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1 Overview
Overview to Contract Billing

A contract is a written agreement between a customer and a provider (contractor). The customer, who is 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 agreement can be changed so that you can provide extra services.

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, based upon a schedule of values
- Information about the customer that you are billing:
  - Who to bill
  - Payment terms
  - Discount terms
- Billing limits
- Special holdbacks, such as retainage

You can use JD Edwards World Contract Billing system to:

- Account for the costs related to time and material
- Mark up the costs
- Calculate retainage and fees
- Create warnings when the billing amount or units exceed specified limits
- Bill according to the terms of a contract
- Provide written proof that justifies the billing amounts
- Create accounting entries for the contract billing amounts
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

The following graphic illustrates the system integration between Contract Billing and other JD Edwards World systems.
System Integration

• Job Cost
• Accounts Payable
• Accounts Receivable
• Other J.D. Edwards Systems

service Billing
• Payroll
• Equipment/Plant Management
• Time Accounting

Service Billing

The Contract Billing system shares resources with the Service Billing system through the following processes:

- System constant setup
- Billing rules setup
- Workfile generation
- Revenue recognition
- Invoice formatting
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 you can bill a transaction in the Contract Billing system.

**Account Master**

The Billable Y/N (BILL) field in the Account Master controls whether you can process transactions in an account through the Contract Billing system.

**Account Ledger**

The Bill Code (BC) 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 (F4812)

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 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 (F0624)
- Account Ledger (F0911)

The Contract Billing system reads the eligible Payroll transactions and creates corresponding T&M workfile transactions in the 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) and cannot be processed separately from the T2 transactions. 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 the setup of the Contract Billing constants, these burden transactions can be processed in conjunction with the related labor transactions in the 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 estimated burden percentage (flat burden)

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, Employee Transactions Detail, and Account Ledger tables as processed.

**Equipment/Plant Management**

Jobs often involve equipment, such as a crane to move heavy materials on a job site. In this case, an agreement between the contractor and the customer could include a provision to bill an hourly rate for the time that the crane is used for the job.

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

- Equipment item 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 use the billing rental rate

**Work Orders**

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

**Job Cost**

Most costs for a job are not associated with a work order. The Job (Business Unit) Master table (F0006) can be the source of the following default information:

- Customer number
- Contract type
System Integration

- Tax explanation and rate/area

For lump sum and unit price billings, the system can use the projected final amounts and units from a job in the calculation of the revenue and billing amounts. Other information from the Job Master can affect the markup and accounting rules for T&M transactions.

Change Management

With the Change Management system, you can use one source to control change requests for any additional work that a customer requests for a job. In this way, you enter changes only once for a job. Then, you can update:

- Budgets in the Job Cost system
- Billing information for the customer’s contract in the Contract Billing system

For Contract Billing, you can copy the detail from change requests in the Change Management system to billing lines in existing contracts. The change request is then immediately available for you to bill.

Accounts Receivable

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

- Payment terms
- Tax explanation and rate/area

After you generate a billing, you post the invoice information to the A/R Account Ledger table (F0311). When you receive a payment from your customer, you apply them to the customer’s receivable account.

Address Book

The Contract Billing system uses the address book number for the customer 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 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
- Responsible business units
System Features

Services can require specific cost-markup rules and precise audit trails. Many services involve work that requires different combinations of time, burden, equipment usage, materials, and recurring billings.

You can use the features of the Contract Billing system to:
- Identify and mark up costs for T&M transactions
- Assign contract information to Billing Workfile (F4812) transactions
- Generate invoices
- Design printed invoices to customer specifications
- Create accounting entries for costs, revenue, and billings

Workfile Generation

With Workfile Generation, the system accumulates the billable costs for time and materials. During the generation, the system:

- Identifies the accounts eligible for billing
- Updates the records in the Account Ledger (F0911) as billed or non-billable
- Creates workfile transactions in the Billing Workfile (F4812)
- Assigns contract information to the workfile transaction
- Marks up the source transactions
- Calculates the applicable tax amounts
- Calculates revenue for lump sum and unit price billing lines, if applicable

Journal Processing

The system uses journal generation programs to create:

- G/L journal transactions for revenue recognition
- G/L journal transactions for cost allocations, if applicable
- Revenue calculations for fees, if applicable
- A/R and G/L journal transactions for billing
Billing

You use the Contract Billing system to identify and invoice the T&M costs for the services and goods you provide. You can also invoice for non-T&M billing terms, such as lump sum, unit price, and milestone billing lines. The billing process includes:

- Generating invoices
- Reviewing/changing billing amounts on invoices
- Printing the invoices
- Processing the invoices into Accounts Receivable

System Management

The system accumulates Billable cost based upon the Contract Billing system constants and rules you define. System constants control the global processes for the Contract Billing system, such as the processing of costs, customer information, and dates. The system rules define markup and accounting information. You can also design the layouts that the system uses to print customer invoices.
Multi-Currency Environments

You can use the multi-currency functionality in JD Edwards World software to maintain account balances and invoices in domestic and foreign currency amounts.

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. Finally, the system determines foreign and domestic amounts based on exchange rates that you define for specific effective date ranges.

Multi-Currency for Contract Billing

As you build a global customer network, you can use the JD Edwards World Contract Billing system to optimize your revenue recognition and billing processes in multi-currency environments. When you use multi-currency 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 (domestic) 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 system (domestic currency), 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).

See Also

- *Multi-Currency Guide* for more information about the multi-currency functionality of JD Edwards World software
The JD Edwards World Contract Billing system stores and accesses billing information in the following tables:

**Contract Setup**

**Contract Billing Master**  
*(F5201)*

Stores contract information, including:
- Detail contract information by contract number
- Customer/owner information
- Contract description
- Tax information
- Retainage rules
- Project and host business units
- Parent contract number
- Currency mode and codes
- Billed-to-date information

**Owner Pay Item Detail**  
*(F5202)*

Stores the billing terms for the contract. This information includes:
- Detailed owner pay items by contract
- Multiple pricing types
- Schedule of values by pay item
- Quantities
- Recurring amounts and frequencies
- Tax information
- Retainage rules
Account Cross Reference Accounts (F5212)

Stores the cross-reference information for T&M, lump sum, and unit price owner pay items.

For T&M owner pay items, 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 reapplys information during Workfile Re-extend.

For lump sum and unit price owner pay items, the account number and related information associates the costs with the contract owner pay items when the system calculates workfile transactions for revenue and invoice pay item transactions for billing.

The information includes:
- Account number
- Subledger and type
- Job type
- Job step
- Pay type
- Employee number
- Equipment number
- Rate group

Pay Item Mark Up Cross Reference Accounts (F5213)

Stores the information you cross-reference with the contract owner pay items for fees. The information includes:
- Fee rates, which are defined by a percentage or rate code
- Amount basis for the fee calculation
- Specific contract owner pay items that establish the basis of the fee calculation

Rate Code Definition (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

Component Code Reference (F5214)

Stores component codes for component owner pay items.

Component Pay Item Cross Reference (F5215)

Stores information to identify owner pay items that are cross-referenced to component codes.
Milestone / Progress Billing Information (F5216)
Stores information of events or percentages that have been predefined to create invoices.
For these owner pay items, the system uses the completion flag and the percentage related to the event to calculate invoice pay item transactions during Invoice Generation.
The information includes:
Stores information of events or percentages that have been predefined to create invoices.
For these owner pay items, the system uses the completion 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 Information (F52161)
Stores information when cross-referencing a milestone or progress billing owner pay item. Prepayment owner pay items (rated or draw) and progress billing lines can be cross-referenced to another progress billing line.

System Setup

Billing Constants (F48091)
Controls the global processing of:
- Billable costs
- Burden processing
- Effective dates
- Customer information
- Journal processing
- Default markup percentage

Cost Plus Mark Up Information (F48096)
Determines how to mark up the selected transactions. The system uses one or more of the following markup rules:
- Per unit rate
- Percentage of costs
- Fixed amount added to costs
- Any combination of the above
- No markup added to costs
### Account Derivation Table (F48126)
Stores accounting rules that control journal creation for:
- Actual or unbilled revenue
- Costs
- Margins
- Unbilled accounts receivable
- Reallocations

### Component Table Master (F4860)
Stores information used to identify component tables. The Cost Plus Mark Up table uses this information to locate the correct entries to create component workfile transactions.

### Component Table Detail (F4861)
Determines the markups applied to billing transactions to create component workfile transactions. The system uses one or more of the following calculation rules:
- Unit Based
- Amount Based

### Component Cross Reference (F4862)
Stores cross-reference information used in the calculation of compound components.

### Format Cross-Reference (F4858)
Stores information used to print invoices. This table is used to assign invoice formats to specific customers, jobs, or work orders.

### Workfile Management

#### Billing Workfile (F4812)
Stores workfile transactions as an inventory of the billable costs. The workfile transactions correspond to the cost transactions generated in other systems or entered manually within the billing system. This information is the starting point for the billing process.

#### Billing Workfile History (F4812H)
Stores historic information for processed workfile transactions. The information provides a detailed audit trail of the changes related to each individual workfile transaction.

### Transaction Processing

#### Billing Batch Control (F48011)
Stores information about invoice and G/L batches created within the Contract Billing system, including the batch status and the current activity.

#### Invoice Summary Work File (F4822)
Stores the information that the system uses to print invoices and create A/R ledger information.
### Delete Invoices – Contract/Service Billing (F48229)
Provides an audit trail of deleted invoice numbers.

### Invoice Summary Access (F48520)
Stores cumulative invoice information that can be used for reporting purposes, such as displaying billed-to-date information on an invoice. This billed-to-date information is stored in more detail here than in the Invoice Summary. This optional file is controlled by an option in Billing Constants. Cumulative invoice amounts are stored by G/L date, employee/supplier, cost account, and contract owner pay item.

### Detail Journal Work File (F48910)
Temporarily stores the detail journal transactions used prior to creating accounting journal entries.

### Compressed Journal Workfile (F48911)
Temporarily stores a summary of the transactions stored in Detail Journal Work File. This summarization is based on ledger type, currency code, G/L date, business unit, object, subsidiary, and subledger. These entries are used to create the final journal entries in the Account Ledger (F0911).

### G/L Link (F48912)
Stores key information from the workfile transaction and the subsequent journal entry created in the Account Ledger table. This table is used for reporting and audit purposes.

### Payroll Journal Reclassification Workfile (F0618WF)
Temporarily stores the original and correcting entries created when the cost account of a workfile transaction originating from payroll has been changed in the Billing system. These entries are written to the Payroll History table (F0618) when Create G/L Entries or Create A/R Entries is run.

The following graphic illustrates the relationships between the tables in the Contract Billing system.
Contract Billing Menu Overview

The Contract Billing menus are listed below. Menus are organized according to function and frequency of use.

**Contract Billing Processing (G52)**

**Periodic Operations**
- Workflow Generation (G4822)
- Revenue Recognition (G4823)
- Invoice Generation (G5221)
- Special Function Reports (G4825)

**Setup Operations**
- Contract Billing System Setup (G5241)
- Table Information (G5243)
- User Defined Codes (G5242)

**Advanced and Technical Operations**
- Contract Billing Advanced Operations (G5231)
2 Contract Information
Contract Setup

Objectives

- To set up the information for the contract terms
- To assign appropriate billing terms to the contract
- To establish monetary limits for the contract and billing terms
- To associate billable costs with the billing terms
Overview to Contract Setup

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.

The contracts that you set up and manage in the Contract Billing system include the following:

- Master information that identifies the contract in the system
- Billing information that defines the billing terms of the contract
- A base contract that preserves the billing terms in the original contract
- Change orders that represent revisions or additions to the billing terms defined in the base contract

Contract setup consists of the following tasks:

- Setting up master information for a contract
- Working with independent billing lines
- Working with dependent billing lines
- Working with contract information
Master Information

You set up master information for a contract to specify:

- Identification information, such as the contract number, owner (customer), and related job or project
- Payment terms that can affect the contract as a whole, such as when payment is due, discount terms, and whether retainage is applicable
- Billing limits, such as a minimum amount and a cap on the total billing
- Whether your company must pay for all goods and services before you can bill the customer
- Additional details, such as the location of the job or project, the names and addresses of people involved in the contract, and start and completion dates

Billing Information

The billing information for a contract consists of billing lines. Billing lines define the billing terms of a contract. You must set up the billing lines for a contract before you can create invoices based on the contract.

