Business Unit on the voucher.
- If no Address number is assigned to the Company, or if no GeoCode is assigned to the Supplier Master record, the system returns an error.

Ship From

- GeoCode assigned to the Supplier Master record of the Supplier entered on the voucher.
- If no GeoCode is assigned to the Supplier Master record, the system returns an error.

Order Acceptance

Same as Ship To hierarchy.

Accounts Payable - Sales Tax

OneWorld uses the following hierarchy for verifying Sales Tax:

Ship To

- GeoCode assigned to the Business Unit on the voucher. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Business Unit on the voucher. If no Address Number is assigned to the Business Unit, or if no GeoCode is assigned to the Supplier Master record, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Company of the Business Unit on the voucher.
- If no Address number is assigned to the Company, or if no GeoCode is assigned to the Supplier Master record, the system returns an error.

Ship From

- GeoCode assigned to the Supplier Master record of the Supplier entered on the voucher.
- If no GeoCode is assigned to the Supplier Master record, the system returns an error.

Order Acceptance

Same as Ship From hierarchy.

Accounts Receivable - Sales Tax

OneWorld uses the following hierarchy for accruing Sales Tax:

Ship To

- GeoCode assigned to the Customer Master record of the Address Number on the invoice for the Company entered on the invoice. If no GeoCode is assigned to the Customer Master record for that Company, then:
- GeoCode assigned to the Customer Master record for the Company 00000 of the Address Number on the invoice.
- If no GeoCode is assigned to the Customer Master record for Company 00000, the system returns an error.

Ship From

- GeoCode assigned to the Business Unit on the Invoice. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Customer Master record for the Company entered on the invoice for the Address Number of the Business Unit on the invoice. If no GeoCode is assigned to this Customer Master record, the hierarchy goes to the next step (step 3). if no Address Number is assigned to the Business Unit, the hierarchy goes to step 4:
- GeoCode assigned to the Customer Master record for Company 00000 for the Address Number of the Business Unit on the invoice. If no GeoCode is assigned to this Customer Master record, then:
- GeoCode assigned to the Customer Master record for the Company of the Business Unit on the invoice for the Address Number assigned to the Company of the Business Unit on the invoice.
- If no Address Number is assigned to the Company, or if no GeoCode is assigned to the Customer Master record, the system returns an error.

Order Acceptance

Same as Ship From hierarchy.

Sales Order Management - Sales Tax

OneWorld uses the following hierarchy for accruing Sales Tax:

Ship To

- GeoCode assigned to the Customer Master record for the Address Number on the Order Detail Line.
- If no GeoCode is assigned to the Customer Master record, the system returns an error.

Ship From

- GeoCode assigned to the Branch/Plant on the Order Detail Line. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Customer Master record for the Address Number of the Branch/Plant on the Order Detail Line. If no Address Number is assigned to Branch/Plant, or if no GeoCode is assigned to the Customer Master record, then:
- GeoCode assigned to the Customer Master record for the Address Number of the Company of the Branch/Plant on the Order Detail Line.
- If no Address Number is assigned to the Company, or if no GeoCode is assigned to the Customer Master record, the system returns an error.

Order Acceptance

- GeoCode assigned to the Branch/Plant on the Order Header. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Customer Master record for the Address Number of the Branch/Plant on the Order Header. If no Address Number is assigned to Branch/Plant, or if no GeoCode is assigned to the Customer Master record, then:
- GeoCode assigned to the Customer Master record for the Address Number of the Company of the Branch/Plant on the Order Header.
- If no Address Number is assigned to the Company, or if no GeoCode is assigned to the Customer Master record, the system returns an error.

Procurement - Use Tax

OneWorld uses the following hierarchy for accruing Use Tax:

Ship To

- GeoCode assigned to the Branch/Plant on the Order Detail Line. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Branch/Plant on the Order Detail Line. If no Address Number is assigned to Branch/Plant, or if no GeoCode is assigned to the Supplier Master record, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Company of the Branch/Plant on the Order Detail Line.
- If no Address Number is assigned to the Company, or if no GeoCode is assigned to the Supplier Master record, the system returns an error.

Ship From

- GeoCode assigned to the Supplier Master record for the Address Number on the Order Header.
- If no GeoCode is assigned to the Supplier Master record, the system returns an error.

Order Acceptance

- GeoCode assigned to the Branch/Plant on the Order Header. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Branch/Plant on the Order Header. If no Address Number is assigned to Branch/Plant, or if no GeoCode is assigned to the Supplier Master record, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Company of the Branch/Plant on the Order Header.
- If no Address Number is assigned to the Company, or if no GeoCode is assigned to the Supplier Master record, the system returns an error.

CSMS - Service Contract Sales Tax

OneWorld uses the following hierarchy for accruing Service Contract Sales Tax:

Ship To

- GeoCode assigned to the Customer Master record of the Site Address Number on the Contract Detail Line.
- If no GeoCode is assigned to the Customer Master record, the system returns an error.

Ship From

- GeoCode assigned to the Business Unit on the Contract Detail Line. If no GeoCode is assigned to the Business Unit, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Business Unit on the Contract Detail Line.
- If no Address Number is assigned to Business Unit, or if no GeoCode is assigned to the Supplier Master record, the system returns an error.

Order Acceptance

- GeoCode assigned to the Business Unit on the Contract Header. If no GeoCode is assigned to the Responsible Business Unit, then:
- GeoCode assigned to the Supplier Master record for the Address Number of the Business Unit on the Contract Header.
- If no Address Number is assigned to Business Unit, or if no GeoCode is assigned to the Supplier Master record, the system returns an error.

CSMS - Service Order Sales Tax

OneWorld uses the following hierarchy for accruing Service Order Sales Tax:

- | | |
|-------------------------|--|
| Ship To | <ul style="list-style-type: none">• GeoCode assigned to the Customer Master record of the Site Address Number on the Service Order.• If no GeoCode is assigned to the Customer Master record, the system returns an error. |
| Ship From | <ul style="list-style-type: none">• GeoCode assigned to the Responsible Business Unit on the Service Order. If no GeoCode is assigned to the Responsible Business Unit, then:• GeoCode assigned to the Supplier Master record for the Address Number of the Responsible Business Unit on the Service Order.• If no Address Number is assigned to Responsible Business Unit, or if no GeoCode is assigned to the Supplier Master record, the system returns an error. |
| Order Acceptance | Same as Ship From hierarchy. |

CSMS - Service Order Use Tax

OneWorld uses the following hierarchy for accruing Service Order Use Tax:

- | | |
|-------------------------|--|
| Ship To | <ul style="list-style-type: none">• GeoCode assigned to the Responsible Business Unit on the Service Order. If no GeoCode is assigned to the Responsible Business Unit, then:• GeoCode assigned to the Supplier Master record for the Address Number of the Responsible Business Unit on the Service Order.• If no Address Number is assigned to Responsible Business Unit, or if no GeoCode is assigned to the Supplier Master record, the system returns an error. |
| Ship From | <ul style="list-style-type: none">• GeoCode assigned to the Supplier Master record of the Site Address Number on the Service Order.• If no GeoCode is assigned to the Supplier Master record, the system returns an error. |
| Order Acceptance | Same as Ship To hierarchy. |

CSMS - Call Sales Tax

OneWorld uses the following hierarchy for accruing Call Sales Tax:

- | | |
|-------------------------|--|
| Ship To | <ul style="list-style-type: none">• GeoCode assigned to the Customer Master record of the Site Address Number on the Call.• If no GeoCode is assigned to the Customer Master record, the system returns an error. |
| Ship From | <ul style="list-style-type: none">• GeoCode assigned to the Responsible Business Unit on the Call. If no GeoCode is assigned to the Responsible Business Unit, then:• GeoCode assigned to the Supplier Master record for the Address Number of the Responsible Business Unit on the Call.• If no Address Number is assigned to Responsible Business Unit, or if no GeoCode is assigned to the Supplier Master record, the system returns an error. |
| Order Acceptance | Same as Ship From hierarchy. |

Contract/Service Billing - Sales Tax

OneWorld uses the following hierarchy for accruing Sales Tax:

- | | |
|-------------------------|--|
| Ship To | <ul style="list-style-type: none">• GeoCode assigned to the Customer Master record of the Address Number on the Workfile Transaction. |
| Ship From | <ul style="list-style-type: none">• GeoCode assigned to the Business Unit of the Workfile Transaction. If no GeoCode is assigned to the Business Unit, then:• GeoCode assigned to the Customer Master record for the Address Number of the Business Unit on the Workfile Transaction. If no GeoCode is assigned to this Customer Master record or no Address Number is assigned to the Business Unit then:• GeoCode assigned to the Customer Master record for the Address Number assigned to the Company of the Business Unit on the invoice.• If no GeoCode is assigned to the Business Unit or Customer Master, the system returns an error. |
| Order Acceptance | Same as Ship From hierarchy. |

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, contract, or call.

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 service contract
- ☐ Overriding GeoCodes on a service order
- ☐ Overriding GeoCodes on a call
- ☐ Overriding GeoCodes on contract billing
- ☐ Overriding GeoCodes on service billing

When you enter a sales or purchase order, invoice, service order quote, voucher, or call, 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	<ul style="list-style-type: none">• Purchase Order Entry (P4310)• Purchase Order Workbench (P43101)• Voucher Match (P4314)• Order Revision History (43205)• Release Open Quotes (P43360)
Accounts Receivable	<ul style="list-style-type: none">• Customer Master (P03013)• Standard Invoice Entry (P03B11)• Speed Invoice Entry (P03B11SI)• Speed Status Change (P03B114)
Sales Order Management	<ul style="list-style-type: none">• Sales Order Entry (P4210)• Online Invoice Inquiry (P42230)
Customer Service Management System (CSMS)	<ul style="list-style-type: none">• Contract Revisions (P1721)• Service Order Entry (P17714)• Service Order Quote (R17711)• Online Service Order Quote (P17717)• Call Entry (P17501)
Contract Billing	<ul style="list-style-type: none">• Contract Billing Line Details (P5202)• Work Order Entry (P48201)• Job Cost Master Revisions (P510006)• Revise Single Business Unit (P0006)
Service Billing	<ul style="list-style-type: none">• Tax Derivation Table (P48127)• Work Order Entry (P48201)• Job Cost Master Revisions (P510006)• Revise Single Business Unit (P0006)

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

Note: In CSMS, the system does not calculate taxes until you run Service Contract Workfile Generation (R1732) or Service Order Workfile Generation (R1775) in final mode. However, the system does calculate taxes when you create a service order quote or enter a call.

See Also

- *Reviewing and Approving 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*, *Working with Service Orders*, and *Working With Calls* in the *Customer Service Management System Guide*
- *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.

Note: You can also override tax information during Speed Invoice Entry and Multi-Invoice Entry.



To override a GeoCode on an invoice

From Customer and Invoice Entry (G03B11), choose Standard Invoice Entry.