Base Contract

The original draft of a contract is referred to as the base contract. The base contract represents the original contract information. A base contract includes master information and billing information (billing lines).

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.
Contract Billing Lines

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 on customer invoices.

A billing line includes a combination of the following information:

- **Schedule of values**: The total amount for non-T&M billing lines.
- **Pay type**: A code that determines the overall billing terms for the billing line.

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

- **Independent billing lines**: When you use independent billing lines, each billing line includes all of the information that the system needs to calculate a billing amount.

- **Dependent billing lines**: When you use dependent billing lines, you must associate the billing line with one or more independent billing lines. The system calculates the billing amount based on the relationship between the dependent billing line and its associated billing lines.

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.

For example, if the amount that you want to bill for time and materials includes costs for union dues, you might set up a dependent billing line. The dependent billing line represents the portion of the billing amount for time and materials that is union dues. You associate the dependent billing line for union dues with the independent billing line for time and materials. 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 union dues as two separate lines on the invoice.
Set Up Master Information for a Contract

Setting Up Master Information for a Contract

The master information for a contract includes the following:

- Contract master record
- Supplemental contract information
- Contract log
- Not-to-exceed rules
- Retainage

Setting up master information for a contract consists of the following tasks:

- Creating the master record for a contract
- Copying a contract
- Entering supplemental contract information (optional)
- Working with contract logs (optional)
- Working with not-to-exceed rules (optional)
- Working with retainage (optional)

Contract Master Records

You must create a contract master record for each contract that you want to maintain and bill in the Contract Billing system. You use the master record to identify individual contracts in the system. You also use the master record to specify other information that affects the contract as a whole, including:

- Payment terms
- Not-to-exceed rules
- Retainage rules
- Billing limits
- Currency specifications

Multi-Currency Contracts

If you work in a multi-currency environment, you can create multi-currency contracts. Multi-currency contracts reflect the currency of your company (domestic currency), or the currency of your customer (foreign currency).
After you create a multi-currency contract, you can review the contract amounts in either the domestic or foreign currency. You can revise the amounts related to a multi-currency 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.

**Supplemental Contract Information**

You can enter supplemental information to record data that relates to a contract, but is not included on the contract master record. Supplemental contract information can include:

- Address information
- Dates
- Reporting categories

**Contract Logs**

In addition to the master record and supplemental information, you can maintain a log for the contract. Information in the contract log typically includes:

- Events
- Meetings
- Penalty clauses
- Dates

**Not-To-Exceed Rules**

You can specify not-to-exceed rules to ensure that you do not recognize revenue or generate invoices in excess of a billing amount to which you and your customer have agreed. The system uses not-to-exceed rules during the revenue recognition and billing processes to determine whether the revenue and invoice amounts are within your contractual limits.

**Retainage**

Retainage is the amount of the payment that your customer, as the owner of the job, might withhold to ensure satisfactory contract performance. You enter retainage rules for a contract to specify the percent of billing that is retained based on the percent of work that has been completed.

**Creating the Master Record for a Contract**

*From Contract Billing Processing (G52), choose Contract Master Revisions (P5201)*

You must create a master record for a contract before you can enter any other contract information. The master record includes:
Set Up Master Information for a Contract

- Identification information, such as the contract number, customer, and related job or project
- Payment terms that can affect the contract as a whole, such as when payment is due, discount terms, and whether retainage is applicable
- Billing limits, such as a minimum or maximum amount on the total billing
- Whether your company must pay for all goods and services before you can bill the customer
- Tax information, if applicable
- Currency specifications, if applicable
- Additional details, such as the location of the job or project, the names and addresses of people involved in the contract, and start and completion dates
- 10 user-defined category codes, which you can use to categorize the contracts

The system stores contract master records in the Contract Billing Master table (F5201).

To create the master record

On Contract Master Revisions

1. Complete the following required fields:
   - Contract Number
   - Description (first line)
   - Project/Job Number
   - Customer
If you leave the Customer field blank, the system supplies the address number for the customer related 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.

2. In a multi-currency environment, to specify a currency for the contract, complete the following field:
   - Mode (F)

3. Complete the following optional fields:
   - Description (second and third lines)
   - Parent Contract
   - Min Amount
   - Max Amount
   - Host Business Unit
   - Retainage Offset
   - Retainage Control Flag
   - Retainage Rule
   - Layout
   - Customer Ref. No.
   - Status
   - Type
   - Tax Explanation
   - Tax Rate/Area
   - Payment Terms
   - Bill When Paid
   - Architect
   - Architect Ref. No.
   - Fee Summ Level

   After you enter the contract information, the system automatically displays the Contract Billing Line Details form.

4. Do one of the following
   - Enter the information for the billing lines
   - Exit the program and enter the billing lines at a later time

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract No (DOCO)</td>
<td>A number that uniquely identifies a contract. 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.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Description (DL01-DL03)</td>
<td>User-defined descriptions of the contract.</td>
</tr>
<tr>
<td>Project/Job (MCUS)</td>
<td>A number that identifies the project or job or business unit 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.</td>
</tr>
<tr>
<td>Parent Cont (PCTN)</td>
<td>A number that identifies the parent contract to which this particular contract is associated.</td>
</tr>
<tr>
<td>Host BU (JMCU)</td>
<td>A business unit associated with the contract by users for tracking or reporting purposes. This value can be used by the Account Derivation Table to determine the resulting business unit using special code *HOST.</td>
</tr>
<tr>
<td>Min Amount (MCIA)</td>
<td>The minimum amount required for invoices created for the contract. If the billing amount of the invoice is less than the amount in this field, the system will not generate an invoice.</td>
</tr>
<tr>
<td>Layout (INVF)</td>
<td>A code that uniquely identifies a series of formats and determines the overall layout of the printed invoice.</td>
</tr>
<tr>
<td>Retainage Offset (RGLC)</td>
<td>A code that designates the offset accounts for retainage, such as RETN. When processing retainage, the code must be defined in the A/R Automatic Accounting Instructions (AAIs).</td>
</tr>
<tr>
<td>Max Amount (NTEX)</td>
<td>The maximum billing amount for the contract.</td>
</tr>
<tr>
<td>NTE Rule (CTF5)</td>
<td>The Not-To-Exceed rule that specifies how amounts that exceed the Max Amount are processed.</td>
</tr>
<tr>
<td>Retainage Control (RCTL)</td>
<td>This flag controls the calculation of retainage with regard to VAT tax.</td>
</tr>
<tr>
<td>Retainage Rule (RTNR)</td>
<td>This rule is used to calculate retainage on a contract. The rule is defined in the Retainage Rules Table.</td>
</tr>
<tr>
<td>Customer (AN8O)</td>
<td>The address number to which billing and accounts receivable transactions will be posted. Typically, this is the address number for the customer.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Cust Ref. No (ODCM)</td>
<td>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 (VR01) field of the invoice in the Customer Ledger (F0311). This information can be for reference and kept for use in Contract Search.</td>
</tr>
<tr>
<td>Pymt Terms (PTC)</td>
<td>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 usually indicates the most frequently used payment term. You define the specifications for each type of payment term on the Payment Terms Revisions (P0014) or Advanced Payment Terms (P00145) form. This code prints on customer invoices.</td>
</tr>
<tr>
<td>Bill Curr (CRCF)</td>
<td>In a multi-currency environment, the currency used for billing the contract.</td>
</tr>
<tr>
<td>Tax Expl (EXR1)</td>
<td>A user defined code (UDC 00/EX) that controls how a tax is assessed and distributed to the G/L revenue and expense accounts. In Contract Billing, tax information is retrieved using the following hierarchy: 1 Individual billing lines on a contract 2 Contract Master 3 Job Master 4 Customer Master</td>
</tr>
<tr>
<td>Rate/Area (TXA1)</td>
<td>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).</td>
</tr>
<tr>
<td></td>
<td><em>Form-specific information</em></td>
</tr>
<tr>
<td></td>
<td>A processing option allows you to display or suppress this field.</td>
</tr>
<tr>
<td>Architect (AN8K)</td>
<td>The address number of the architect for the contract or project. You can use this information for reference.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Architect Reference Number (ADCM)</td>
<td>The Architect Contract Number as recorded on the customer’s books. You can use this information for reference.</td>
</tr>
<tr>
<td>Status (DS)</td>
<td>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 (UDC 52/CS).</td>
</tr>
<tr>
<td>Bill w/ Paid (BLWP)</td>
<td>A flag that controls when billing lines for time and material (T&amp;M) are eligible to be included in an invoice. When the billing detail for T&amp;M billing lines originates from transactions in the Accounts Payable system, you can maintain this flag for contracts or for individual billing lines.</td>
</tr>
<tr>
<td></td>
<td>Y Only accounts payable invoices that have been paid can be billed to the customer.</td>
</tr>
<tr>
<td></td>
<td>N Default value. All transactions can be billed to the customer.</td>
</tr>
<tr>
<td></td>
<td>Note: To override this flag for a billing detail transaction, enter N in the Reverse Bill When Paid field for the Billing Workfile (F4812) transaction using the Internal Control Information window in Workfile Revisions (P4812).</td>
</tr>
<tr>
<td></td>
<td>If you leave this field blank, the system uses N.</td>
</tr>
<tr>
<td>Fee Summ Level (FSLV)</td>
<td>The level of detail at which the system creates work file records for fee lines.</td>
</tr>
<tr>
<td></td>
<td>• If you leave this field blank, the system creates fees at a summarized level, with one work file record (F4812) per fee line.</td>
</tr>
<tr>
<td></td>
<td>• A value of “1” in this field indicates that the system should create the F4812 records at a detailed level, with one work file record for each unique combination of key values.</td>
</tr>
<tr>
<td></td>
<td>“Key Values” refers to any values, which you can use, as a key or a result in the Account Derivation Table.</td>
</tr>
<tr>
<td>Type (CT)</td>
<td>A user defined code (UDC 51/CT) that identifies the type of contract.</td>
</tr>
<tr>
<td>Planned Start Date (USD1)</td>
<td>The date you plan to start work on the contract.</td>
</tr>
<tr>
<td>Actual Start Date (CSDT)</td>
<td>The date you actually start work on the contract.</td>
</tr>
</tbody>
</table>
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned Completion Date (USD2)</td>
<td>The date you plan to complete work on this contract.</td>
</tr>
<tr>
<td>Actual Completion Date (CDTE)</td>
<td>The date you actually completed work on the contract.</td>
</tr>
</tbody>
</table>

### Copying a Contract

You can create new contracts by copying from existing contracts, including all the secondary and tertiary files associated with each contract. The system allows you to copy and set up several contracts, depending on the project, using the copy contract functionality (F13).

You use the processing option P52COPY (Copy Contracts) to determine the information you need to copy:

- Files
- Fields
- Data fields
- Blocked fields
- Restrictions

If the processing options are left blank, the system opens a new window and allows you to determine what information to copy. You can Add, Change or Delete information as needed.
To copy a contract

On Contract Master Revisions

1. Open the contract you want to copy.
2. Choose the Copy function (F13).

Processing Options

See Copy Contracts (P52COPY).

What You Should Know About

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 (F15).

Creating a standard contract

You can create a standard contract to use as a template for the contract log information that applies to the majority of your contracts. When you use a standard contract to set up contracts, you save time and the need for repetitive data entry.

To create a standard contract, set up a contract. Assign the contract Contract Number 00000000.

See Working with Contract Logs for more information about using standard contracts.
Assigning the customer and contract type

The system uses the information in the related job for the contract to automatically assign the customer address 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 markup and account derivation information
- The basis for generating invoices and revenue recognition

See Defining Markup Rules and Defining Account Derivation Rules for more information.

Changing a contract

When a contract is in an active invoice batch, you can change only the description and invoice layout 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 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

Printing contract information

You can print contract information from within Contract Master Revisions (P5201) using the Print Contract Detail function (F21).

Processing Options

See [Contract Master Revisions (P5201)](#).

Entering Supplemental Contract Information

From Contract Billing Processing (G52), choose **Contract Master Revisions (P5201)**

After you create the master record for a contract, you can enter additional contract information. To do this, access the Additional Contract Details form. Additional contract information can include:

- Address information, such as an alternative location. The locations of the project and the corporate office (customer) are often not the same. You might have to send the bills to the project manager for approval before they are sent to the corporate office where the bills are paid.

- Dates for informational purposes only. The system does not edit information dates against the dates in the Job Master table (F0006). Informational dates might include:
  - Penalty dates, such as for liquidated damages for not completing the work on time. As of a specific date, a daily cost is incurred which the contractor must pay the client.
  - Warranty expiration dates. Up to the warranty expiration date, your company guarantees to correct any problems and defects.

If you work in a multi-currency environment, you can also review the currency information for a contract on the Additional Contract Details form.

The system stores the additional master information in the Contract Billing Master table (F5201).
To enter supplemental contract information

On Contract Master Revisions

1. To locate a contract, complete the following field:
   - Contract Number

2. Choose Additional Contract Details (F17).

3. On Additional Contract Details, complete the following optional fields to identify related address numbers:
   - Alternate Billing
   - Remit To
   - Send To
   - User Address 1
   - User Address 2
   - User Address 3

   **Note:** The customer number on a contract cannot be changed after an invoice for the contract is created.

4. Complete the optional fields for contract dates.

5. For currency information related to the contract, review the following fields:
   - Base Currency
   - Billing Currency
### Exchange Rate

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Currency (CRCD)</td>
<td>A code that indicates the currency of a customer's or a supplier's transactions.</td>
</tr>
<tr>
<td>Billing Currency (CRCF)</td>
<td>The currency used for billing the contract.</td>
</tr>
<tr>
<td>Exchange Rate (CRR)</td>
<td>The conversion rate that the system uses to convert foreign currencies to domestic currencies. If the Multi-Currency Conversion option on the Set Multi-Currency Option form is set to Y, this rate is a multiplier. If it is set to Z, this rate is a divisor.</td>
</tr>
</tbody>
</table>

---

## Working with Contract Logs

**From Contract Billing Processing (G52), choose Contract Master Revisions (P5201)**

In addition to the master record and additional contract information, you can maintain a contract log for a contract. You can use the contract log to document and track:

- Important events
- Meetings
- Penalty clauses
- Reporting categories
- Dates

You can also enter free-form text as an extended description of the information you record in the log, such as:

- Provisions concerning the penalty and warranty that you might identify as dates in the additional master information
- Information related to a subcontractor
- Brief descriptions and remarks

The system stores supplemental information for a contract in the Log Master table (F4303) and the free-form text in the Contract Log Text table (F52034).

Working with contract logs consists of the following:

- Entering log information
- Entering additional text
To enter log information

On Contract Master Revisions

1. To locate a contract, complete the following field:
   - Contract Number

2. Choose Log (F20).

3. On Contract Log Revisions, complete the following field for each log line:
   - Log Type

4. Complete the following optional fields:
   - Description
   - Remark
   - Required Date
   - Pay Effect
     - If you leave the Description field blank, the system adds the description from the log type.

5. Access the detail area (F4).

6. Complete the optional fields to enter additional information.
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Type</td>
<td>A user defined code (UDC 00/LG) that specifies the type of information in a log entry. The log type is used to group similar types of entries.</td>
</tr>
<tr>
<td>Remark</td>
<td>A name or remark that describes an element in the JD Edwards World systems.</td>
</tr>
<tr>
<td>Required Date</td>
<td>The date that the log entry needs to be received. For example, consider a submittal requirement for an insurance certificate. For such an entry, the date that a copy of the policy or certified proof of coverage document is to be received would be entered in the Required Date field.</td>
</tr>
</tbody>
</table>
| Pay Effect       | A code that indicates whether the submittal requirement is of such importance that regular payments to the subcontractor can be suspended if the submittal requirement is not properly satisfied. This code is normally used in conjunction with submittal log entries. Valid values are:  
|                  | Y Issue warning messages if log requirements are not met.  
|                  | N Do not issue warning messages.  
|                  | Form-specific information  
|                  | For billing, this field should always be N. Valid values are are:  
|                  | Y Yes, the log entry has a pay effect.  
|                  | N No, the log entry does not have a pay effect. |

### What You Should Know About

**Copying standard contract logs**

You can enter the log for a standard contract and then copy it to many contracts. Use the standard contract log to save time and minimize data entry errors when you create the log information.

To copy the standard log to your contract, choose Copy Standards (F6) from the Contract Log Revisions form. The system displays the log for the standard contract (Contract 00000000). Choose the Add or Change action to copy the logs to your contract.
To enter additional text

On Contract Master Revisions
1. To locate a contract, complete the following field:
   ▪ Contract Number
2. Choose Log (F20).
3. On Contract Log Revisions, choose Text (Option 1) for a specific log line.
4. On Contract Log Details, enter the text.
   After you enter the text, the system highlights the Option field for the contract log to indicate that text exists.

What You Should Know About

Formatting text
The system prints any text that you enter for a billing line exactly as it appears on the text entry form.

Inserting a blank line
You can insert a blank line between two existing lines of text to enter new information. The system inserts a line directly below the line on which you choose Insert Line (Option 1).

Deleting text
You can use two methods to delete text that you enter:
▪ To delete all the text, use the Delete action
▪ To delete individual lines of text, choose Delete Line (Option 9) for the respective lines
**Working with Not-To-Exceed Rules**

You can specify not-to-exceed rules for a contract to ensure that you do not generate an invoice in excess of a billing amount to which you and your customer have agreed. You can also specify not-to-exceed rules to ensure that you do not recognize revenue in excess of a certain amount.

As you add change orders and billing lines to a contract, the billing terms might require different not-to-exceed rules. You can define not-to-exceed rules for the following items:

- **Contract masters**: When you define a not-to-exceed rule for a contract master, the rule applies to the base contract (Change Order 000) and all of the related billing lines.
  - If you do not define a not-to-exceed rule for the contract master, the system does not perform an edit for exceeded revenue or invoice limits for the contract as a whole.

- **Change orders**: When you define a not-to-exceed rule for a specific change order, the rule applies to the total billing amount of all the billing lines that are associated with the change order.
  - The system performs the edit for exceeded limits for Change Order 000 (the base contract) based on the rule that you define for the contract master.

- **Contract billing lines**: When you define a not-to-exceed rule for a contract billing line, the rule applies only to that billing line.

When you set up not-to-exceed rules, you must specify the following:

- The amount that you do not want to exceed, or maximum amount
- The processes to which the limit applies (revenue recognition, billing, or both)

For example, you might set up a not-to-exceed rule that applies only to the total amount you bill your customer, but not to the revenue amount that you recognize for the contract. Or, you might want a specific billing line to be exempt from the not-to-exceed rule that you set up for a change order.

The system uses not-to-exceed rules during the revenue recognition and billing processes to determine whether the revenue and invoice amounts are within your contractual limits. If the revenue or the billing amounts are not within the limits that you specify for the not-to-exceed rule, the system prevents you from completing the revenue recognition process or the billing process. To complete the revenue recognition or billing processes, you must manually override the not-to-exceed values for the records that exceed the specified limit.

**See Also**

- *Releasing Records that Exceed Specified Limits*

Working with not-to-exceed rules consists of the following:

- Assigning a not-to-exceed rule to a contract master
- Assigning a not-to-exceed rule to a change order
- Assigning a not-to-exceed rule to a billing line

**To assign a not-to-exceed rule to a contract master**

| From Contract Billing Processing (G52), choose **Contract Master Revisions (P5201)** |

On Contract Master Revisions

1. To locate a specific master record, complete the following field:
   - Contract

2. Complete the following fields:
   - Max Amount
   - Rule

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max Amount (NTEX)</td>
<td>Use this field to specify a maximum billing amount for the contract.</td>
</tr>
</tbody>
</table>
Rule (CTF5)

A code that you use to specify how the system processes the not-to-exceed rule for a contract.

Y  Contract billing lines are exempt from the not-to-exceed limit expressed at the contract or change order level.

N  The billed amount for the billing line is subject to the limits expressed at the contract or change order for revenue and invoice processing.

L  The billed amount for the billing line is subject to the limits specified at the contract or change order for revenue processing, but not for invoice processing.

M  The billed amount for the billing line is subject to the limits specified at the contract or change order for invoice processing, but not for revenue processing.

O  The billed amount for the billing line is exempt from the limits specified at the contract or change order level.

To assign a not-to-exceed rule to a change order

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

On Contract Billing Line Details

1. To locate a change order, complete the following fields:
   - Contract No
   - Chg Ord No

2. Complete the following fields:
   - NTE Amount
   - NTE Rule
To assign a not-to-exceed rule to a contract billing line

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

On Contract Billing Line Details
1. To locate the contract billing lines for a specific contract or change order, complete the following fields:
   - Contract No
   - Chg Ord No
2. Choose the Additional Details Window option (Option 4) for a billing line.
3. Complete the following fields:
Set Up Master Information for a Contract

- NTE Amount
- Exempt from NTE
- NTE Units

The NTE Units field applies only to Unit Price billing lines.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTE Rule (EXMP)</td>
<td>You can use this field to override, on a-pay-item-by-pay-item basis, the Not to Exceed limit expressed at the contract header, change, or line level.</td>
</tr>
<tr>
<td></td>
<td>Y This particular pay item is exempt from the Not To Exceed limit expressed at the contract header, change, or line level.</td>
</tr>
<tr>
<td></td>
<td>N The billed amount for the pay item is subject to the limits expressed at the contract header, change, or line level.</td>
</tr>
<tr>
<td>NTE Units</td>
<td>Complete this field to specify the unit limit for an individual unit price billing line.</td>
</tr>
</tbody>
</table>

Working with Retainage

Retainage is the amount of payment that your customer might withhold to ensure satisfactory contract performance. For example, you might agree to a 10 percent retainage on the amount you bill your customer. If you bill the customer for 100 dollars, the customer withholds 10 dollars and pays you 90 dollars. After your company has completed the work satisfactorily, the customer remits the 10 dollars that was retained.

Retainage is based on the percent of work that has been completed. During the billing process, the system uses the retainage rules that you set up for your contract to calculate retained amounts. When you set up the retainage rules for a contract, you can specify the following:

- The percent of billing to calculate for retainage
- The offset account that you set up in the AAIs for retainage
- Whether to calculate tax on the total taxable amount of the contract or defer the tax calculation on retainage until the retainage amount for the contract is released

As you manage your contracts, your billing terms might require different retainage rules. You can set up retainage rules for the following items:

**Contract masters**

When you set up a retainage rule for a contract master, the rule applies to the base contract (Change Order 000) and all of the related billing lines. If you do not define a retainage rule for the contract master, the system does not calculate retainage for the contract as a whole.
Set Up Master Information for a Contract

**Change orders**

When you set up a retainage rule for a specific change order, the rule applies to the total billing amount of all the billing lines that are associated with the change order.

The system calculates the retainage for Change Order 000 (the base contract) based on the retainage rule that you define for the contract master.

**Contract billing lines**

When you set up a retainage rule for a billing line, the rule applies only to that billing line.

Working with retainage consists of the following:

- Defining a retainage rule
- Assigning a retainage rule to a contract master or change order
- Assigning a retainage rule to a billing line

### Retainage Calculation for Change Orders

The system determines the percent complete for a change order by dividing the total billed-to-date amount for all billing lines that do not have specific retainage rules at the billing line level by the total of the schedule of values for the billing lines. If a billing line does not have a schedule of values amount, the system uses the total billed-to-date amount for the billing line as the schedule of values amount.

Using the percent complete, the system then applies the retainage rule to the total billed-to-date amount to derive the total amount of retainage to be withheld for the change order. The system then subtracts previously withheld retainage from the total amount of retainage that should be withheld to derive the current retained amount for the change order. The system then allocates the current retained amount to each billing line by dividing the billing line's current billing amount by the total current billing amount for the change order and then multiplies that percent by the current retained amount for the change order.