1. On Work with Customer Ledger Inquiry, click Add.
2. On Standard Invoice Entry, 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 to override tax information:
 - Tax Amount (optional)

- Tax Area
- Tax Expl (Explanation) Code (optional)

Field	Explanation
Tax Expl Code 1	<p>A user defined code (00/EX) that controls how a tax is assessed and distributed to the general ledger revenue and expense accounts.</p> <p>A single invoice can have both taxable and non-taxable items. The entire invoice, however, must have one tax explanation code.</p> <p>The Tax Explanation Code is used in conjunction with the Tax Rate Area and Tax Rules by Company to determine how the tax is calculated. Each transaction pay item can be defined with a different tax explanation code, including E, to exempt the pay item from calculating taxes.</p>
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.

Note: 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 Supplier and Voucher Entry (G0411), choose Standard Voucher Entry.

1. On Supplier Ledger Inquiry, click Add.
2. On Enter Voucher - Payment Information, 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 to override tax information:
 - Tax Ex (Explanation) Code (optional)

- Tax Rate/Area
- Tax Amount (optional)
- Taxable Amount

Field	Explanation
Tax Explanation 2	<p>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.</p> <p>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.</p>
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 Processing menu (G4211), choose Sales Orders Detail.

1. On Customer Service Inquiry, click Add.
2. On Sales Order Detail Detail Revisions, complete the steps to enter an order.

To enter sales orders, see *Working with Detail Information* in the *Sales Order Management Guide*.

Sales Order Detail - [Sales Order Detail Revisions]

File Edit Preferences Form Row Window Help

OK Can... New... Dis... Abo Links ▾ A/B Inf... Internet

Detail Revisions Line Defaults

Order Number Branch/Plant

Sold To Order Date

Ship To Cust PO

Currency Exchange Rate Base ☒ Foreign

Quantity Ordered	UoM	Item Number	Ln Ty	Foreign Unit Price	Foreign Extended Price	Branch/Plant	Location
0.0000			S	0.0000	0.00		

- On Sales Order Detail Revisions, chose the order detail line and choose SOE – Additional from the Row menu.

Sales Order Detail - [SOE - Additional Information]

File Edit Preferences Window Help

OK Can... Dis... Abo Links ▾ Displ... Internet

Order Number Line Number

Additional Info1 Additional Info2

Addresses

Sold To Capital System

Ship To

Carrier

Dates

Requested

Scheduled Pick

Promised Delivery

Cancel

Ship

Freight Information

Apply Freight ☒

Shipping Commodity Blank-Shipping Com

Shipping Conditions Blank-Shipping Con

Rate Code Blank-Rate Code 4

Route Code Blank-Route Code

Stop Code Blank-Stop Code 4

Zone Number Blank-Shipping Zon

Mode of Trn blank

Extended Volume

Extended Weight

Commission and Tax

Apply Commission ☒

Salesperson 1

Rate 1

Salesperson 2

Rate 2

Sales Taxable

Tax Expl Code

Tax Rate/Area

- Click the Additional Info 2 tab and complete the following fields to override tax information:
 - Tax Expl Code
 - Tax Rate/Area

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.

Note: You can review and change tax information on the Purchase Order Workbench and Voucher Match.

► To override GeoCodes on a purchase order

From the Purchase Order Processing (G43A11), choose Enter Purchase Orders.

1. On Work With Order Headers, click Add.
2. On Order Headers, complete the steps to enter an order and click OK.

See *Entering Purchase Order Detail Information* in the *Procurement Guide*.

Item Number	Quantity Ordered	Tr. UoM	Unit Cost	Extended Cost	Pu. UoM	Ln Ty	Descrip
220	100	EA	495.4788	49,547.88	EA	S	Touring Bike, Red
221	10	EA	1.0000	10.00	EA	S	Touring Bike, Two
2200	10	EA	1.0000	10.00	EA	S	Tire Pump
				0.00			

3. On Order Detail, select the Order Detail tab and choose Tax/Terms from the Row menu.

The screenshot shows a software window titled "Enter Purchase Orders - [Order Detail - Page 1]". It features a standard menu bar with "File", "Edit", "Preferences", "Window", and "Help". Below the menu is a toolbar with icons for "OK", "Cancel", "Dis..." (Dismiss), "Add", "Links", "Displ..." (Display), and "Internet". The main content area is divided into two columns. The left column contains fields for "Taxable" (a checkbox), "Expl Code", "Rate/Area", "Discount Factor" (set to 1.0000), "Item Price Group", "Pricing Cat. Level", and "Print Message". The right column contains fields for "Line Branch" (set to M30), "Lot/Serial", "Location", "Asset ID", and "Adjustment Schedule".

4. On Order Detail – Page 1, complete the following fields to override tax information:
 - Expl (Explanation) Code
 - Tax Rate/Area

Overriding GeoCodes on a Service 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.

Note: In CSMS, the system does not calculate taxes until you run Service Contract Workfile Generation (R1732) in final mode.

► To override GeoCodes on a service contract

From the Daily Service Contract Processing menu (G1714), choose Service Contract Detail.

1. On Work with Contracts, click Add.

2. On Contract Revisions, complete the steps to enter a service contract,

See *Entering Service Contracts* in the *Customer Service Management System Guide*.

3. Then, complete the following fields to override tax information:
 - 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

Note: In CSMS, the system calculates taxes when you create a service order quote. The system does not calculate final taxes until you run CSMS Service Order Workfile Generation (R1775) in final mode.

► To override a GeoCode on a service order

From the Daily Service Order Processing menu (G1712), choose Service Order Entry.

1. On Work with Service Orders, click Add.

The screenshot shows the 'Service Order Entry - [Service Work Order Revisions]' window. The 'Accounting' tab is active, showing two columns of cost-related fields: 'Estimated Cost of Service Order' and 'Actual Cost of Service Order'. Each column has fields for Labor Hours, Labor Amount, Material Amount, Other Amount, and Total Amount. Below these are fields for Accounting Business Unit (M30), Subsidiary, Covered G/L Category (CS10), Non-Covered G/L Category (CS20), and Coverage Group (100100). The Service Contract section includes Contract Number/Type (1), Contract Company (00200), Contract Change Number (001), Contract Line Number (.002), and an Entitlement Check field with a value of 1. The Transaction Entit field is also visible.

2. On Service Work Order Revisions, complete the steps to enter a service work order and click the Accounting tab.

To enter a service order, see *Working with Service Order Entry* in the *Customer Service Management System Guide*.

3. Complete the following fields to override tax information:
 - Tax Explanation Code
 - Tax Rate/Area

Overriding GeoCodes on a Call

When you receive a call from a customer, you enter, store and track a customer's question or problem. Depending on the issue, you might need to override tax information.

You can override this tax information at the time you directly enter the call.

Note: To calculate taxes on a call, you must turn on the Customer Call MBF Processing Options (P1700140).

► To override a GeoCode on a call

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

1. On Work with Calls, click Add.

2. On Customer Call Entry, complete the steps to enter a call.

See *Entering Calls* in the *Customer Service Management System Guide*.

3. Choose Billing Information from the Form menu.

4. On Billing Information, click the Pricing Info tab.
5. Complete the following fields to override tax information:
 - Tax Expl (Explanation) Code
 - Tax Rate/Area

Overriding GeoCodes on Contract Billing

When you bill your customers, you might need to override or set up tax information to meet specific tax requirements associated with the work you perform for your customer. The Contract Billing system provides you with a hierarchy for entering tax information, depending on the contract. The system allows you to override information in the Customer Master and apply taxes at a line, work order, or business unit level.

To override tax information, the system uses the following tables, in the order listed, to search for and calculate tax information:

- Contract Billing Line Detail (F5202)
- Work Order Master File (F4801)
- Business Unit Master (F0006)

Depending on how you need to record taxable information for billing purposes, perform one of the following tasks to override GeoCodes for contract billing:

- Overriding a GeoCode using a contract billing line
- Overriding a GeoCode using a work order

- Overriding a GeoCode using a business unit

► **To override a GeoCode using a contract billing line**

From the Daily Processing menu (G5210), choose Contract Billing Line Details.

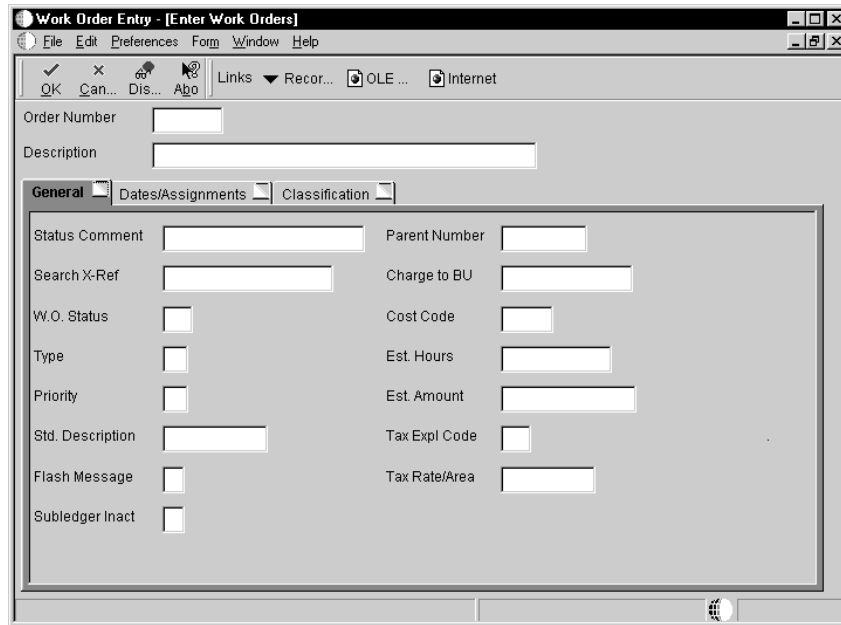
1. On Contract Billing Line Details, click Add.

2. On Contract Billing Line Detail Revisions, click the General tab and complete the following fields to override tax information:
 - Tx Ex (Explanation) Code
 - Tax Rate

► **To override a GeoCode using a work order**

From the Work Order Processing menu (G4811), choose Work Order Entry.

1. On Work With Work Orders, click Add.



2. On Enter Work Orders, click the General tab, and complete the following fields to override tax information:
 - Tax Expl (Explanation) Code
 - Tax Rate/Area

To override a GeoCode using a job

From the Job Budget Setup menu (G5111), choose Job Cost Master Revisions.

1. On Work with Job Master, click Add.

Job Cost Master Revisions - [Job Master Revisions]

File Edit Preferences Form Window Help

OK Cancel Dismiss Abort Links Address Previous Next OLE Internet

Job Number 2002

Posting Edit ☐

Level of Detail 2

Type Business Unit JB

Model Job ☐

Project

Company 00050

Job Site Address

Owner Address 500

Contract Type P

State

Threshold % Complete

Subledger Inactive ☐

Description

MTC Enterprises

Project Management Company

Gas StationA

Progress

2. On Job Master Revisions, complete the following fields:
 - Level of Detail
 - Type Business Unit
 - Project
 - Company
 - Job Site Address
 - Contract Type
 - Description
3. Choose Job Dates/Others from the Form menu.