### Retainage Calculation for Contract Billing Lines

The system determines the percent complete for a billing line by dividing the total billed-to-date amount by the schedule of values for the billing line. If the billing line does not have a schedule of values amount, the system uses the total billed-to-date amount as the schedule of values amount.

Using the percent complete, the system then applies the retainage rule to the total billed-to-date amount to derive the total amount of retainage that should be withheld. The system then subtracts previously withheld retainage from the total amount of retainage that should be withheld to derive the current retained amount from the billing line.

### To define a retainage rule

From Contract Billing Processing (G52), enter **29**
From Contract Billing System Setup (G5241), choose **Table Information**
From Contract Billing Table Information (G5243), choose **Retainage Rules Table (P5204)**
On Retainage Rules Table

1. To identify the retainage rule, complete the following fields:
   - Retainage Rule
   - Description

2. Complete the following fields for one or more detail lines:
   - Retainage Percent
   - Percent Complete

If you leave the Percent Complete field blank, the system uses 100 percent as the default value.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rule (RTNR)</td>
<td>The name of the retainage rule. The system uses this rule to calculate retainage on a contract. You define the retainage rule on the Retainage Rules Table.</td>
</tr>
<tr>
<td>Percent Retainage (PRET)</td>
<td>The retainage rate for the contract. The rate is a percentage that is expressed as a whole number. For example, you enter a retainage rate of 10.5% as 10.5- Do not enter a retainage percent greater than 99.99% (expressed as 99.99) or less than zero.</td>
</tr>
</tbody>
</table>
Percent Complete (PC)

This field identifies the percentage of the total job or project that is complete.

Form-specific information

The customer retains a percentage of the total due as shown in the left column. The retained percentage is based on the percentage of completion as shown in the right column.

To assign a retainage rule to a contract master

From Contract Billing Processing (G52), choose Contract Master Revisions (P5201)

On Contract Master Revisions

1. To locate a contract, complete the following field:
   - Contract Number

2. To specify whether to defer the tax on the retained amount for the contract or change order, complete the following field:
   - Retainage Control

3. To specify offset account for retainage, complete the following field:
   - Retn Offset

4. Choose Field Sensitive Help (F1) for the following field:
   - Retainage Rule

5. On Retainage Rules Window, choose Select (Option 4) for the correct retainage rule.
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retainage Control (RCTL)</td>
<td>This flag controls the calculation of retainage with regard to VAT tax.</td>
</tr>
<tr>
<td>Retention G/L Offset</td>
<td>A code that designates the offset accounts for retainage, such as RETN or 1220. You set up the code as an automatic accounting instruction. Note: Do not use code 9999. This is reserved for the post program and indicates that offsets should not be created.</td>
</tr>
</tbody>
</table>

---

### To assign a retainage rule to change order or a billing line

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

On Contract Billing Line Details

1. To locate a contract, complete the following field:
   - Contract Number


3. To add retainage to the change order, add the retainage rule to the change order header information.
4. To add retainage to a billing line, choose More Details (F4), and then add the retainage rule to the billing line.

What You Should Know About

Prepayments (draws) and retainage

The system does not calculate retainage for direct draw or rated draw billing lines. The system does not include the schedule of values for these billing lines in the retainage calculations.

Searching for retainage rules

When the system calculates retainage for a contract, it first searches for retainage rules in the billing lines, then the rules on the change orders, and finally the rule in the contract master.

Defining a rule for no retainage

If a billing line is exempt from the retainage rule that applies to a change order, you must assign a specific rule for no retainage to the billing line. You can define the retainage rule with the retainage percent as 0 and the percent complete as 100.

In this case, you cannot leave the field for the retainage rule blank for the respective billing line. If the field is blank, the system uses the retainage rule for the change order.

Deleting a retainage rule

If you delete a retainage rule, the system does not automatically update the retainage rule wherever you have assigned that rule. You must manually change the retainage rule for the related base contract, change orders, and billing lines.
Defining a retainage rule for the base contract (Change Order 000)

The retainage rule for the base contract, which is Change Order 000, defaults from the contract master and cannot be changed. The retainage rule on subsequent change orders does not have to match the retainage rule of the contract master.
Work with Independent Billing Lines

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. Billing lines define the billing terms of the contract. You can set up independent and dependent billing lines. The pay type determines whether the billing line is independent or dependent.

Independent billing lines include all of the information that the system needs to calculate a billing amount. The pay type you use to define the billing line determines whether or not the billing line is independent.

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

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

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

- Defining T&M billing lines
- Defining lump sum billing lines
- Defining unit price billing lines
- Defining milestone billing lines
- Defining progress billing lines

Before You Begin

- Set up a contract master record for your contract. See *Creating the Master Record for a Contract*.

Defining Contract Billing Lines for Time and Material

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

Time and material (T&M) billing lines 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 T&M billing line, 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, General Accounting, 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 T&M billing line 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 invoicing and revenue recognition

Each billable cost account and its related cross-reference information must be unique for the T&M billing lines on the contracts in your system.

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 T&M billing lines, 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 T&M billing lines consists of the following:

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

**To set up a billing line for time and material**

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
If you inquire using only Contract Number, then Change Order 000 displays.

2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Use the pricing type T or 1 for time and material (T&M).

3. Complete the following optional field:
   - Schedule of Values

4. Choose More Details (F4).

5. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

6. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
• Eligibility Override
• Account Override

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

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   • Contract Number
   • Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Choose Cross-Reference (Option 2) for a T&M billing line.

3. On Cross Reference Table, complete the following fields for one or more billable cost accounts:
   • Business Unit
   • Subsidiary
   • Object
   • Subledger
   • Subledger Type

4. Complete one or more of the following optional fields for payroll information:
   • Job Type
   • Job Step
   • Pay Type
   • Employee Number
   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.

5. Complete the following optional field for equipment information:
   • Equipment Worked

6. Choose More Details (F4).
7. Complete one or more of the following optional fields for payroll information:
   - Home Business Unit
   - Cost Pool Code

8. Complete the following optional field for equipment information:
   - Rate Group

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligb. Ovrd (CTF1)</td>
<td>Use this field to override the system-assigned eligibility code for a workfile transaction when records in the Billing Workfile (F4812) are created during invoicing. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>0  Eligible for invoicing and revenue recognition</td>
</tr>
<tr>
<td></td>
<td>1  Eligible for invoicing only</td>
</tr>
<tr>
<td></td>
<td>2  Eligible for revenue recognition only</td>
</tr>
<tr>
<td></td>
<td>3  Non-billable</td>
</tr>
<tr>
<td></td>
<td>4  Eligible for cost only</td>
</tr>
<tr>
<td></td>
<td>blank  No override</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bill w/Paid (BLWP)</td>
<td>A flag that controls when T&amp;M billing lines are eligible to be included in an invoice when the billing detail for T&amp;M billing lines originates from transactions in the Accounts Payable system. You can maintain this flag for contracts or for individual billing lines.</td>
</tr>
<tr>
<td></td>
<td><strong>Y</strong> Only accounts payable invoices that have been paid can be billed to the customer.</td>
</tr>
<tr>
<td></td>
<td><strong>N</strong> Default value. All transactions can be billed to the customer.</td>
</tr>
<tr>
<td>Note: To override this flag for a billing detail transaction, enter N in the Reverse Bill When Paid field for the accounting and internal control information.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If you leave this field blank, the system uses N.</td>
</tr>
<tr>
<td>Job Type (JBCD)</td>
<td>A Payroll user-defined code (UDC 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.</td>
</tr>
<tr>
<td>Job Step (JBST)</td>
<td>A Payroll user-defined code (UDC 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.</td>
</tr>
<tr>
<td>Pay Type (PRTR)</td>
<td>A Payroll code that defines the type of pay, deduction, benefit, or accrual.</td>
</tr>
<tr>
<td>Employee Number (AN8)</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>The address book number of an individual employee in the Payroll system.</td>
</tr>
<tr>
<td>Equipment Worked (EQCG)</td>
<td>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.</td>
</tr>
<tr>
<td>Home Business Unit (HMCU)</td>
<td>The number of the business unit in which the employee generally works.</td>
</tr>
</tbody>
</table>
Work with Independent Billing Lines

Cost Pool Code (RP12)  Category Code 12 associated with the Business Unit Master file (F0006). This is a user-defined code (UDC 00/12) for use in flex account mapping and in printing selected information on reports.

Form-specific information
You can use this value as selection criteria for markup rules in the Cost Plus Markup Table (P48096).

Rate Group (ACL0)  A user-defined code (UDC 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.

What You Should Know About

Specifying a range of valid values
You can use an asterisk as a wildcard to indicate a range of valid values. For example, you can use the following wildcards:

- Object and Subsidiary – an asterisk (*) to indicate a range of accounts. For example, 13*9 as the object includes all object accounts from 1309 to 1359.
- Subsidiary – "ALL or an asterisk (*) in the first position of the field indicate all subsidiaries.
- Subledger – an asterisk (*) in the first position of the field to indicate all subledgers.

Verifying job accounts and budgets
When you choose Basic Budget Setup (F15), the system displays the Original Budget Entry form from the Job Cost system. You can then verify the budget information for a job and determine the correct accounts to cross-reference.

Locating account information
When you choose Pick Accounts (F2), the system displays the Cost Code/Type Search window. You can then locate and select accounts for the cross-reference. To retain selected accounts, you must use the Add or Change action on the Cross Reference Table window.

Arranging information by account number
The system displays the accounts for the cross-reference in the order that you entered them. When you choose Toggle-Accounts in Business Unit Sequence (F17), the system displays the cross-reference information in sequence by account number. You can use this toggle only for reviewing information and not for adding or changing.

See Also

- Accumulating Costs for Billing (P48120)
Defining Billing Lines for Lump Sum

Lump sum billing lines define a fixed billing amount. When you set up a lump sum billing line on a contract, 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 manual calculation, for automatic calculation, or for a recurring amount.

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.

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 lump sum billing lines, 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
- Default account based on Automatic Accounting Instruction (AAI) BC01

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 lump sum billing lines consists of the following tasks:

- Setting up lump sum for manual calculation
- Setting up lump sum to calculate the billing amount
- Setting up lump sum to calculate revenue and billing amounts
- Setting up recurring billing amounts

Setting Up Lump Sum Billing Lines for Manual Calculation

If you do not want the system to calculate the billing amounts, you can set up a lump sum billing line for manual calculation. You calculate the billing amounts and enter them after the invoice batch is created. You can add amounts to these billing lines during the invoicing process, but if you run revenue recognition as a separate process, you are not able to add amounts to the billing lines in a revenue batch.
To set up lump sum for manual calculation

On Contract Billing Line Details (P5202)

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then the system displays Change Order 000.

2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Schedule of Values
   Use the pricing type L or 3 for lump sum.

3. Choose More Details (F4).
4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

5. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule of Values (SCOF)</td>
<td>The expected or budgeted amount assigned to a specific billing line of the contract. The system uses this amount in conjunction with the percent of completion to calculate billing and retainage.</td>
</tr>
<tr>
<td><strong>Form-specific information</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The total billing amount for a billing line.</td>
</tr>
<tr>
<td></td>
<td>If you are defining a billing line for a direct or rated draw, the value you enter is always negative because the draw reduces the billing amount and the overall value of the contract.</td>
</tr>
<tr>
<td></td>
<td>Use the Unit/Amount Display Toggle to alternately review the Schedule of Values field and the Unit Price field.</td>
</tr>
<tr>
<td></td>
<td>Use the processing options for the Billing Line Details program to:</td>
</tr>
<tr>
<td></td>
<td>• Select which of these fields displays when you first access the form.</td>
</tr>
<tr>
<td></td>
<td>• Set up a warning or error message when the Schedule of Values field does not equal the Job Cost budget amounts for the accounts cross-referenced to this billing line.</td>
</tr>
<tr>
<td></td>
<td>• Specify the ledger type to use for the Job Cost budget edits. If you leave the option blank, the system uses the revised budget ledger type (UDC 51/RB).</td>
</tr>
<tr>
<td>Subsidiary (SUB)</td>
<td>A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account.</td>
</tr>
<tr>
<td>Object Account (OBJ)</td>
<td>The object account portion of a general ledger account. The term “object account” refers to the breakdown of the Cost Code (for example, labor, materials, and equipment) into subcategories (for example, dividing labor into regular time, premium time, and burden). If you are using a flexible chart of accounts and the object is set to 6 digits, JD Edwards World recommends that you use all 6 digits. For example, entering 000456 is not the same as entering 456, because the system enters three blank spaces to fill a 6-digit object.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>AR Offset (GLC)</td>
<td>The offset account for the contract line or pay item. The system automatically enters a default value from the accounts receivable offset for the Owner (Customer) Address Book.</td>
</tr>
<tr>
<td></td>
<td><em>Form-specific information</em></td>
</tr>
<tr>
<td></td>
<td>On this form, this field identifies the receivable account attached to the owner of the contract.</td>
</tr>
<tr>
<td>Tax Expl (EXR1)</td>
<td>A user-defined code (00/EX) that controls how a tax is assessed and distributed to the general ledger revenue and expense accounts.</td>
</tr>
<tr>
<td></td>
<td>A single invoice can have both taxable and non-taxable items. The entire invoice, however, must have one tax explanation code.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Subledger (SBL)</td>
<td>A code that identifies a detailed auxiliary account within a general ledger account. A subledger can be an equipment item number, an address book number, and so forth. If you enter a subledger, you must also specify the subledger type.</td>
</tr>
<tr>
<td>Subledger Type SBLT</td>
<td>A user-defined code (UDC 00/ST) that you use with the Subledger field to identify the category of the subledger.</td>
</tr>
<tr>
<td>Elig Ovr (CTF1)</td>
<td>Use this field to override the system-assigned eligibility code for a workfile transaction when records in the Billing Workfile (F4812) are created during invoicing.</td>
</tr>
<tr>
<td></td>
<td>Valid values are:</td>
</tr>
<tr>
<td></td>
<td>0  Eligible for invoicing and revenue recognition</td>
</tr>
<tr>
<td></td>
<td>1  Eligible for invoicing only</td>
</tr>
<tr>
<td></td>
<td>2  Eligible for revenue recognition only</td>
</tr>
<tr>
<td></td>
<td>3  Non-billable</td>
</tr>
<tr>
<td></td>
<td>4  Eligible for cost only</td>
</tr>
<tr>
<td></td>
<td>blank  No override.</td>
</tr>
</tbody>
</table>
### Field

**Acct Ovr (ACCO)**

A code that controls whether the account information in the detail area for a billing line identifies a revenue account or a cost (source) account.

*Form-specific information*

The business unit, object, and subsidiary, are default values that the system bases on the AAIs that you set up for System 52, Code BC. If you do not want to use the default values, you can enter a specific account.

The system uses this account information for all billing lines, with the exception of billing lines for time and materials (pricing type T or 1). The account information for a billing line can represent a revenue account or a cost account, depending on the value that you enter in the Account Override Field (ACCO) in the detail area.

Note: If the Account Override is set to 1, the system uses this account as a source (cost) account. In this case, the system processes the billing line against the Account Derivation Table during journal generation, similar to a billing line for time and materials.

If the Account Override is set to 0, the system uses this account as a revenue account during journal generation instead of deriving the revenue account number from the Account Derivation Table.
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Rev Acct/Cost Acct (MCU) | 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.  
Business Unit security can prevent you from locating business units for which you have no authority.  
*Form-specific information*  
The business unit, object, and subsidiary, are default values that the system bases on the AAIs that you set up for System 52, Code BC. If you do not want to use the default values, you can enter a specific account.  
The system uses this account information for all billing lines, with the exception of billing lines for time and materials (pricing type T or 1). The account information for a billing line can represent a revenue account or a cost account, depending on the value that you enter in the Account Override Field (ACCO) in the detail area.  
Note: If the Account Override is set to 1, the system uses this account as a source (cost) account. In this case, the system processes the billing line against the Account Derivation Table during journal generation, similar to a billing line for time and materials.  
If the Account Override is set to 0, the system uses this account as a revenue account during journal generation instead of deriving the revenue account number from the Account Derivation Table. |
| Retn Rule (RTNR)         | The system uses this rule to calculate retainage on a contract. You define the retainage rule on Retainage Rules Table.                          |
| Tax Rate (TXA1)          | 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).  
*Form-specific information*  
A processing option allows you to display or suppress this field. |
Setting Up Lump Sum to Calculate the Billing Amount

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

You can set up lump sum billing lines 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 lump sum billing line to one or more accounts. The system uses the cross-referenced accounts to determine the actual and projected final costs.

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

- Percent Complete
- Percent of Cost

Since both methods are partly based upon projected final costs, lump sum billing lines are typically related to jobs defined in the Job Cost system. Job Cost processing records project final costs in Ledger Type HA.

Percent Complete Method

When you specify the Percent Complete method, the system calculates the billing amount as follows:

1. Percent Complete = Actual Cost-to-Date / Projected Final Cost
2. Billable Amount = Percent Complete X Schedule of Values
3. Current Billing Amount = Billable Amount - Prior Billed Amount

Actual Cost-to-Date is located in the AA ledger. Projected Final Cost is located in the HA ledger. Both cost amounts are calculated as inception-to-date.

Another way to look at the calculation is:

Current Billing Amount = (AA Ledger / HA Ledger * Schedule of Values) – Prior Billed Amount

Percent of Cost Method

When you specify the Percent of Cost method, the system calculates the billing amount as follows:

1. Markup Amount = Schedule of Values - Projected Final Cost
2. Markup Percent of Cost = Markup Amount / Projected Final Cost
3. Current Billing Amount = Markup Percent of Cost X Actual Cost for Current Period

Another way to look at the calculation is:

Current Billing Amount = [(Schedule of Values - HA Ledger) / HA Ledger] * AA Ledger
To set up lump sum lines to calculate the billing amount

On Contract Billing Line Details
1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.
2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Schedule of Values
   Use the pricing type L or 3 for lump sum.
3. Choose More Details (F4).
4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area
5. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override
6. Use the Add action if the billing line is the first for the contract. Use the Change action to add subsequent billing lines to the contract.
7. Use the Inquire action to relocate the contract.
8. Choose Cross Reference (Option 2) for the lump sum billing line.
9. On Cross Reference Table, complete the following fields for one or more accounts:
   - Business Unit
   - Subsidiary
   - Object
   - Subledger
   - Subledger Type

   **Caution:** The accounts that 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.

   The additional fields on this form that relate to payroll and equipment information are not applicable.
What You Should Know About

Specifying a range of valid values

You can use an asterisk as a wildcard to indicate a range of valid values. For example, you can use wildcards in the following fields:

- Object and Subsidiary – an asterisk (*) as a positional wildcard to indicate a range of accounts. For example, 13*9 as the object specifies all object accounts from 1309 to 135*9.
- Subsidiary – *ALL or an asterisk (*) in the first position of the field specifies all subsidiaries.
- Subledger – an asterisk (*) in the first position of the field to indicate all subledgers.

Verifying job accounts and budgets

You can verify the budget information for a job and determine the correct accounts to cross-reference for projected final costs. To do this, choose Basic Budget Setup (F15). The system displays the Original Budget Entry form from the Job Cost system.

Locating account information

If you do not know the account number that you want to include in the cross-reference for a billing line, you can locate and select accounts from a list of accounts set up for your system. To do this, choose Pick Accounts (F2). The system displays the Cost Code/Type Search form. After you locate and select the account to add it to the Cross Reference Table.

Arranging information by account number

The system displays the accounts for the cross-reference in the order that you enter them. When you choose the Toggle-Accounts in Business Unit Sequence function (F17), the system displays the cross-reference information in sequence by account number. You can use this toggle only for reviewing information and not for adding or changing.

Setting Up Lump Sum to Calculate Revenue and Billing Amounts

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

You can set up lump sum billing lines that the system can use to automatically calculate both revenue and billing amounts. The system calculates the revenue amount during the workfile generation process and the billing amount during the invoicing process.

To automatically calculate the revenue and billing amounts, you must set up the following:

- A cross-reference from the billing line to one or more accounts. The system uses the account cross-reference to determine the actual and projected final costs.
- A cost account for the billing line. The system uses the cost account to retrieve the correct account derivation rules for the journal entries for the revenue and billing amounts.
When you create an invoice for the lump sum billing lines, you can specify one of the following methods of calculation for the billing amount:

- Percent Complete
- Percent of Cost

The system uses only the Percent Complete method to calculate the revenue amount during workfile generation.

**Percent Complete Method**

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

1. \( \text{Percent Complete} = \frac{\text{Actual Cost-to-Date}}{\text{Projected Final Cost}} \)
2. \( \text{Billable Amount} = \text{Percent Complete} \times \text{Schedule of Values} \)
3. \( \text{Current Billing Amount} = \text{Billable Amount} - \text{Prior Billed Amount} \)

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 billing amount as follows:

1. \( \text{Markup Amount} = \text{Schedule of Values} - \text{Projected Final Cost} \)
2. \( \text{Markup Percent of Cost} = \frac{\text{Markup Amount}}{\text{Projected Final Cost}} \)
3. \( \text{Current Billing Amount} = \text{Markup Percent of Cost} \times \text{Actual Cost for Current Period} \)

**Before You Begin**

- Verify that the system constants are set up for revenue recognition of non-T&M billing lines. See *Setting Up System Constants*.
- Verify that the account derivation rules are defined for revenue recognition. See *Defining Account Derivation Rules*.
- Set up a lump sum billing line on your contract. The Eligibility Override (CTF1) must be blank or 0 and Account Override (ACCO) must be 1.

**To set up lump sum to calculate revenue and billing amounts**

On Contract Billing Line Details.

1. Use the Inquire action to locate the contract.
2. Choose Cross Reference (Option 2) for the lump sum billing line.
3. On Cross Reference Table, complete the following fields for one or more accounts:
   - Business Unit
Work with Independent Billing Lines

- Subsidiary
- Object
- Subledger
- Subledger 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.

The additional fields on this form that relate to payroll and equipment information are not applicable.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Override Flag</td>
<td>A code that controls whether the account information in the detail area for a billing line identifies a revenue account or a cost (source) account.</td>
</tr>
<tr>
<td></td>
<td>The system automatically supplies the account information (business unit, object, subsidiary, subledger, and subledger type) based on the AAIs that you set up for system 52, code BC. The system uses the account information for all billing lines, with the exception of billing lines for time and materials. You can enter a specific account to override the default account information.</td>
</tr>
<tr>
<td></td>
<td>Note: When this flag is set to 1, the account information in the fold area identifies a cost account. In this case, the system processes the billing line against the Account Derivation table during journal generation, similar to a billing line for time and materials.</td>
</tr>
</tbody>
</table>

Setting Up Recurring Billing Amounts

| From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202) |

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**

- Set up a lump sum billing line on your contract
To define recurring billing amounts

On Contract Billing Line Details
1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Identify a billing line for lump sum.

3. Choose More Details (F4).

4. In the fold area for the lump sum billing line, complete the following fields:
   - Recurring Amount
   - Recurring Code

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring Billing Amount (RRBA)</td>
<td>A fixed amount you want to bill with each recurring frequency.</td>
</tr>
<tr>
<td>Recurring Billing Code (RRBC)</td>
<td>A user specified code that determines the frequency of the recurring billing amount for the billing line, such as M, MO, or MON for monthly. You can generate invoices that include a recurring billing amount by specifying the recurring billing code in the processing options for the Invoice Generation program or in the Invoice Adjustment window. Note: The Recurring Billing Code is not a user-defined code. You must maintain your own record of the codes that you specify in this field.</td>
</tr>
</tbody>
</table>

See Also
- Creating Invoices Automatically
- Creating Invoices Manually

Defining Unit Price Billing Lines

Unit price billing lines define billing terms that are based on a quantity and price per unit. When you set up a unit price billing line, 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.