4. On Job Dates & Other Information, complete the following fields to override tax information:
 - Tax Expl (Explanation) Code
 - Tax Rate/Area

Overriding GeoCodes on Service Billing

When you bill your customers, you might need to override or set up tax information to meet specific tax requirements associated with the service you perform for your customer. The Service Billing system provides you with a hierarchy for entering tax information, depending on the service. The system allows you to override information in the Customer Master and apply taxes using the Tax Derivation Information table (F48127) a work order, or a business unit.

To override tax information, the system uses the following tables, in the order listed, to search for and calculate tax information:

- Tax Derivation Information (F48127)
- Work Order Master File (F4801)
- Business Unit Master (F0006)

Depending on how you need to record taxable information for billing purposes, perform one of the following tasks to override GeoCodes for Service Billing:

- Overriding a GeoCode using the Tax Derivation Information table (F48127)

- Overriding a GeoCode using a work order
- Overriding a GeoCode using a business unit

► **To override a GeoCode using a tax derivation**

From the Table Information menu (G48S41), choose Tax Derivation Table.

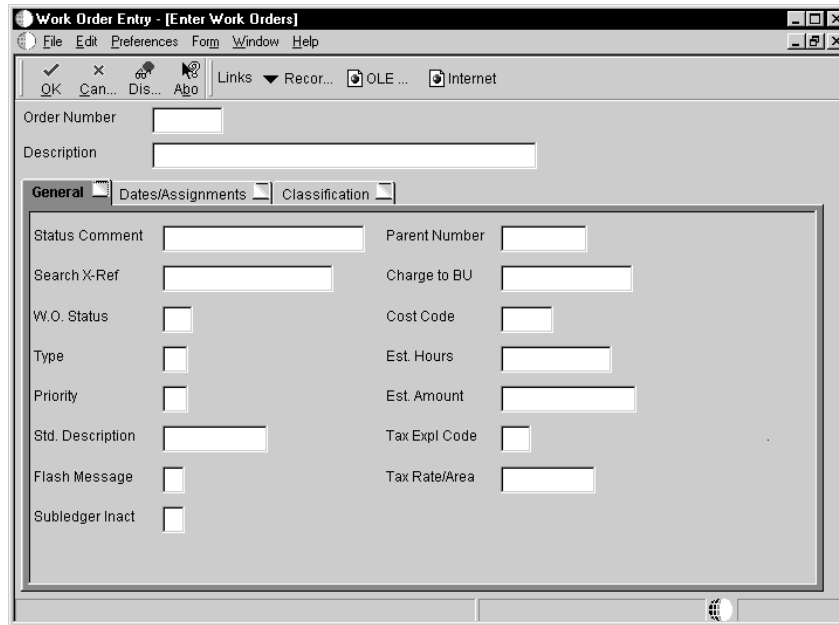
1. On Work with Tax Derivation Table, click Add.

2. On Tax Derivation Revisions, complete the following fields to override tax information:
 - Tax Rate/Area
 - Tax Expl (Explanation) Code

► **To override a GeoCode using a work order**

From the Work Order Processing menu (G4811), choose Work Order Entry.

1. On Work With Work Orders, click Add.



2. On Enter Work Orders, click the General tab, and complete the following fields to override tax information:
 - Tax Expl (Explanation) Code
 - Tax Rate/Area

To override a GeoCode using a job

From the Job Budget Setup menu (G5111), choose Job Cost Master Revisions.

1. On Work with Job Master, click Add.

Job Cost Master Revisions - [Job Master Revisions]

File Edit Preferences Form Window Help

OK Cancel Dismiss Abort Links Address... Previous... Next OLE ... Internet

Job Number 2002

Posting Edit

Level of Detail 2

Type Business Unit JB

Model Job

Project

Company 00050

Job Site Address

Owner Address 500

Contract Type P

State

Threshold % Complete

Subledger Inactive

Description

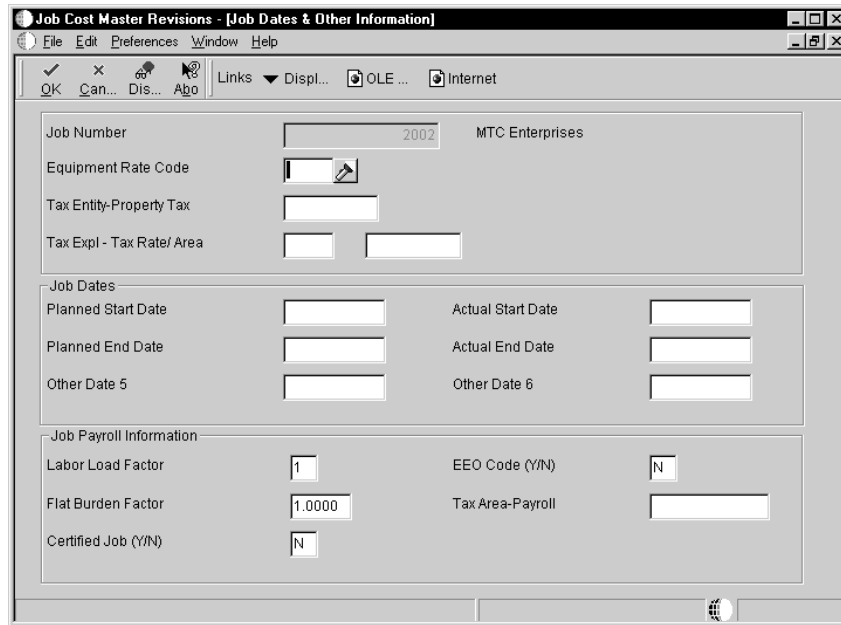
MTC Enterprises

Project Management Company

Gas StationA

Progress

2. On Job Master Revisions, complete the following fields to override tax information:
 - Level of Detail
 - Type Business Unit
 - Project
 - Company
 - Job Site Address
 - Contract Type
 - Description
3. Choose Job Dates/Others from the Form menu.



Job Cost Master Revisions - [Job Dates & Other Information]

File Edit Preferences Window Help

OK Can... Dis... Abo Links Displ... OLE... Internet

Job Number: 2002 MTC Enterprises

Equipment Rate Code: []

Tax Entity-Property Tax: []

Tax Expl - Tax Rate/ Area: [] []

Job Dates

Planned Start Date: [] Actual Start Date: []

Planned End Date: [] Actual End Date: []

Other Date 5: [] Other Date 6: []

Job Payroll Information

Labor Load Factor: 1 EEO Code (Y/N): N

Flat Burden Factor: 1.0000 Tax Area-Payroll: []

Certified Job (Y/N): N

4. On Job Dates & Other Information, complete the following fields to override tax information:
- Tax Expl (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	<ul style="list-style-type: none">• Print Voucher Journal (R04305)
Procurement	<ul style="list-style-type: none">• Print Purchase Orders (R43500)• Print Order Detail (R4401P)
Accounts Receivable	<ul style="list-style-type: none">• Invoice Print (R03B505)
Sales Order Management	<ul style="list-style-type: none">• Print Invoice (R42565)• Open Orders by Item Report (R42632)• Open Orders by Customer Report (R42620)• Held Orders Report (R42640)
CSMS	<ul style="list-style-type: none">• Service Order Quote (R17711)• Invoice Print (R48504)
Contract/Service Billing	<ul style="list-style-type: none">• 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 records the pertinent information in the Quantum Tax Register.

OneWorld writes to the Quantum Tax Register at various times, depending on what program application is calculating taxes. Three different OneWorld product suites can create records in the Quantum Tax Register. They are the Financial, Distribution, and CSMS product suite applications.

Financial Processes

When OneWorld financial applications like the Accounts Receivable and Accounts Payable systems create financial records, the General Ledger Post Report program (R09801) writes A/R and A/P information to the Quantum Tax Register.

Distribution Processes

When financial records are created in a distribution application such as Sales Order Management or Procurement, those applications write the records to the Quantum Tax Register. OneWorld financial programs ignore these records and do not write to the Quantum Tax Register.

For example, when the Sales Update program (R42800) creates A/R records, the General Ledger Post Report program (R09801) ignores these A/R records and does not write to the Quantum Tax Register. When the Voucher Match program (P4314) creates A/P records, it also writes to the Quantum Tax Register. The General Ledger Post Report program (R09801) ignores the Voucher Match records.

CSMS Processes

With CSMS, the Service Billing system writes the tax information to the Quantum Tax Register. Again the A/R and A/P Post program ignores the CSMS tax records.

Contract and Service Billing Processes

If the financial records are created in the Contract or Service Billing systems, the system writes the tax information to the Quantum Tax Register when you create records in the Customer Ledger (F03B11) and Account Ledger (F0911) tables. This occurs at Billing Invoice A/R Journal Generation (R48199). Unlike tax

processing in the J.D. Edwards system, 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*

Appendix B: Searches for Markup Rules

The markup is an amount that you add to costs for overhead and profit. The system calculates markup amounts when you accumulate costs or revise workfile transactions based on the markup rules you define when you set up the Contract Billing system.

You define markup rules by specifying major and minor key values. The system uses these values in combination to identify the specific markup rules that apply to individual source transactions. To identify the correct markup rules, the system:

- Accesses the markup rules
- Searches and selects specific source transactions that match the values you specified for the major key
- Continues the search, narrowing the selection of source transactions based on the value you specified for the minor key

The system uses the most specific rule it can locate to calculate the markup for a transaction.

Major Key Values

The system matches the major key information you define for a markup table to the information in billable workfile transactions.

The following table lists the searches that the system can use for a major key.

Search Level	Key Type	Searches for:	Validates against:
First	1	Work Orders	Work Order Master (F4801)
Second	2	Work Order Classes	User Defined Code (UDC 00/W7)
Third	3	Contract Numbers	Contract Billing Master (F5201)
Fourth	4	Parent Contract Numbers	Parent Contract Master (F5201)
Fifth	5	Customer Numbers	Address Book Master (F0101)

Search Level	Key Type	Searches for:	Validates against:
Sixth	6	Job/Business Units	Job (Business Unit) Master (F0006)
Seventh	7	Job Classes	User Defined Code (UDC 00/11)
Eighth	8	Company	Company Constants (F0010)
Ninth	9	System Default.	No validation

The system uses Key Type 9 if a match is not found at any of the previous levels. The system applies the remaining eligible transactions to tables with this key type. If the system does not find a match, it uses the default markup percentage that you specify in the system constants.

Minor Key Values

Payroll Transactions

The system identifies payroll transactions using the T2, T4, and T5 document type coding. Having identified a T2, T4, or T5 document, the system conducts two searches for related minor key values.

First-Level Search

At the first level of the first search, the system looks for a match with transactions that include the job type, job step, pay type, and employee number.