The system can also use the unit price billing line to automatically calculate the revenue amount for revenue recognition. To do this, you must assign the billing line a cost account in addition to the cross-reference. The cost account directs the system to the account derivation rules for the revenue journal entry.

When you set up a unit price billing line, 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 (AAI) BC02 for unit price

If you set the system constants to recognize revenue for 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 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 to calculate the revenue and billing amounts

## Setting Up Unit Price for Manual Calculation

To set up unit price billing lines for manual calculation

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
     If you inquire using only Contract Number, then Change Order 000 displays.

2. Complete the following fields for the billing line:
   - Billing Line
- Description
- Pricing Type
- Unit of Measure

Use the pricing type U or 2 for unit price.

3. Complete two of the following fields:
   - Schedule of Values
   - Quantity
   - Unit/Price

   After you complete two of the fields, the system calculates the value for the remaining field.

4. Choose More Details (F4).

5. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

6. Complete the following optional fields:
   - Retainage Rule
- Subledger
- Subledger Type
- Eligibility Override
- Account Override

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>UM (Unit of Measure)</td>
<td>A user-defined code (UDC 00/UM) that identifies the unit of measurement for an amount or quantity. For example, it can represent a barrel, box, cubic yard, gallon, an hour, and so on.</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>This field applies to billing lines for unit price. Complete the field to indicate the unit of measure on which the billing amount is based.</td>
</tr>
<tr>
<td>Units (U)</td>
<td>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.</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>The field applies to billing lines for unit price. Complete the field to identify the number of units on which the billing amount is based.</td>
</tr>
<tr>
<td>Unit Price (UP)</td>
<td>The list or base price you charge for one primary or pricing unit of this item.</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>You can use the Unit/Amount Display Toggle to alternately review the Schedule of Values field and the Amount - Price per Unit field.</td>
</tr>
<tr>
<td></td>
<td>Use the processing options for the Billing Line Details program to:</td>
</tr>
<tr>
<td></td>
<td>- Select which of these fields displays initially when you first access the form.</td>
</tr>
<tr>
<td></td>
<td>- Set up a warning or error message when the Schedule of Values does not equal the Job Cost budget amounts for the account cross-referenced to this billing line.</td>
</tr>
<tr>
<td></td>
<td>- Specify the ledger type to use for the Job Cost budget edits. If you leave the option blank, the system uses the Revised Budget Ledger Type (UDC 51/RB).</td>
</tr>
</tbody>
</table>
What You Should Know About

Schedule of values and unit price

You can set a processing option to control whether the system displays the Schedule of Values field or the Unit/Price field in the fold area. You can also choose Unit/Amount Display Toggle (F18) to switch the location of those two fields.

Setting Up Unit Price to Calculate the Billing Amount

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

You can set up unit price billing lines 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:

1. Earned Units-to-Date = Actual Quantity-in-Place-to-Date
2. Current Units = Earned Units-to-Date - Previously Billed Units
3. Unit Price = Schedule of Values / Scheduled Units
4. Current Billing Amount = Current Units X Unit Price

Another way to look at the calculation is:

Current Billing Amount = (total units – previously billed units) * unit price

To set up unit price for automatic billing calculation

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Complete the following fields for the billing line:
   - Billing Line
Work with Independent Billing Lines

- Description
- Pricing Type
- Unit of Measure

Use the pricing type U or 2 for unit price.

3. Complete two of the following fields:
   - Schedule of Values
   - Quantity
   - Unit/Price

   After you complete two of the fields, the system calculates the value for the remaining field.

4. Choose More Details (F4).

5. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

6. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override

7. Use the Add action if the billing line is the first for the contract. Use the Change action to add subsequent billing lines to the contract.

8. Use the Inquire action to relocate the contract.

9. Choose Cross Reference (Option 2) for the unit price billing line.
10. On Cross Reference Table, complete the following fields for only one cost account:

- Business Unit
- Subsidiary
- Object
- Subledger
- Subledger Type

**Caution:** The account number you specify in the cross-reference should be specified as non-billable in the Account Master table (F0901). If you specify a billable account, you risk double-billing for the billing line. The results will be unpredictable.

---

**What You Should Know About**

**Schedule of values and unit price**

You can set a processing option to control whether the system displays the Schedule of Values field or the Unit/Price field in the fold area. You can also choose Unit/Amount Display Toggle (F18) to switch the location of those two fields.

**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. To do this, choose Basic Budget Setup. The system displays the Original Budget Entry form from the Job Cost system.
Locating account information

If you do not know the account number that you want to include in the cross-reference for a billing line, you can locate and select accounts from a list of accounts set up for your system. To do this, choose Pick Accounts (F2). The system displays the Cost Code/Type Search form. After you locate and select the account to add it to the Cross Reference Table.

Setting Up Unit Price to Calculate Revenue and Billing Amounts

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)

You can set up unit price billing lines that the system can use to calculate both revenue and billing amounts automatically. The system calculates the revenue amount during the revenue recognition process and the billing amount during the invoicing process.

To automatically calculate the revenue and billing amounts, you must set up:

- A cross-reference from the billing line to an account. The system uses the account cross-reference to determine the quantities in place.
- A cost account for the billing line. The system uses the cost account to retrieve the correct account derivation rules for the revenue and invoice journal entries.

Before You Begin

- Verify that the system constants are set up for revenue recognition. See Setting Up System Constants.
- Verify that the account derivation rules are defined for revenue recognition. See Defining Account Derivation Rules.

To assign a cost account to unit price

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.
2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Unit of Measure
   Use the pricing type U or 2 for unit price.
3. Complete two of the following fields:
   - Schedule of Values
   - Quantity
   - Unit/Price
   After you complete two of the fields, the system calculates the value for the remaining field.

4. Choose More Details (F4).

5. To specify a cost account, complete the following fields:
   - Revenue BU
   - Subsidiary
   - Object
   - Account Override
   To recognize revenue on a non-T&M billing line, Account Override must be 1. The text for the account number changes from Rev Acct to Cost Acct when you save the changes to the billing line.

6. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

7. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override

8. Use the Add action if the billing line is the first for the contract. Use the Change action to add subsequent billing lines to the contract.

9. Use the Inquire action to relocate the contract.

10. To set up the cross-reference, choose Cross Reference (Option 2).

11. On Cross Reference Table, complete the following fields for only one account:
   - Business Unit
   - Subsidiary
   - Object
   - Subledger
Work with Independent Billing Lines

- **Subledger Type**
  Payroll and equipment information are not applicable.

  __Caution:__ The accounts that you specify in the cross-reference should be specified as 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.

---

**What You Should Know About**

**Schedule of values and unit price**
You can set a processing option to control whether the system displays the Schedule of Values field or the Unit/Price field in the fold area. You can also choose Unit/Amount Display Toggle (F18) to switch the location of those two fields.

---

**Defining Milestone Billing Lines**

From Contract Billing Processing (G52), choose **Contract Billing Line Details (P5202)**

When you define a milestone billing line, 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 milestone billing line, 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 (AAI) 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 milestone billing line with 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. When you know the specific dates for billing, you can specify them on the billing events.

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

```
Schedule of Values X Percentage for the Milestone Event
```

The schedule of values for the milestone billing is the amount of the overall billing for the billing line.
Milestone billing lines are only eligible for the invoicing process and are not eligible for the separate revenue recognition process.

See Also

- Working with Prepayments to cross-reference a draw to a milestone billing line
- Setting up milestone billing lines consists of the following:
  - Defining billing lines for milestone billing
  - Defining billing events for milestone billing

To define billing lines for milestone billing

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number

   If you inquire using only Contract Number, then Change Order 000 displays.

2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Schedule of Values

   Use pricing type M or 6 for milestone billing.

3. Choose More Details (F4).
4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

5. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override

After you enter the information, the system automatically assigns 1 to the Eligibility Override field in the fold area. The system does not let you change this code because you use the milestone billing pricing type for billing only. It is not applicable to revenue recognition.

The system highlights the Pricing Type field until you define the milestones, or billing events, for the milestone billing line.
To define billing events for milestone billing

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number

   If you inquire using only Contract Number, then Change Order 000 displays.

2. Choose Cross Reference (Option 2) for a milestone billing line.

3. On Milestone/Progress Billing, complete the following fields for each billing event:
   - Billing Event
   - Event Description
   - Percent Complete
   - Estimate Complete (optional)
   - Sequence Number (optional)

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing Event (EVNT)</td>
<td>The name, number or other identifier of the event.</td>
</tr>
</tbody>
</table>
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent Complete (PC)</td>
<td>This field identifies the percentage of the total job or project that is complete. Form-specific information: This field specifies the percentage of the schedule of values to bill. Enter the percentage as a whole number. For example, you enter 25 percent as 25. For milestone billing lines, the system multiplies this percentage by the schedule of values to determine the invoice amount.</td>
</tr>
<tr>
<td>Estimate Complete (DECO)</td>
<td>The estimated date for completion of this milestone event.</td>
</tr>
<tr>
<td>Seq Number (SEQ)</td>
<td>A number that the system uses to sequence information for display on Milestone/Progress Billing.</td>
</tr>
</tbody>
</table>

### What You Should Know About 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 (yes) 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 Creating Invoices Automatically and Creating Invoices Manually* for more information about cutoff dates.

### Defining Progress Billing Lines

From Contract Billing Processing (G52), choose Contract Billing Line Details (P5202)
When you define a progress billing line, 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 progress billing lines, 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 (AAI) 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:

\[
\text{Schedule of Values} \times \text{Cumulative Percentage of Completion} - \text{Total of Previously Billed Amounts}
\]

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

**See Also**

- *Working with Prepayments* 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 a billing event for a progress billing line

**To define a billing line for progress billing**

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
     If you inquire using only Contract Number, then Change Order 000 displays.

2. To define the billing line, complete the following fields:
   - Contract Billing Line
- Description
- Pricing Type
- Schedule of Values

Use the pricing type P or 7 for progress billing.

3. Choose More Details (F4).

4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

5. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override

After you enter the information, the system automatically assigns 1 to the Eligibility Override field in the fold area. The system does not let you change this code because
you use the progress billing pricing type for billing only. It is not applicable to revenue recognition.

The system highlights the Pricing Type field until you define the events for progress billing.

**To define a billing event for a progress billing line**

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number

   If you inquire using only Contract Number, then Change Order 000 displays.

2. Choose Cross Reference (Option 2) for a progress billing line.

3. On Milestone/Progress Billing, complete the following fields for each billing event:
   - Billing Event
   - Event Description
   - Percent Complete
   - Estimate Complete (optional)
What You Should Know About

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 Creating Invoices Automatically and Creating Invoices 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 in the cross-reference for the billing line to override a previously defined progress billing line in the same contract. To do this, you must:

- Define the progress billing line on a subsequent change order for the contract
- Define the billing events for billing for the new billing line
- Cross-reference the new progress billing line to the previously progress billing line

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

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 billing lines include only a portion of the information that the system needs to calculate a billing amount. To calculate a billing amount for dependent billing lines, 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 pricing type you use to define a billing line determines whether or not the billing line is dependent. You can use the following pricing types to define dependent billing lines on a contract:

- Prepayments (draws)
- Fees
- Components

Working with dependent billing lines consists of the following tasks:

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

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 prepayment billing line on a contract, your company agrees to apply the amount of the prepayment against the total billing amount for the contract.

You can set up prepayment billing lines to define billing terms for rated draws and direct draws.
Work with Dependent Contract Billing Lines

**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 at the time the work for the contract is complete.

Working with prepayments for contracts consists of the following tasks:

- Defining a direct draw billing line
- Defining a rated draw billing line

**Defining a Direct Draw Billing Line**

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

You define a direct draw billing line 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 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. The position of the billing line for the direct draw must precede the cross-referenced billing line in the same change order or occur in a previous change order.

You can set up cross-references between direct draw billing lines and the following billing lines:

- Unit Price (independent)
- Lump Sum (independent)
- Milestone (independent)
- Progress Billing (independent)
- Time and Material (independent)
- Component (dependent)
- Fee (dependent)

You apply the reduction beginning with the first billing until the entire schedule of values for the draw is fully applied to the cross-referenced billing line. 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:

1. 10,000 Billing - 10,000 Direct Draw reduction = 0 Billing Amount
2. 10,000 Billing - 10,000 Direct Draw reduction = 0 Billing Amount
3. 10,000 Billing - 2,000 Direct Draw reduction = 8,000 Billing Amount

After you set up a direct draw billing line, 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
- Default account based on the Automatic Accounting Instruction (AAI) BC06 for direct draw

**To define a direct draw billing line**

On Contract Billing Line Details
1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
     If you inquire using only Contract Number, then Change Order 000 displays.
2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Schedule of Values
     Use the pricing type D or 8 for a direct draw.
     The direct draw reduces the billing amount. You must enter a negative amount in the Schedule of Values field, such as -10,000.
3. Choose More Details (F4).
4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

5. Complete the following optional fields:
   - Retainage Rule
   - Subledger
   - Subledger Type
   - Eligibility Override
   - Account Override

   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 in the detail area. You cannot change this code.

6. Choose the Draw Line Cross Reference option (Option 3) for an independent billing line.
7. On Draw Line Cross Reference, choose Select (Option 4) for the direct draw billing line that you want to cross-reference to the independent billing line. An X in the Option field indicates that the draw line is cross-referenced to the billing line shown in the header portion of Draw Line Cross Reference.

The Change Number that the system displays in the Draw Line Cross Reference window is the change number for the independent billing line.

Defining a Rated Draw Billing Line

You can define a rated draw billing line to represent a prepayment or advance deposit that your company might require from the customer when the contract is signed.

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 of 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 billing line for a rated draw. The dependent billing line reduces the billing amount of another independent 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 dependent rated draw billing line and the independent billing line. The position of the billing line for the rated draw must precede the cross-referenced independent billing line in the same change order or occur in a previous change order.

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

- Unit price
- Lump sum
Work with Dependent Contract Billing Lines

- **Milestone**
- **Progress billing**

Rated draws usually relate 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:

\[ \text{Schedule of Values} \times \text{Percentage of Completion} - \text{Prior Reduction Amounts} \]

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:
1. \[ 100,000 \times .10 = 10,000 \] (initial billing amount)
2. \[ 5,000 \times .10 = 500 \] (prepayment reduction)
3. \[ 10,000 - 500 = 9,500 \] (billing amount after reduction)

When you define a rated draw billing line, the system automatically 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
- Default account based on the Automatic Accounting Instruction (AAI) BC07 for rated draw

**To define a rated draw billing line**

On Contract Billing Line Details
1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.
2. Complete the following fields for the billing line:
   - Billing Line
   - Description
   - Pricing Type
   - Schedule of Values
   Use the pricing type R or 9 for rated draw.
   The rated draw reduces the billing amount. You must enter a negative amount in the Schedule of Values field, such as -10,000.
3. Choose More Details (F4).
4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
Subsequent fields:
- Subsidiary
- Object
- A/R Offset
- Tax Explanation
- Rate/Area

5. Complete the following optional fields:
- Retainage Rule
- Subledger
- Subledger Type
- Eligibility Override
- Account Override

Rated draw billing lines apply to billing amounts only. After you enter the information, the system automatically assigns 1 to the Eligibility Override field in the fold area. You cannot change this code.

6. Choose the Draw Line Cross Reference option (Option 3) for an independent billing line.

7. On Draw Line Cross Reference, choose Select (Option 4) for the rated draw billing line that you want to cross-reference to the independent billing line.

The Change Number that the system displays in the Draw Line Cross Reference window is the change number for the independent billing line. An X in the Option field indicates that the draw line is cross-referenced to the billing line shown in the header portion of Draw Line Cross Reference.

**Defining Fee Billing Lines**

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. You can base fees on a percentage of the costs that you incur or the amounts you bill for a contract.
Fee billing lines are dependent on other billing lines. To calculate billing amounts for a fee billing line, you must set up a cross-reference between the fee billing line and other independent billing lines within the contract. You must also assign a rate code or a fee percentage to the fee billing line. The rate code specifies a table of fee percentages that the system uses for the calculation. The rate code is based on an effective date range. You can define a rate code before or at the time you define a cross-reference for a fee line.

If you use revenue recognition, the system can calculate the revenue amount for the fee when you generate revenue journals. To do this, you must assign a cost account to the fee billing line. The system uses the cost account to retrieve the correct account derivation rules to calculate the revenue amount.

Defining fee billing lines consists of the following tasks:
- Defining fees for billing amounts
- Defining fees for revenue and billing amounts

**Cross-References for Fees**

To apply a fee to a contract, you must set up a cross-reference between the dependent fee billing line and other independent billing lines within the contract against which you want to apply the fee. You can set up a cross-reference to the same billing line from multiple fee billing lines.

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

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

When you create revenue journals, the system uses either the revenue amount or the cost amount to calculate the fee amount. For example:

\[
\text{Fee Amount} = \text{Fee Percent} \times \text{Total Revenue Amount for the Cross-Referenced Billing Lines}
\]

**Before You Begin**

- Enter the billing lines that you want to cross-reference

**To define a rate code for a fee**

- From Contract Billing Processing (G52), enter 29
- From Contract Billing System Setup (G5241), choose Table Information
- From Contract Billing Table Information (G5243), choose Fee Rate Code Table

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

On Fee Rate Code Table
Work with Dependent Contract Billing Lines

1. To identify the rate code, complete the following fields:
   - Rate Code
   - Description

2. Complete the following fields:
   - Effective Date From
   - Effective Date Through
   - Percent

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Description | A user defined name or remark. A brief description of the rate code.  
*Form-specific information*  
This description appears on the Valid Rate Codes Selection window.  
Date From | The beginning date for which the transaction or code is applicable.  
Date Thru | The ending date for which the transaction or code is applicable. |
What You Should Know About

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 following dates and respective programs to determine the applicable fee percentage.

- Cutoff date in the Revenue Journal Generation (P48132) program
- Application date in the Invoice Generation (P52800) program
- Application date in the Invoice Adjustment Window (P48DO)


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 amounts billed for one or more independent billing lines. You can base the fee billing line on a percent of either the costs incurred or the amounts invoiced for a contract.

When you define fee billing lines, the system supplies the following default information:

- Tax explanation, tax or geographical area, job, and accounts receivable company from the contract master information
- Accounts receivable offset from the customer address
- Default account based on the Automatic Accounting Instruction BC03 for fees

Defining fees for billing amounts consists of the following:

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

To set up a contract billing line for a fee

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

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:

   - Contract Number
Work with Dependent Contract Billing Lines

- Change Order Number
  If you inquire using only Contract Number, then Change Order 000 displays.

2. Complete the following fields for the billing line:
   - Contract Billing Line
   - Description
   - Pricing Type
   Use the pricing type F or 4 for a fee.

3. Complete the following optional field:
   - Schedule of Values

4. Choose More Details (F4).

5. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

6. Complete the following optional fields:
   - Retainage Rule
   - Subledger
Work with Dependent Contract Billing Lines

- Subledger Type
- Eligibility Override
- Account Override

The system highlights the Pricing Type field until you define the cross-reference for the billing line.

**To set up a cross-reference for a fee**

From Contract Billing Processing (G52), choose **Contract Billing Line Details (P5202)**

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Choose Cross Reference for a fee billing line (Option 2).
   
   Initially, the detail portion is blank because you have not yet defined a cross-reference with any billing lines.

3. On Fee Cross Reference, if you have not already defined a rate code and you would like to do so, then choose Rate Code Revisions (F15) and add a rate code.

4. On Fee Line Cross Reference, complete the following fields that are applicable to your system setup:
   - Invoice Fee Basis
   - Revenue Fee Basis

   If the fee basis is cost, the fee billing line must reference only T&M billing lines.
You set the Independent Revenue/Invoice system constant to control whether the values you specify for these fields can be different.

If the Independent Revenue/Invoice system constant is set so the invoice and revenue amounts are always equal, then the invoice and revenue fee basis values must be 1 (use invoice/revenue amount); the fee cannot be based upon cost.

See *Setting Up System Constants*.

5. Complete one of the following fields:
   - Percent Fee
   - Rate Code

6. Choose Cross Reference Selection (F8) to locate billing lines that are eligible for fees.

   The position of the independent billing line that you set up for the cross-reference must either precede the fee billing line in the same change order or occur in a previous change order.

   ![Cross Reference Selection](image)

6. On Fee Line Cross Reference Selection, choose Select (Option 4) for one or more billing lines that you want to add to the cross-reference.

   The system displays the change order number for the fee line on Fee Line Cross Reference Selection.

7. Choose Exit Program (F3).

   The system removes the billing lines from the list and adds them to the cross-reference.

8. Access the Fee Cross Reference form to verify the cross-reference information.
Work with Dependent Contract Billing Lines

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoice Fee Basis (FBAS)</td>
<td>The fee basis the system uses to derive the billing amount for the fee billing line. Valid values:</td>
</tr>
<tr>
<td></td>
<td>1 Use invoice amount</td>
</tr>
<tr>
<td></td>
<td>2 Use cost amount</td>
</tr>
<tr>
<td>Revenue Fee Basis (RFBS)</td>
<td>The fee basis the system uses to derive the revenue amount for the fee billing line.</td>
</tr>
<tr>
<td></td>
<td>1 Use revenue amount</td>
</tr>
<tr>
<td></td>
<td>2 Use cost amount</td>
</tr>
<tr>
<td></td>
<td>If you leave this field blank, the system uses the revenue amount.</td>
</tr>
<tr>
<td>% Fee (MKRP)</td>
<td>The percent of markup the system uses to calculate billing amounts for fee billing lines. You can enter a percentage in this field or a rate code in the Rate Code field. Enter the percentage as a whole number. For example, enter 10 to indicate a 10 percent markup.</td>
</tr>
</tbody>
</table>

What You Should Know About

Deleting a cross-reference

To remove contract billing lines that you do not want to include in the cross-reference, choose Delete on the Fee Cross Reference form. The system:

- Removes the billing lines from Fee Cross Reference
- Displays the billing line on Fee Cross Reference Selection

Setting Up Fees for Revenue and Billing Amounts

You set up dependent contract billing lines for fees to bill for an amount that you charge your customer in addition to the amounts for one or more independent billing lines.

If you use both the revenue recognition and the billing processes, you must assign a cost account to each fee billing line that you define. The system uses the cost account to retrieve account derivation rules. The account derivation rules determine how the system creates journal entries for billing and revenue amounts.

The revenue fee amount is calculated only when you generate journals for revenue recognition.
Before You Begin

- Verify that the system constants are set up for revenue recognition. See Setting Up System Constants.
- Verify that the accounting rules are defined for revenue recognition. See Defining Account Derivation Rules.
- Define a billing line for a fee. See Defining a Fee Billing Line for Billing.

To assign a cost account to a fee

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.
2. Identify a fee billing line.
3. Choose More Details (F4).
4. In the detail area of the fee billing line, complete the following fields:
   - Revenue BU
   - Subsidiary
   - Object
   - Account Override

Enter a 1 in the Account Override field to direct the system to use the account derivation rules to determine the accounts for journal entries during revenue and invoice processing. The system uses the code you enter in the Account Override field to change the description of the Revenue BU field to the Cost Account field.
Work with Dependent Contract Billing Lines

What You Should Know About

Calculating revenue for fee lines

You can base fee billing lines on the cost amounts, revenue amounts, or invoice amounts for the billing lines in the cross-reference for that fee. The system does not calculate the revenue that is related to fee billing lines until you create:

- Journals for revenue recognition
- Invoices

However, if the fee billing line is cross-referenced to a lump sum or unit price billing line that is eligible for revenue processing, the system can calculate the revenue amount for the fee billing line when you accumulate costs for billing.

See also:

- Setting Up System Constants
- Defining Lump Sum Billing Lines
- Defining Unit Price Billing Lines
- Accumulating Costs for Billing

Defining Contract Billing Lines for Components

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

A component is a markup amount that you link to a Time and Materials (T&M) billing line. The billing amount for components are included in the amount for the T&M billing lines.

To display the component amounts that are included in T&M billing lines as a separate line on the invoice for the contract, you must set up a billing line for components.