Search Level	Searches for:				
	JBCD (Job Type)	JBST (Job Step)	PDBA (Pay Type)	AN8 (Employee)	
First	X	X	X	AND	X
Second	X	X		AND	X
Third	X		X	AND	X
Fourth	X			AND	X
Fifth		X	X	AND	X
Sixth		X		AND	X
Seventh			X	AND	X
Eighth					X

Second-Level Search

In the second search for payroll transactions, the system uses job type, job step, and pay type, with either the home business unit or a cost pool. Employee number, home business unit, and cost pool are mutually exclusive and are not used in the second level search.

Search Level	JBCD (Job Type)	JBST (Job Step)	PDBA (Pay Type)	HMBU (Home BU)	RP12 (Cost Pool)
First	X	X	X	X	
Second	X	X	X		X
Third	X	X	X		
Fourth	X	X		X	
Fifth	X	X			X
Sixth	X	X			
Seventh	X		X	X	
Eighth	X		X		X
Ninth	X		X		
Tenth	X			X	
Eleventh	X				X
Twelfth	X				
Thirteenth		X	X	X	
Fourteenth		X	X		X
Fifteenth		X	X		
Sixteenth		X		X	
Seventeenth		X			X
Eighteenth		X			
Nineteenth			X	X	
Twentieth			X		X
Twenty-first			X		
Twenty-second				X	
Twenty-third					X
Twenty-fourth					

Non-Payroll Transactions for Equipment

The system identifies non-payroll equipment transactions using the TE document type code. It applies the following search criteria to transactions with the TE document type.

Search Level	Searches for:				
	ACLO (Rate Grp)	NUMB (Equipment)	ERC (Rate Code)	HMBU (Home BU)	RP12 (Cost Pool)
First		X			
Second	X		X		X
Third	X				X
Fourth			X		X
Fifth	X		X		
Sixth	X				
Seventh			X		
Eighth				X	
Ninth					X
Tenth					

All Other Transactions

For the remaining eligible transactions (those that are not T2, T4, T5, or TE documents), the system conducts the following search for minor key values.

Search Level	Searches for:			
	AN8 (Employee)	HMBU (Home BU)	RP12 (Cost Pool)	JBST (Job Step)
First	X	X		X
Second	X		X	X
Third	X	X		
Fourth	X		X	
Fifth	X			
Sixth		X		
Seventh			X	
Eighth				X
Ninth				

Object and Subsidiary Search

When the system finds a match between the minor key values and the transactions being billed, it searches for a match of the object and subsidiary account information between the markup table rule and the billable transaction.

Search Level	Searches for:	
	OBJ (Object)	SUB (Subsidiary)
First	X	X
Second	X	
Third		X
Fourth		

T2 Payroll Transactions with Equipment Information

If a markup table rule contains information for a rate group (ACL0), equipment number (EQCG), or rate code (ERC), the T2 payroll transaction with equipment information must match the equipment information in the markup table rule. If the information does not match, the system continues to search for the correct rule. The following three examples illustrate this search:

- The markup table rule specifies an equipment number of 180 and the T2 payroll transaction contains an equipment number of 100. The system continues searching for another rule because the equipment numbers do not match.
- The markup table specifies an equipment number of 180 and the T2 payroll transaction does not contain an equipment number. The system continues searching for another rule because the equipment numbers do not match.
- The markup rule does not specify an equipment number and the T2 payroll transaction contains an equipment number of 100. When the rule does not specify an equipment number, it applies to all T2 payroll transactions, whether they contain an equipment number or not. The system stops the search and uses the rule.

Appendix C: Invoice Design

Although you can insert business view fields from the F48SUI01 directly (without using the SF4812* smart fields) into the header and detail sections, you must use the SF4812* smart fields in the footer section. To simplify the invoice design process, use smart fields and do not use the business view fields.

It is a good idea to change the variable name to something more specific when inserting a smart field. The variable name that is used by default is the name of the smart field as it is defined in the data dictionary. If the name is not changed, confusion may result later, especially if the same smart field is used for multiple invoice fields. Also, if you place the same field in multiple sections, you may want to reference the section in the variable name (header, footer, or detail).

The variable name that you select will become the associated text that is printed with the variable. So, if you want the text to appear on the invoice with the variable, you may want to name the variable the same as you want the text to appear. If you want the text to appear but it does not make sense to have the variable the same name, you can modify the associated text afterwards by changing the name within the Properties of the text. If you do not want to see any associated text with the variable, you can disconnect and delete the text after you locate the smart field on the invoice. This last solution is not the best because the system will not allow you to change the smart field parameters if you delete the associated text. The best solution for displaying a smart field without associated text is to change the name of the associated text to a 1-character blank field.

The system will insert all alpha smart fields initially as 40-character fields. You can change the length afterwards by changing the Display Length within the Properties of the smart field. All numeric smart fields will be inserted initially as 15-digit, 2-decimal fields. For all noncurrency, numeric fields, you can change the length and decimal settings later by changing the Display Length and Display Decimals within the Properties of the smart field. All currency numeric fields do not need modification, as they will be printed with appropriate currency properties.

If section sizes are modified or if font sizes of detail lines are modified, these three variables (in the Initialize Section of the Invoice Header Section) may need to be modified. See code section below:

```
// Set the number of detail lines that can print on a page that DOES NOT  
have the  
  
// Total Section print
```

```
VA rpt_MaxDetailLines_MATH01 = "45"
```

```
// Set the number of detail lines that can print on a page that DOES have  
the
```

```
// Total Section print
```

```
VA rpt_MaxDetLinesWithTots_MATH01 = "25"
```

```
// Set the number of lines (detail and blank lines) that are between the  
Detail
```

```
// Heading and the Total Section
```

```
VA rpt_LinesBeforeTotals_MATH01 = "30"
```

You can test your line counting modifications by enabling the assignment line that sets the BlankLine variable to a visible expression. This disabled assignment line is located in the Do Section of the Blank Line Section. See code section below:

```
// This value to be set to <blank>, but can be set to something visible (i.e.
```

```
// blankline) for testing purposes.
```

```
! RV Blank Line = "BlankLineeeeeeeeeeeeeeeeeeeee"
```


Appendix D: Smart Fields

The following table shows the smart fields that are available to insert on an invoice during invoice design. It also shows the parameter prompts that the invoice designer will need to answer when inserting these smart fields.

Smart Fields and Source Tables	Parameters	Explanation
SF0006x (where x equals A, C, D or N) Business Unit (Job) Master (F0006)	1	R01PCC Glossary
SF0014x (where x equals A, C, D or N) Payment Terms (F0014)	1	R01PPT Glossary
SF0101x (where x equals A, C, D or N) Address Book Master (F0101)	1	R01PAB Glossary
SF0111x (where x equals A, C, D or N) Address Book Who's Who Information (F0111)	1	R01PWW Glossary
SF0115x (where x equals A, C, D or N) Address Book Phone Numbers Information (F0115)	1	R01PPN Glossary
	5	R22P Glossary
SF0116x (where x equals A, C, D or N) Address by Date Information (F0116)	1	R01AD Glossary
	5	R23P Glossary
SF03012x (where x equals A, C, D or N) Customer Master (F03012)	1	R01PCM Glossary
SF0401x (where x equals A, C, D or N) Supplier Master (F0401)	1	R01PSP Glossary

Smart Fields and Source Tables	Parameters	Explanation
SF0692x (where x equals A, C, D or N)	1	R01PSC Glossary
Cost Center Supplemental Data Code Info (F00692)	5 (SF0692N Only)	R25P Glossary
SF0901x (where x equals A, C, D or N)	1	R01PAM Glossary
Account Master (F0901)		
SF0693A	1	R05P Glossary
Cost Center Supplemental Narrative Text (F00693)	2	R26P Glossary
	3	R18P Glossary
	4	R27P Glossary
	5	R28P Glossary
SF1201x (where x equals A, C, D or N)	1	R01PEQ Glossary
Equipment Master (F1201)		
SF1721x (where x equals A, C, D or N)	1	R01PCD Glossary
CSMS Contract Detail Information (F1721)		
SF4201N	1	R29P Glossary
Prepayment Amount (F04201)	2	R25P Glossary
SF4801x (where x equals A, C, D or N)	1	R01PWO Glossary
Work Order Master (F4801)		
SF4802A	1	R06P Glossary
Work Order Text (F4802)	2	R27P Glossary
	3	R28P Glossary
SF4812x (where x equals A, C, D or N)	1	R01PBD Glossary
Billing Detail Information (F4812/F4812H)		
SF4822x (where x equals A, C, D or N)	1	R01PIS Glossary
Invoice Summary Information (F4822)		

Smart Fields and Source Tables	Parameters	Explanation
SF48520N Invoice Summary Access Information (F48520)	1	R01PSA Glossary
	2	R12P Glossary
	3	R13P Glossary
	4	R14P Glossary
	5	R16P Glossary
	6	R25P Glossary
SF5201x (where x equals A, C, D or N) Contract Billing Master (F5201)	1	R01PCBM Glossary
SF5202x (where x equals A, C, D or N) Contract Billing Detail (F5202)	1	R01PCBD Glossary
SF5216x (where x equals A, C, D or N) Milestone/Progress Billing Information (F5216/F52161)	1	R01PMP Glossary
SFAMT Amounts No source table	1	R04P
	2	R08P
	3	R16P
	4	R25P

Smart Fields and Source Tables	Parameters	Explanation
SFABTXT Address Book Media Object Text (F00165)	1	R02P Glossary
	2	R03P Glossary
	3	R27P Glossary
	4	R28P Glossary
SFCNTTXT Contract Media Object Text (F00165)	1	R30P Glossary
	2	R27P Glossary
	3	R28P Glossary
SFINVTXT Invoice Batch Media Object Text (F00165)	1	R15P Glossary
	2	R27P Glossary
	3	R28P Glossary
SFADD SFSUB SFMUL SFDIV Add/Subtract/Multiply/Divide Calculations No source table	1–4	R24P Glossary
SFTOTAL Register Total No source table	1	R10P Glossary
	2	R11P Glossary
	3	R25P Glossary
SF005A UDC Description (F0005)	1	R31P Glossary
	2	R32P Glossary
	3	R33P Glossary
	4	R35P Glossary
SFCALC Register Calculate No source table	1	R34P Glossary
	2	R25P Glossary

Appendix E: Field Derivations (F4812)

The following table shows the source of the information for each field in the Billing Workfile (F4812). For many fields, the source depends on specific conditions and other retrieval information.

Use the following list of table IDs and names to identify the sources specified in the table that follows:

- F0005 User Defined Codes
- F0006 Business Unit Master
- F0014 Payment Terms
- F0101 Address Book Master
- F0411 A/P Account Ledger
- F06116 Employee Transactions Detail
- F0618 Payroll Transaction History
- F0624 Burden Distribution
- F069116 Payroll Transaction Constants
- F0901 Account Master
- F0911 Account Ledger
- F1201 Equipment Master
- F4111 Item Ledger
- F4311 Purchase Order Detail
- F4801 Work Order Master
- F48091 Billing System Constants
- F48096 Billing Markup Information
- F4812 Billing Workfile
- F48127 Tax Derivation Information
- F5201 Contract Billing Master
- F5202 Contract Billing Line Detail
- F5212 T&M Cross-Reference Accounts

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDAA (Amount)	Default	GLAA/F0911
	GLDCT (Document Type) field in the F0911 record contains T2.	YTGPA (Gross Pay)/F0618 or F06116
	GLDCT field in the F0911 record contains T2. The transaction relates to a burden reconciliation.	J#BDA (Burden Amount)/F06116
	GLDCT field in the F0911 record contains T4.	YTRCPY (Recharge Amount)/F0618 or F06116
	GLDCT field in the F0911 contains T5.	YTEQGR (Equipment Gross)/F0618 or F06116
WDAA2 (Foreign Cost Amount)		
WDACL0 (Rate Group)	GLASID (Serial Number) field in the F0911 record is not blank.	FAACL0/F1201
WDADCI (Invoice Markup Amount)	WQGTYP (Generation Type) field in the F48096 record contains 1.	WQAA (Amount)/F48096
WDADCR (Revenue Markup)	WQGTYP (Generation Type) field in the F48096 record contains 2.	WQAA (Amount)/F48096
WDAGS (Suspend Aging)	Not Used	
WDAID (Account ID)	Default	GLAID/F0911
	The billing transaction is for burden.	GMAID (Short Account ID) for the burden account/F0901
WDAID5 (Account ID)	CSMS and Contract Billing. G6ACCO (Account Override Flag) field in the F5202 record is blank.	G6MCU, G6OBJ, and G6SUB (Business Unit, Object, and Subsidiary)/F5202
WDAID6 (Account ID)	This field is currently not active.	
WDAN8 (Address Number)	Default.	GLAN8/F0911
	GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.	YTAN8/F0618 or F06116

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDAN80 (Customer/Receivable Address Number)	Default	MCAN80 for the related business unit/F0006
	GLMCU (Business Unit) field in the F0911 record.	
	GLSBL (Subledger) field in the F0911 record is not blank. GLSBLT (Subledger Type) field in the F0911 record contains W. WZCNBS (Customer Number Basis) field in the F48091 record contains 1.	WAAN8 (Address Number) for the related subledger/F4801
	Contract Billing	G4AN80/F5201
WDAREX (Exempt from Bill when Paid)	Contract Billing	WDAREX/F4812
WDBCI (Billing Control ID)		Automatically assigned with the Next Numbers facility (system 48. index 02)
WDBDPN (Burden Pending)		Automatically assigned
WDBLKK (Block of Composition Key)	Not Used	
WDBRT (Revenue Rate)	WQGTYP (Generation Type) field in the F48096 record contains 2.	WQBRT (Billing Rate)/F48096
WDBRTI (Invoice Rate)	WQGTYP field in the F48096 record contains 1.	WQBRT/F48096
WDBTOL (Total Billed Amount)		Automatically calculated
WDCAP (Cap or Override Rate)	WQGTYP (Generation Type) field in the F48096 record contains 2.	WQCAP/F48096
WDCAP1 (Cap or Override Rate)	WQGTYP (Generation Type) field in the F48096 record contains 1.	WQCAP/F48096
WDCBLC (Coding Block Change)		Automatically assigned
WDCCOD (Component Code)		AFCCOD/F4860
WDCCR (Component Cost Rate Table)	WQCCR field in the F48096 record is not blank.	WQCCR/F48096

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDCIDS (Foreign Invoice Discount)		Calculated
WDCINR (Component Invoice Rate Table)	WQCINR field in the F48096 record is not blank.	WQCINR/F48096
WDCITA (Foreign Invoice Taxable Amount)		Calculated
WDCITL (Foreign Invoice Amount)		Calculated
WDCITX (Foreign Invoice Tax)		Calculated
WDCLNK (Component Link)		Automatically assigned
WDCO (Company)		GLCO/F0911
WDCOCH (Contract Change Order Number)	Contract Billing	G6COCH/F5202
WDCRCD (Currency Code)	GLCO (Company) field in the F0911 record.	CCCRCO related to the company/F0010
WDCRCE (Currency Code)	The field is currently not active.	
WDCRCF (Currency Code)		Bill Currency CRDC/F0301 CRCF/F5202
WDCRR (Exchange Rate)		Automatically assigned
WDCRRD (Exchange Rate - Divisor)		Automatically assigned
WDCRRM (Mode F)		Automatically assigned/ CRRM/F5202
WDCRVR (Component Revenue Rate)	WQGTYP (Generation Type) field in the F48096 record contains 2.	WQCRVR/F48096
WDCTRY (Century)		GLCTRY/F0911
WDDAGO (Age Override Date - B)		WDDAGO
WDDC (Description Compr)	YTAN8 (Address Number) field in either the F0618 or F06116 record.	ABDC/F0101
WDDCP (Discount Percent)	WDAN80 (Customer/Receivable Address Number) field in the F4812 record. ABATR (Receivable Y/N) field in the F0101 contains Y.	PMDCP/F0014
WDDCT (Document Type)		GLDCT/F0911

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDDCT1 (Document Type)	Contract Billing	Processing option for the Invoice Generation program (R52121)
	Service Billing	Processing option for the Invoice Generation program (R48121)
WDDCTO (Order Type)	Contract Billing	G6DCTO/F5202
WDDEJ (Date Entered)		Automatically assigned
WDDGJ (G/L Date)	Contract Billing	Processing option for the Invoice Generation program (R52121)
	Service Billing	Processing option for the Invoice Generation program (R48121)
WDDGL (G/L Date)		GLDGJ (G/L Date)/F0911
WDDI (Invoice Date)	GLICUT (Batch Type) field in the F0911 record contains V or W.	RPDGJ (G/L Date)/F0411
WDDOC (Document Number)		GLDOC/F0911
WDDOCM (Payment /Item Number)	This field is currently not active.	
WDDOCO (Order Number)	Contract Billing	G6DOCO/F5202
WDDOCZ (Order Number)		Automatically assigned with the Next Numbers facility (system 03. index 01)
WDDSVJ (Service/Tax Date)	Default.	GLDSVJ/F0911
	GLICUT (Batch Type) field in the F0911 record contains V or O.	
	GLD0C, GLDCT, and GLKCO (Document Number, Type, and Company) fields in the F0911 record.	
	GLICUT field contains V.	RPDSVJ/F0411
	GLDSVJ and RPDSVJ fields are blank.	ILTRDJ (Order Date)/F4111
	The F4111LC file exists.	
WDDWNL (Download Flag)		Automatically assigned.

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDEBAS (Date - Effectivity Basis)	WZEBAS field in the F48091 record contains 1.	GLDGL (G/L Date)/F0911
	WZEBAS field contains 2.	GLDSVJ (Service/Tax Date)/F0911
WDELGC (Eligibility Code)	Default. GLMCU, GLOBJ and GLSUB (Business Unit, Object Account, and Subsidiary) fields in the F0911 record.	GMBILL (Billable - Y/N)/F0901
	Burden. J#MCU, J#OBJ, and J#SUB (Business Unit, Object Account, and Subsidiary) fields in the F0624 record.	GMBILL/F0901
	WZPRRR (Journal Generation Control) field in the F48091 record contains 3 or 4. GMBILL field in the F0901 record contains 1, 2, 3, or 4.	GMBILL/F0901
	WZPRRR field contains 3 or 4.	GMBILL/F0901
	WZPRRR field in the F48091 record does not contain 3 or 4.	WZPRRR/F48091
WDEQCG (Equipment Worked)	GLDCT (Document Type) field in the F0911 record contains TE.	GLASID (Serial Number)/F0911
	GLDCT field contains T5.	YTEQCG/F0618 or F06116
	GLDCT field does not contain TE, T2, T4, or T5.	Blank
WDEQWO (Equipment Worked On)	GLDCT field contains TE.	Blank
	GLDCT field contains T5.	YTEQWO/F0618 or F06116
	GLDCT field does not contain Te, T2, T4, or T5.	GLASID (Serial Number)/F0911
WDERC (Equipment Rate Code)	GLDCT field contains TE.	GLALTY (ID Type)/F0911
	GLDCT field contains T5.	YTERC/F0618 or F06116
	GLDCT field does not contain TE, T2, T4, or T5.	Blank

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDEXA (Explanation - Name A)	Default.	GLEXA/F0911
	GLDCT field contains T2, T4, or T5. YTAN8 (Address Number) field in either the F0618 or F06116 record.	ABALPH (Alpha Name)/F0101
WDEXR (Explanation - Remark)	WQEXR field in the F48096 record is blank. GLDCT field does not contain T2, T4, or T5.	GLEXR/F0911
	WQEXR field in the F48096 record is blank. GLDCT field contains T2, T4, or T5.	YTEXR/F0618 or F06116
	WQEXR field in the F48096 record is not blank.	WQEXR/F48096
	Burden. Of the following conditions, the one that the system finds first determines the source: A) J#FRTY (Fringe Type) field in the F0624 record contains FB. B) J#PTAX (Tax Type) field in the F0624 record is not blank. C) J#PDBA (PDBA Code) field in the F0624 record is greater than zero. YCDL01 field in the F069116 record is not blank. YCDL01 field in the F069116 record is blank.	DRDL01 (Description) related to the fringe type /F0005 DRDL01 related to the tax type/F0005 YCDL01/F069116 YCEXA (Explanation - Name A)/F069116
WDEXR1 (Tax Explanation Code)	Contract Billing	G6EXR1/F5202 or processing option
	Service Billing	WOEXR1/F48127
WDFRTN (Foreign Retainable)		Calculated
WDFTOL (Foreign Total Billed)		Calculated
WDFY (Fiscal Year)		GLFY/F0911
WDGLC (G/L Offset)		F48127/F5202

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDHLD (Hold Code)		User Assigned
WDHMCU (Home Business Unit)	Default	GLHMCU/F0911
	GLHMCU is blank. GLDCT (Document Type) field in the F0911 record does not contain T2, T4, or T5. GLMCU field is blank. GLASID (Serial Number) field in the F0911 record.	FAMCU (Business Unit) related to the serial number/F1201
	GLHMCU is blank. GLICUT (Batch Type) field in the F0911 record contains N. GLDOC, GLDCT, GLKCO, and GLDGL (Document Number Type, Company, and G/L Date) fields in the F0911 record.	ILMCU/F4111
	GLHMCU is blank. GLICUT field contains either V or W. GLDOC, GLDCT, and GLKCO fields.	RPMCU/F0411
	GLHMCU is blank. GLICUT field contains 0. GLPO, GLPDCT, GLKCO, GLPSFX, and GLLNID (P.O. Number, Document Type, Company, Suffix, and Line Number) fields in the F0911 record.	PDMCU/F4311
	GLHMCU is blank. GLICUT field contains G. GLMCU in the F0911 record.	MCMCUS (Project Number)/F0006
	GLDCT contains T2, T4, or T5.	YTHMCU/F0618 or F06116

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDICU (Batch Number)		Automatically assigned with the Next Numbers facility (system 00. index 01)
WDICUA (Active Batch Number)		Automatically assigned with the Next Numbers facility (system 00. index 01)
WDICUJ (Revenue Batch Number)		Automatically assigned with the Next Numbers facility (system 00. index 01)
WDIDSC (Invoice Discount Ama)		Automatically assigned.
WDIJST (Invoice Journal Status)		Automatically assigned.
WDITAM (Invoice Tax)		Automatically assigned.
WDITOL (Total Invoiced Amount)		Automatically assigned.
WDITXA (Invoice Taxable Amount)		Automatically assigned.
WDIVD (Invoice Date)		Automatically assigned.
WDJBCD (Job Type)	GLDCT (Document Type) field in the F0911 record does not contain T2, T4, or T5.	GLJBCD/F0911
	GLDCT field contains T2, T4, or T5.	YTJBCD/F0618 or F06116
WDJBST (Job Step)	GLDCT field does not contain T2, T4, or T5.	GLJBST/F0911
	GLDCT field does not contain T2, T4, or T5.	YTJBST/F0618 or F06116
WDJELN (Journal Entry Line Number)		GLJELN/F0911
WDJMCU (Host Business Unit)	Default	MCMCUS (Project Number)/F0006
	Contract Billing.	
	GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.	
	G4JMCU field in the F5201 record for the contract is not blank.	G4JMCU/F5201
	A contract does not exist.	MCMCUS/F0006
WDJOBN (Workstation ID)		Job name from the program status data structure.

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDJRSP (Journal Status Code)		Automatically assigned
WDJRST (Journal Status Code)		Automatically assigned
WDJTAX (Journaled Tax)	WDEXR1 (Tax Explanation Code) field in the F4812 record contains C, E, or V.	Automatically assigned
	WDEXR1 field does not contain C, E, or V.	Automatically assigned
WDJTXF (Journaled Tax)	Not currently available.	
WDKCO (Document Company)		GLKCO/F0911
WDKCOI (Document Company)	Contract Billing	G6KCOO/F5202
	Service Billing	Document of Invoice GLCO/F0911
WDKCOO (Order Number Document Company)	Contract Billing	G6KCOO/F5202
	Service Billing	GLCO/F0911
WDLNID (Line Number)	Contract Billing	G6LNID/F5202
WDLSPM (Payment Completed)	Revenue has been rec.	Automatically assigned
WDLSSQ (Last Sequence)	Invoices have been performed.	Automatically assigned
WDLT (Ledger Type)		GLLT/F0911/"AA" (Non-T&M - CB)
WDMCU (Business Unit)	Default.	GLMCU/F0911
	Burden	J#MCU/F0624
WDOBJ (Object Account)	Default	GLOBJ/F0911
	Burden	J#OBJ/F0624
WDODCT (Original Document Type)		GLODCT/F0911
WDODOC (Original Document Number)		GLODOC/F0911
WDOGNO (Original Line Number)		GLLNID (Line Number)/F0911
WDOKCO (Original Order Document)		GLOKCO/F0911
WDOPIIM (Contract Billing Line)	Contract Billing	G6OPIM/F5202

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDOPSQ (Operations Sequence)		GLOPSQ/F0911
WDOSEFX (Original Pay Item)		GLOSEFX/F0911
WDPCFG (Burden Flag)	Default	Blank
	Burden record exists in F0624 table.	Automatically assigned 1
WDPCIM (Percentage)	Generation type is 1.	WQPERT (Percentage)/F48096
WDPCKO (Document Company)		GLPKCO (Purchase Order Document Company)/F0911
WDPCTN (Parent Contract Number)		G4PCTN/F5201
WDPCTT (Parent Contract Type)		G4PCTT/F5201
WDPDBA (PDBA Code)	Default	Blank
	GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.	YTPDBA/F0618 or F06116
	Burden	J#PDBA/F0624
WDPDCT (Purchase Order Document)		GLPDCT/F0911
WDPERT (Percentage)	Generation type is 2.	WQPERT (Percentage)/F48096
WDPID (Program ID)		Program name
WDPKCO (Purchase Order Document Company)		GLPKCO/F0911
WDPSMO (Payment Sequence Number)	This field is currently not active.	
WDPN (G/L Period Number)		GLPN/F0911
WDPO (P.O. Number)		GLPO/F0911
WDPRET (Percent Retainage)	Service Billing	F48127
WDPRIC (Unit Price)		Automatically calculated
WDPRSQ (Parent Sequence Number)		Automatically assigned
WDPRTF (Printed Flag)		Automatically assigned
WDPRTTR (Transaction Number)	GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.	YTPRTR/F0618 or F06116
WDPSFX (Purchase Order Suffix)		GLPSFX/F0911

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDPTAX (Tax Type)	Default.	Blank
	Burden.	J#PTAX/F0624
WDPTFG (Pass-Through Invoicing)	This field is currently not active.	
WDRDJ (Release Date)		WDRDJ
WDRGLC (Retention G/L Offset)		F48127
WDRP11 (Category Code 011)	WDMCU (Business Unit) field in the F4812 record.	MCRP11/F0006
WDRP12 (Category Code 012)	WDHMCU (Home Business Unit) field in the F4812 record.	MCRP12/F0006
WDRTNG (Retainage)		Automatically calculated
WDRTPS (Retainage Prior)		Automatically calculated
WDR001 (Bill Item Code)	Default	GMR001 for the account number in the source transaction/F0901
	Burden	GMR001 for the burden account number/F0901
WDR002 (Category Code 002)	Default	GMR002 for the account number in the source transaction/F0901
	Burden	GMR002 for the burden account number/F0901
WDR003 (Location)	Default	GMR003 for the account number in the source transaction/F0901
	Burden	GMR003 for the burden account number/F0901
WDSBAR (Reason Code)		WDSBAR
WDSBL (Subledger)		GLSBL/F0911
		G6SBL/F5202
WDSBLT (Subledger Type)		GLSBLT/F0911
		G6SBLT/F5202
WDSBL5 (Subledger)		G6SBL/F5202
WDSBL6 (Subledger)	Not currently available.	
WDSBSK (Summarization Key)		Automatically assigned
WDSBSQ (Sequence Number)		Automatically assigned

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDSBT5 (Subledger Type)		G6SBLT/F5202
WDSBT6 (Subledger Type)	Not currently available.	
WDSCSQ (Secondary Sequence Number)		Automatically assigned
WDSFX (Pay Item)		Automatically assigned
WDSLNK (Split Link)		Automatically assigned
WDSUB (Subsidiary)	Default	GLSUB/F0911
	Burden	J#SUB/F0624
WDTBDT (Table Basis Date)	WZEBAS (Date - Effectivity Basis) field in the F48091 record contains 1.	GLDGL (G/L Date)/F0911
	WZEBAS field contains 2.	GLDSVJ (Service/Tax Date)/F0911
WDTCLS (Classification)	Components (provisional burdens)	Value is 0.
	GLDCT (Document Type) field in the F0911 record contains either T2 or T4.	Value is 1.
	Burden	Value is 2.
	GLDCT field contains TE.	Value is 3.
	GLDCT field does not contain T2, T4, or T5.	
	A) Related records exist in both F0911 and F1202 tables. Both records have the same serial number (GLASID and FAASID, respectively).	Value is 3.
	B) GLICUT (Batch Type) field in the F0911 record contains N.	Value is 4.
	GLD0C, GLDCT, GLKCO, and GLDGL (Document Number, Type, Company, and G/L Date) fields in the F0911 record.	Value is 5.
	C) GLICUT field contains either V or W. GLD0C, GLDCT, and GLKCO fields in the F0911 record.	Value is 6.
	D) GLICUT field contains G. A related record exists in F0006 table.	

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDTCLS (Classification) <i>cont'd</i>	None of the previous conditions are satisfied, and the GLPO (P.O. Number) field in the F0911 record is not blank.	Value is 5.
WDTOG (Taxable or Gross)	Contract Billing F4812 record contains tax rate/area and explanation codes	Value is 1.
	Service Billing F48127 record contains tax rate/area and explanation codes.	Value is 1.
	Neither of the previous conditions exist.	Blank
WDTX (Purchasing Taxable-)	Contract Billing F4812 record contains tax rate/area and explanation codes.	Value is Y.
	Service Billing F48127 record contains tax rate/area and explanation codes.	Value is Y.
	Neither of the previous conditions exist.	Value is N.
WDTXA1 (Tax Rate/Areas)	Contract Billing	G6TXA1/F5202 or P.O.)
	Service Billing	WOTXA1/F48127
WDTYKY (Key Type)	This field is currently not active.	
WDU (Units)	Default	GLU/F0911
	GLDCT (Document Type) field in the F0911 record contains either T2 or T4.	YTPHRW (Hours Worked)/F0618 or F06116
	GLDCT field contains T5.	YTEQHR (Equipment Hours)/F0618 or F06116
WDUM (Unit of Measure)	Default.	GLUM/F0911
	GLDCT field contains T2, T4, or T5.	Automatically assigned HR
WDUPMJ (Date Updated)		Automatically assigned
WDUPMT (Time Last Updated)		Automatically assigned

F4812 Data Item	Conditions and Retrieval Information	Data Item/Source Table
WDUSER (User ID)		Automatically assigned
WDINV (Invoice Number)		GLVINV/F0911
WDVOID (Void - V)		Automatically assigned
WDWR01 (Phase)		GLWR01/F0911
WDWR07 (Service Type)	GLSBL (Subledger) field in the F0911 record is blank.	WAWR07/F4801
	GLSBLT (Subledger type) field contains W.	
VGCSF (Ship From Geocode)		Geocode of MCU(Blank)
		Geocode of AN8 of MCU(Blank)
		Geocode of Address Book Number of Company of MCU(Blank)
VGCOA (Order Acceptance Geocode)		Value of VGCSF
VVTY (Vertex Transaction Type)	Tax Derivation Table	VVTY/F48127
	Contract Billing Line Revisions	VVTY/F5202
VVTC (Vertex Product Category)	Tax Derivation Table	VVTC/F48127
	Contract Billing Line Revisions	VVTC/F5202

Appendix F: World Coexistence

This document provides guidelines for preparing your World environment for coexistence with OneWorld. World coexistence includes the following topics:

- ☐ World Coexistence Preparation
- ☐ After the OneWorld Install

Assumptions:

- This document assumes the user is familiar with the J.D. Edwards World upgrade process and has a PTF Install Workbook.
- CLTCOM is a generic term used to refer to the user library that contains the common files. Your common library may be named differently.
- The term CLTDTA refers to the library that contains the production data files. Your production library may be named differently.

World Coexistence Preparation

- Run Post Install Jobs For World Updates: The pre-requisite for installing A73PC000X2 coexistence is A7PC00009 or greater. All Post Install jobs for the World updates must be applied. This includes: working with merge reports, performing ASIs, creating new files and executing Special Application Jobs. Refer to your PTF Install workbook for additional information regarding Post Install jobs.
- Move the Generic Text Files To The Production Data Library: The following files must exist in the same library for coexistence to work properly. The Control Files usually reside in the CLTCOM library. If the Control files listed reside in the CLTCOM library, they should be moved to the CLTDTA library.



1. Move the files to the CLTDTA library after installing A73PC000X2 and before beginning the Coexistence Special Jobs on the G97UX2 menu.
2. The Production Files listed below should exist only in the CLTDTA library. Use the WRKOBJ *ALL/file name command to find which libraries contain

the files listed below. In particular, the F01132 may exist in the CLTCOM library as well as the CLTDTA library. Be sure to remove it from the CLTCOM library if it exists there.

3. Use the MOVOBJ command to move any of the listed Control Files or Production Files from the CLTCOM library to the CLTDTA library as necessary.

Control Files:

- F0016
- F00163
- F00164LA
- F00161
- F00163LA
- F00165
- F00162
- F00164

Production Files:

- F01131
- F4301
- F4802
- F01132
- F4311LA
- F4802H
- F4201
- F4314
- F4211LA
- F4314H

Note: It is not necessary to move the F0016D. The F0016D is replaced by the F00165.



Run Post Install Jobs for OneWorld Updates

1. Verify what libraries the Generic Text files are in using the WRKOBJ command. The files are: F0016, F00161, F00162, F00163, F00163LA, F00164, F00164LA and F00165. If they are in the CLTCOM and CLTDTA libraries, delete them from the CLTCOM library.

2. Verify that the F01132 exists in the CLTDTA library only. If it exists in the CLTCOM library, it should be deleted from there.
3. Establish how the following files in the CLTDTA library are formatted.

Generic Text Files:

- F0016
- F00163
- F00164LA
- F00161
- F00163LA
- F00165
- F00162
- F00164

Production Files:

- F01131
- F4301
- F4802
- F01132
- F4311LA
- F4802H
- F4201
- F4314
- F4211LA
- F4314H

In order for coexistence to work, these files must be in the CLTDTA library in the World format, with triggers attached. The OneWorld install may also replace or create these files in the CLTDTA library with a OneWorld format.

To verify a file format use the DSPFD command. If the file is formatted to OneWorld, the top of the file description will contain an SQL File Type of TABLE.

If there is no SQL file type on the first screen of the file description, go to the bottom of the file description and verify that a format exists for the file and that the format starts with an "I". For example, the file description of F9801 would have a format of I9801 in the World format. If the file has an "I" format, and does not have an SQL File Type, it is formatted to World.

4. If a OneWorld format has replaced a World formatted file in the CLTDTA library, rename the OneWorld file, and use the CRTDUPOBJ command to copy the file from JDFTDATA .
5. To verify that the Generic Text files have triggers, use the DSPFD command and roll down 4 times to the trigger information. If no trigger information exists in the file description, the triggers have not been set. If no triggers exist, return to the G97UX2 menu and run the options again.

Appendix G: Table Conversion

This appendix pertains to the existing World Contract Billing clients who are migrating from World A7.3 to OneWorld B73.3.3 and are planning to use their existing World data in OneWorld. Several table conversions have been created to streamline this migration process. These table conversions are located on the menu, Conversion from World to OneWorld (G48S32). Note that these table conversions are post install and should only be executed after OneWorld has been successfully installed. Below are the table conversions created and the tables they will copy from World Software A7.3 to One World B73.3.3. Following that are the instructions for using these table conversions.

Program Name	Table Copied
Convert F4805 from World to OneWorld	F4805
Convert F48051 from World to OneWorld	F48051
Convert F48091 from World to OneWorld	F48091
Convert F48096 from World to OneWorld	F48096
Convert F4812 from World to OneWorld	F4812
Convert F48127 from World to OneWorld	F48127
Convert F48128 from World to OneWorld	F48128
Convert F4812H from World to OneWorld	F4812H
Convert F4822 from World to OneWorld	F4822
Convert F48221 from World to OneWorld	F48221
Convert F4848 from World to OneWorld	F4848
Convert F48520 from World to OneWorld	F48520
Convert F4860 from World to OneWorld	F4860
Convert F4861 from World to OneWorld	F4861
Convert F4862 from World to OneWorld	F4862

Instructions for Using Table Conversion

Process Description:

These conversion programs copies all the records from World (AS/400 database) to OneWorld.

Dependencies:

None

Execution Steps:

- OneWorld has been successfully installed
- Before running this Table Conversion, it is important that you create an input environment for foreign or non-OneWorld tables. The input environment you create should point to the AS/400 database library that will be used as a source for conversion. Also, you have to make these foreign/non-OneWorld tables known to OneWorld by creating an OCM. The following steps are required before starting this table conversion. Please refer to *Preparing Non-OneWorld Tables for Table Conversion* in *Table Conversion Guide* for the ODBC, Data Source, Environment and OCM set up.
 - Create an ODBC data source for foreign/non-OneWorld tables
 - Set up a database Data Source
 - Set up an environment
 - Create an OCM that points to the ODBC data source

Note: Input environment is required therefore select the input environment correctly. If you do not select Input environment, table conversion will run but will not do anything. If you select incorrect input environment, environment that is not pointing to correct world library, then you may get unpredictable results.

Run the available version (XJDE0001) attached to R894805 after the environment and other setup.

Error Listings:

Database Errors, if any, will be written to JDE log file

Verification Procedures

Data correctly copied from World A7.3. To OneWorld B73.3.3.

Appendix H: Accounting for the Billing Cycle

Accounting for the billing cycle is controlled by the Billing AAI rules. The system uses the rules to:

- Identify and process workfile transactions
- Direct the amount of the resulting journal entries to specific accounts

You can define one type of Billing AAI rules:

- Base rules — Indicate which accounts you want the system to use when creating journal entries for the billing and revenue recognition processes. The system uses the base rule to create journals for the total of the base and component amounts.

The Journal Generation Control field in the system constants for Contract Billing controls the types of Billing AAI rules that you define for the following processes:

- Billing (Invoicing) only — Revenue reconciliation is not applicable.
 - Without reconciliation of the unbilled receivable account to the billed revenue and receivable accounts. The unbilled receivable account does not equal zero. Unbilled receivable variances *are* allowed.
 - With reconciliation of the unbilled revenue and unbilled receivable amounts to the billed revenue and receivable amounts. The unbilled revenue and receivable amounts must equal zero after you generate the invoice. Unbilled variances are not allowed.

Base Rules

There are three types of Billing AAI Tables that the system can use to create revenue recognition and invoice journal entries. The type of journal processing that you select in the system constants controls whether the system is restricted from using a specific table type. Each applicable type must contain a base rule that defines how the system creates journal entries.

The following table shows the relationship between the Journal Generation Control field in the system constants and the Table Type field for the Billing AAI rules.

If you are processing	Set Journal Generation Control in system constants as:	Create Information for Billing AAI Table Types	Restricted Billing AAI Table Types
Invoices only	1	3	1 and 2
Revenue Recognition only	2	1 and 3	2
Invoices and Revenue Recognition <i>without</i> Revenue Reconciliation	3	1 and 3	2
Invoices and Revenue Recognition <i>with</i> Revenue Reconciliation	4	1, 2, and 3	N/A

Note: The system uses the RC automatic accounting instruction (AAI) for accounts receivable and retainage when you generate invoices. The RC AAI does not apply if you are processing revenue recognition *only*.

The following table shows how the system uses the base rules to create the accounting journal entries. The amount basis results from either the invoicing or revenue recognition process.

Journal Generation Control	Table Types	Amount Basis	“+” Indicates	System Created Entries
1 Invoices	3	Invoice	Credit entry	Actual Revenue
	RC AAI	Invoice	Debit entry	Accounts Receivable
2 Revenue Recognition	1	Revenue Recognition	Credit Entry	Actual Revenue
	3	Revenue Recognition	Debit Entry	Unbilled Accounts Receivable
Journal Generation Control	Table Types	Amount Basis	“+” Indicates	System Created Entries
3 Revenue Recognition without Reconciliation	1	Revenue Recognition	Credit Entry	Actual Revenue

	3	Revenue Recognition	Debit Entry	Unbilled Accounts Receivable
	3	Invoice	Credit Entry	Unbilled Accounts Receivable
	RC AAI	Invoice	Debit Entry	Accounts Receivable
4 Revenue Recognition with Reconciliation	1	Revenue Recognition	Credit Entry	Unbilled Revenue
	3	Revenue Recognition	Debit Entry	Unbilled Accounts Receivable
	1	Revenue Recognition	Debit Entry	Unbilled Revenue
	3	Revenue Recognition	Credit Entry	Unbilled Accounts Receivable
	2	Invoice	Credit Entry	Actual Revenue
	3	Invoice	Debit Entry	Unbilled Accounts Receivable
	3	Invoice	Credit Entry	Unbilled Accounts Receivable
	RC AAI	Invoice	Debit Entry	Accounts Receivable

Invoicing Only

When you process invoicing only:

- The journal generation control is 1.
- Revenue recognition does not apply.
- The system calculates the same amount for actual revenue and accounts receivable.
- The system calculates the amounts for revenue and accounts receivable simultaneously.
- The RC AAI designates the accounts for accounts receivable and retainage.

For example, if the cost for a workfile transaction is 100.00 and the markup is 15 percent, the amounts for the invoice and accounts receivable are 115.00. The system creates the following journal entry:

Accounts receivable	115.00	
Actual revenue		(115.00)

The “T” account posting in the general ledger is:

Accounts Receivable		Actual Revenue	
Debit	Credit	Debit	Credit
115			115

The RC AAI directs the system to the accounts receivable and retainage account information. Billing AAI Table Type 3 directs the system to the base rules for the actual revenue account.

Invoicing Only

A company creates an invoice for 1,200.00. The original cost per unit is 10.00 for 100 units. The cost of each unit is recorded in the Work in Process account. After the units are invoiced, the cost is moved from the Work in Process account to the Cost of Goods Sold account. Each unit is sold for 12.00.

The journal entries are:

06/30/98	Work in Process	1,000.00	
	Accounts Payable		(1,000.00)
07/31/98	Accounts Receivable	1,200.00	
	Sales Revenue		(1,200.00)
07/31/98	Cost of Goods Sold	1,000.00	
	Work in Process		(1,000.00)

The Billing AAI Table rules for Table Type 3 - Actual Revenue first direct the 1,200.00 invoice amount to the Sales Revenue account. The system uses the AAIs to create the Accounts Receivable portion of the journal entry. Then, the Work in Process account is reduced and the Cost of Goods Sold is increased by the cost amount.

The account postings and balances for June in the general ledger are:

WORK IN PROCESS			
Date	Debit	Credit	Balance
06/30/98	1,000.00		1,000.00

ACCOUNTS PAYABLE			
Date	Debit	Credit	Balance
06/30/98		1,000.00	(1,000.00)

The account postings and balances for July in the general ledger are:

ACCOUNTS RECEIVABLE			
Date	Debit	Credit	Balance
07/31/98	1,200.00		1,200.00

SALES REVENUE			
Date	Debit	Credit	Balance
07/31/98		1,200.00	(1,200.00)

WORK IN PROCESS			
Date	Debit	Credit	Balance
06/30/98	1,000.00		1,000.00
07/31/98		1,000.00	0

COST OF GOODS SOLD			
Date	Debit	Credit	Balance
07/31/98	1,000.00		1,000.00

Note: In the example, the Journal Generation system constant is set to 1 because the company is creating invoices only without revenue recognition. Billing AAI Table Type 3 is the only table needed to create the revenue and reallocation journal entries.

Billing AAI Table Rules

You set up the Billing AAI Table rules for invoicing only as follows:

Billing AAI TABLE TYPE 3			
Purpose	Account Basis	Tax Basis	+/-

Define base rule for revenue amount from the invoice	B (Base)	B (Base)	+ creates a credit to the Revenue account
Remove cost from the Work in Process account	C (Cost)		+ creates a credit to the Work in Process account
Reallocate cost to Cost of Goods Sold account	C (Cost)		- creates a debit to Cost of Goods Sold account

Note: The RC AAI directs the system to the account information associated with the debit to Accounts Receivable.

Caution: To determine the correct +/- entry, you must analyze the type of account and the normal type of balance within the account. For example, the Work in Process account is usually a balance sheet account with a debit (+) balance. If you use a + on Table Type 3 when the Journal Generation is set to only create invoices, the system automatically creates a credit (-) entry to the resulting account.

Index

A

AAIs. *See* Automatic accounting instructions
About, contract billing, 1-1
Accounting
 payroll, 1-3
 time, 1-3
Accounts Payable system, 1-6
Accounts Receivable system, 1-6
Adding component rules to markup rules, 6-57
Address Book Revisions (P01012)
 manually assigning GeoCodes to a customer, A-27
 manually assigning GeoCodes to suppliers, A-26
Address Book system, 1-6
Assigning component information, 6-57
Assigning GeoCodes to address book records, A-21
 global updates, A-23
 manual updates, A-24
 business units, A-25
 customer, A-27
 suppliers, A-26
Automatic accounting instructions, 6-2
 setting up, 6-59
Automatically printing invoices, 4-52

B

Billing
 creating invoices manually, 4-31
 moving a transaction out of history, 3-56
 reviewing transaction revisions, 3-55
 revising the workfile, 3-31
 working with Workfile History, 3-55
Billing AAIs, 6-2
Billing Rate/Markup Table, processing options, 6-27

C

Calculation, markup, 6-17
Component
 See also Component rules
 adding component rules to markup rules, 6-57
 compound, 6-53
Component Cross Reference form (P4862W), 6-56
Component rules, 6-2
 adding to markup rules, 6-57
Compound markup, 6-17
Connection to Quantum, testing, A-12
Constants, system, setting up, 6-3
Constants (P7306), A-10, A-14
Contract Billing Line Details, processing options, 2-68
Contract Billing system, features, 1-6
Contract information
 See also Master information
 lump sum, 2-18
Creating taxes for related addresses, A-29
Cross reference table, working with, 6-67

D

Defining tax information for items, A-19
Detail History, processing options, 3-57

E

Effective Address Update (R01840), A-23
Enter Purchase Orders (P4310), A-43
Equipment/Plant Management system, 1-5

F

Features, system setup, 6-2
Features of Contract Billing system, 1-6

Files. *See* Tables

Forms

- Billing Rate Markup Revisions, 6–19
- Billing Rate Markup Table, 6–19
- Component Cross Reference, 6–56
- Contract Master Revisions, 2–10
- Inquire Workfile History, 3–56
- Owner Pay Item Status, 2–65
- Service Billing Constants, 6–4
- Service Billing Invoice Generation, 4–52
- Work With Billing Detail History, 3–57
- Work with Component Tables, 6–54
- Work With Service Billing Batches, 4–53

G

Generating invoices automatically, 4–13

I

Integration, 1–2

See also System integration

Invoice

- assigning numbers, 4–13
- creating automatically, 4–13
- creating manually, billing, 4–31
- running Invoice Generation, 4–13
- Invoice batch, locating to print, 4–54
- Invoice batches, working with, 4–19
- Invoice format revisions, overview, 6–73
- Invoice formats, revising, 6–73
- Invoice Print Selection (R48504), processing options, 4–56
- Invoice print version, assigning override, 4–53

Invoices

- generating automatically, 4–13
 - printing, 4–51
- Item Branch/Plant (P41026), A–20

J

Job Cost system, 1–5

Journal entry. *See* A/R entry; G/L entry

L

- Logging, Quantum Sales and Use Tax, A–14
- Lump sum, 2–18
 - defining recurring amounts, 2–26
 - working with, 2–18

M

- Major key, 6–14
 - generation types, 6–15
 - key type, 6–14
- Markup rules, 6–2
 - calculations, 6–17
 - defining, 6–11
 - major key, 6–14
 - minor key, 6–16
- Master information
 - See also* Contract information
 - Contract Master Revisions form (P5201), 2–10
- Minor key, 6–16
- Moving a transaction out of history, 3–56

N

- Non-Stock Product Categories (P7307), A–17

O

- Overriding GeoCodes on a contract, A–44
- Overriding GeoCodes on a purchase order, A–43
- Overriding GeoCodes on a sales order, A–41
- Overriding GeoCodes on a service order, A–45
- Overriding GeoCodes on a voucher, A–40
- Overriding GeoCodes on an invoice, A–39
- Overview
 - contract billing, 1–1
 - system integration, 1–2
 - tables, 1–13

Owner pay item
 adding a blank detail line, 2-66
 changing a base contract, 2-66
 verifying schedule of values, 2-66
Owner Pay Item Status form (P52200), 2-65

P

Payroll accounting, 1-3
Posting tax information, A-58
Printing, invoices, 4-51
Printing invoices
 automatic method, defined, 4-51
 manual method, defined, 4-51
 manually, 4-52
Printing invoices automatically, 4-52
Printing tax information, A-57
Processing options
 Billing Rate/Markup Table, 6-27
 Contract Billing Line Details, 2-68
 Detail History, 3-57
 Invoice Print Selection (R48504), 4-56
Processing tax information, A-57
 posting, A-58
 printing, A-57
Programs and IDs
 P0006 (Revise Single Business Unit), A-25
 P01012 (Address Book Revisions)
 manually assigning GeoCodes to a customer, A-27
 manually assigning Geocodes to suppliers, A-26
 P03B2002 (Standard Invoice Entry), A-39
 P0411 (Standard Voucher Entry),
 overriding a GeoCode on a voucher, A-40
 P1720 (Service Contract Detail), A-44
 P41026 (Item Branch/Plant), A-20
 P4210 (Sales Order Detail), A-41
 P4310 (Enter Purchase Orders), A-43
 P48091 (Service Billing Constants),
 Service Billing Constants form, 6-4
 P48096 (Billing Rate Markup Table)
 Billing Rate Markup Revision form, 6-19
 Work With Billing Rate Markup Table form, 6-19

P48121 (Service Billing Invoice Generation), Service Billing Invoice Generation, 4-52
P4812H (Billing Detail History), Work With Billing Detail History form, 3-57
P48201 (Service Order Entry), A-46
P48208 (Inquire Workfile History),
Inquire Workfile History form, 3-56
P48221 (Service Billing Batch Review),
Work With Service Billing Batches form, 4-53
P4862W (Component Cross Reference), 6-56
P5201 (Contract Master Revisions), 2-10
P52200 (Owner Pay Item Status), 2-65
P7306 (Constants), A-10, A-14
P7307 (Non-Stock Product Categories), A-17
R01840 (Effective Address Update), A-23
R730101 (Update Address Book Geocodes), A-23

Q

Quantum
 Sales and Use Tax, A-1
 AAIs, A-15
 activating logging, A-14
 assigning GeoCodes, A-21
 components, A-4
 constants, A-10
 interface considerations, A-6
 interface overview, A-3
 item tax information, A-19
 overriding GeoCodes, A-37
 overview, A-1
 posting tax information, A-57
 setup, A-9
 testing the quantum connection, A-12
 Vertex documentation, A-2

R

Recurring amounts, 2-26
Reports
 Workfile Print, R48405, 3-53
 Workfile Totals, R48TW, 3-54

- Reviewing the workfile, 3–17
- Reviewing transaction revisions, 3–55
- Revise Single Business Unit (P0006), A–25
- Revising the workfile, 3–31
- Rules, 6–2
 - See also* Component rules

S

- Sales Order Detail (P4210), A–41
- Screens. *See* Forms
- Service Billing system, 1–2
- Service Contract Detail (P1720), A–44
- Service Order Entry (P48201), A–46
- Setting up AAIs, 6–59
- Setting up AAIs for Quantum, A–15
- Setting up automatic accounting instructions, 6–59
- Setting up system constants, 6–3
- Setting up the J.D. Edwards/Quantum interface, A–9
 - AAIs, A–15
 - activating Quantum constants, A–10
 - item tax information, A–19
- Setup
 - See also* System setup
 - system, 6–1
- Setup features, 6–2
- Standard Invoice Entry (P03B2002), A–39
- Standard Voucher Entry (P0411), overriding a GeoCode on a voucher, A–40
- System constants, 6–2
 - See also* Constants
 - setting up, 6–3
- System integration, 1–2
 - Account Ledger (F0911), 1–3
 - Account Master (F0901), 1–3
 - Accounts Payable, 1–6
 - Accounts Receivable, 1–6
 - Address Book, 1–6
 - Equipment/Plant Management, 1–5
 - Job Cost, 1–5
 - payroll and time accounting, 1–3
 - Service Billing, 1–2
 - Work Orders, 1–5
- System setup, 6–1
 - automatic accounting instruction, 6–59
 - automatic accounting instructions, 6–2

- features, 6–2
- overview, 6–1
- system constants. *See* Constants
- user defined codes, 6–61

T

- Tables, Contract Billing, 1–13
- Testing the Quantum Connection, A–12
- Transactions. *See* Workfile transaction

U

- UDC. *See* User defined codes
- Update Address Book Geocodes (R730101), A–23
- User defined codes, 6–2
 - setting up, 6–61

V

- Vertex. *See* Quantum

W

- Windows. *See* Forms
- Work Orders system, 1–5
- Work with Component Tables form, 6–54
- Workfile
 - printing totals, 3–54
 - reviewing, 3–17
 - revising, 3–31
- Workfile generation, transaction. *See*
- Workfile transaction
- Workfile history
 - See also* Workfile transaction
 - moving transactions, 3–56
 - reviewing transaction revisions, 3–55
 - working with, 3–55
- Workfile totals, printing, 3–54
- Workfile transaction. *See* Transactions
- Working with lump sum, 2–18
- Working with Quantum taxes, A–37
- Working with workfile history, 3–55