For example, when you set up a T&M billing line to calculate the billing amount for payroll costs, the amount could include a component markup of 10 percent for overhead. Because you have agreed to bill your client for the overhead separately from the payroll costs, you enter a component billing line to separate the payroll and overhead amounts.

When you define component billing lines, the system automatically supplies the information for the job and the accounts receivable company based on the contract master.

Defining component billing lines consists of the following:

- Setting up a billing line for a component
- Setting up a cross-reference for a component

Cross-References for Components

After you set up component billing lines, you must:
• Set up a cross-reference from the billing line to a component code. The component code specifies the rules for the markup calculation.

• Set up a cross-reference from the component billing line to a T&M billing line that you have previously defined for the same contract.

When you create invoices or generate revenue recognition, the system uses the cross-reference information to separate the component markup from the T&M billing line.

---

**Caution:** If you do not set up the correct cross-references for the previously defined T&M billing line, the system does not separate the component and T&M amounts when you generate invoices.

---

When you define a cross-reference for a component, the component codes T&M billing lines must correspond to one another. To determine whether the component codes and T&M billing lines correspond to one another, compare the information on the following forms:

**Component Table**
Identify the table that contains the component codes.

**Cost Plus Markup Table**
Identify the markup rules for which the component table has been assigned in the detail area.

---

**Before You Begin**

• Define T&M billing lines for your contract. See *Defining Contract Billing Lines for Time and Material (T&M)*

• Set up component markup rules for component codes. See *Defining Component Rules*

• Assign component tables to markup rules in the Cost Plus markup table. See *Defining Markup Rules*

---

**To set up a billing line for a component**

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   • Contract Number
   • Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Complete the following fields for the billing line:
   • Contract Billing Line
   • Description
   • Pricing Type
   Use the pricing type C or 5 for components.

3. Choose More Details (F4).
4. To override default information, complete the following optional fields:
   - Revenue BU or Cost BU
   - Subsidiary
   - Object
   - A/R Offset
   - Tax Explanation
   - Rate/Area

   The system highlights the Pricing Type field until you define the cross-reference for component billing line.

**To set up a cross-reference for a component**

On Contract Billing Line Details

1. To locate a contract and change order, complete the following field:
   - Contract Number
   - Change Order Number

   If you inquire using only Contract Number, then Change Order 000 displays.

2. Choose Cross Reference (Option 2) for a component billing line.
3. On Component Cross Reference, choose Select Code (Option 4) for the applicable component codes. The system displays an X in the Option field for each code that you selected.

4. Choose Set Up Component Code Pay Item Cross-Reference (Option 1) for each component code that displays an X to specify the previously defined T&M billing lines. The system displays Component Code Pay Item Cross Reference with only T&M billing lines. The billing lines must precede the component billing line in the same change order or occur in a previous change order.

5. On Component Code Pay Item Cross Reference, choose Select (Option 4) for one or more T&M billing lines that you want to add to the cross-reference. The system displays an X in the Option field for each billing line that you select.

6. Choose the Exit Program function (F3) to return to Component Cross Reference, then Exit Program (F3) again to return to Contract Billing Line Details.

See Also

- Defining Component Rules (P4860)
- Adding Component Rules to Cost Plus Markup Rules (P48096)
- Defining Markup Rules (P48096)
Work with Contract Information

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
- Associate text with a billing line to add further explanation or instructions related to the billing
- Copy the text from one billing line to another billing line to save time and minimize data entry errors
- Copy billing detail from the Change Management system

Working with contract information consists of the following tasks:

- Searching for contract information
- Reviewing the status of contract billing information
- Revising billing lines
- Entering text for a billing line
- Copying text for a billing line
- Copying detail from the Change Management system

Searching for Contract Information

From Contract Billing Processing (G52), choose Contract Search (P52210)

Alternately, you can access Contract Search from the following forms:

- Contract Master Revisions (F10)
- Contract Log Information (F10)
- Contract Billing Line Details (F10)
- Contract Billing Line Status (F10)
- Contract History (F10)
- Cost Plus Markup Table (F1 in Table Key field)
Work with Contract Information

- Account Derivation Table (F1 in Table Key field)
- Change Request Revenue Detail (Option 2)

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 (Option 1), to review and revise contract information
- Contract Billing Line Status (Option 2), to review the billing, payment and retainage information for a contract

See Also

- Creating the Master Record for a Contract (P5201)
- Entering Supplemental Contract Information (P5201)
- Working with Contract Logs (P5201)
- Reviewing Contract Billing Information (P52200)
To search for contract information

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

From Contract Billing Processing (G52), choose Contract Billing Line Status (P52200)

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
- Received
- Retained
- Earned
- Not yet billed

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

On Contract Billing Line Status

![Contract Billing Line Status](image)

1. 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
   - Amount
   - Sequence

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

   If multi-currency processing is activate in your General Accounting constants, you can also specify the currency mode (domestic or foreign) for displaying the amounts.

3. To display the description for the billing line, choose Pay Item/Description Toggle (F17).
4. To review additional balance amounts, choose Billed/Earned/Unbilled Amount Toggle (F18).

5. To review the related billing detail, such as the paid and unpaid amounts, choose Audit Trail (Option 1) for a billing line.

6. On Audit Trail Inquiry, complete the following fields to limit the information you have displayed or to review the information for a different billing line:
   - G/L Date
   - Paid Y/N
   - Contract Number
   - Change Number
   - Line Number

   If multi-currency processing is activate in your General Accounting constants, you can also specify the currency mode (domestic or foreign) for displaying the amounts.
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Display Amount/Units/Unit Cost (#UC) | A code that controls how the system displays contract amounts, units and unit rates. The information can appear on the primary line or in the detail area. Valid alphabetic codes are:  
A  Amounts appear on the primary line and units appear in the detail area.  
Q  Units appear on the primary line and amounts appear in the detail area.  
U  Unit rates appear on the primary line and units appear in the detail area. Valid numeric codes are:  
1  Amounts appear on the primary line and units appear in the detail area.  
2  Units appear on the primary line and amounts appear in the detail area.  
3  Unit rates appear on the primary line and units appear in the detail area. |
| Sequence Code (#SEC)          | A code that controls the sequence in which the system displays the records. Valid codes are:  
blank  Change order number and billing line number with subtotals by change order  
1  Change order number and billing line number with subtotals by billing line  
2  Change order number and billing line number without subtotals |
| Line Number (LNID)            | A number that identifies multiple occurrences (such as line numbers on a contract). In Contract Billing, the system assigns a line number to each billing line. You cannot change the line numbers.  
 FORM-SPECIFIC INFORMATION  
A location number that identifies the location of the information on the contract. |

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**Revising Contract Billing Lines**

From Contract Billing Processing (G52), choose **Contract Billing Line Details (P5202)**
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 allows only limited changes to the 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 billing line 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 001, 002, and so on.
To revise billing lines

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Revise the billing line.
   You cannot revise the following fields:
   - Billing Line
   - Pricing Type

What You Should Know About

Adding a billing line to a contract or change order
To add a billing line between two existing billing lines, choose Insert Contract Billing Line (Option 6) 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 billing lines
The system prevents you from deleting billing lines that have been included in an invoice.
Revising Contract Billing Lines

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.

Processing Options


Entering Text for a 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

The system stores the text for billing lines in the Billing Line Text table (F52024).

To enter text for a billing line

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number
   
   If you inquire using only Contract Number, then Change Order 000 displays.

2. Choose Text (Option 1) for a billing line.
3. On Contract Billing Line Text, enter the text.

After you enter the free-form text, the system highlights the Option field next to the billing line to indicate that text is associated with that line.

What You Should Know About

Formatting text
You can print the text you enter for a billing line on an invoice exactly as it appears on the Contract Billing Line Text form.

Inserting a blank line
You can insert a blank line between two existing lines of text to enter new information. The system inserts a line directly below the line on which you choose Insert Line (Option 1).

Deleting text
You can use two methods to delete text you have entered for a transaction:
- To delete all the text, use the Delete action
- To delete individual lines of text, choose Delete Line (Option 9) for the respective lines

Renumbering lines of text
The system automatically assigns a sequence number to each line of text. The sequence number is not displayed on the form. If the system prevents you from inserting a blank line, choose Renumber Text. The system updates the numbers to prepare the text for additional lines.
Copy text for a contract billing line

On Contract Billing Line Details
1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number

   If you inquire using only Contract Number, then Change Order 000 displays.
2. Choose Text (Option 1) for a billing line.

4. On Copy Billing Line Text, complete the following field to identify the contract from which you want to copy text:
   - Contract Number
5. Complete the following optional field:
   - Change Number
The system displays the related billing lines that include associated text.

6. On Copy Billing Line Text, choose Detail (Option 1) for the billing line to display all the lines of text.

![Image of billing line text]

7. Choose Select (Option 4) for one or more lines of text to copy specific lines.

The system automatically updates the Contract Billing Line Text window with the lines of text that you specify.

**Copying Detail from the Change Management System**

If you use the Change Management system, you can use one source to control change requests for any additional work that a client requests for a job. In this way, you enter changes only once for a job. Based on the job information, you can update:

- Budgets in the Job Cost system
- Information for the billing terms in the Contract Billing system

You can copy the detail from change requests in the Change Management system to billing lines in existing contracts. The change request is then immediately available for you to bill in the Contract Billing system.

**Caution:** The system only copies the specified information from the Change Management system to your contract. The system does not perform edits on the information.

You must verify that:

- Duplicate numbers for the billing lines do not exist in the contract.
- The pricing type is correct for the resulting billing line. The default pricing type from the Change Management system is lump sum.
- You have not added the same billing information more than once.
Before You Begin

- Create the master record for a contract. See Creating the Master Record for a Contract.
- Enter billing lines for the contract.
- Enter a change request in the Change Management system. See About Change Requests in the Change Management Guide.

To copy detail from the Change Management system

On Contract Billing Line Details

1. To locate a contract and change order, complete the following fields:
   - Contract Number
   - Change Order Number

2. Choose Change Management Inquiry (F8).
   The system displays Change Request Revenue Detail with any change requests that exist for the contract.

3. On Change Request Revenue Detail, choose Return with Number (Option 4) for the change request.

4. On Contract Billing Line Details, verify and complete the fields that relate to the resulting billing lines.

5. Do one of the following:
• Use the Add action if you are copying the information to a new change order
• Use the Change action if you are copying the information to an existing change order

See Also

• Copying Information to Contract Billing (P53310) in the Change Management Guide.
3 Billing
Overview to Billing

Objectives

- To understand the Billing Workfile
- To understand the origination of costs for time and material
- To apply markups to costs for time and materials and related components
- To create, print, and void invoices
- To create and record accounting journal entries

About the Billing Process

The typical billing process includes accumulating costs, creating and printing invoices, and recording journal entries for income and receivables.

When you perform the billing process using the Contract Billing system, you can:

- Accumulate billable costs from multiple systems, such as Accounts Payable, Equipment/Plant Management, and Payroll, without re-entering the cost information into the billing system
- Calculate markup amounts and taxes based on a hierarchy of multiple user defined rules
- Revise workfile transactions for T&M costs, including components
- Calculate the billing amounts at the time you create invoices
- Facilitate immediate billing upon entering the costs into the system
- Print invoices to customer specifications
- Automatically create and record the journal entries for the Accounts Receivable and General Accounting systems that result from billing

The billing process consists of the following tasks:

- Accumulating costs
- Reviewing the workfile
- Revising the workfile
- Working with the workfile history
- Generating invoices automatically
- Working with invoices
- Creating invoices manually
Overview to Billing

- Printing invoices
- Working with A/R and G/L entries
- Working with final invoices

About Billing for Contracts

When you set up a contract, you define billing lines for costs related to time and materials (T&M) and costs that are not related to time and materials (non-T&M).

**T&M billing lines**
The portion of a contract that you bill for the actual costs of goods and services plus specific markup amounts for the work. The actual costs include payroll-based costs, such as labor and burden, and non-payroll-based costs, such as the equipment and material required to complete the contract.

**Non-T&M contract billing lines**
The portion of the contract that is not related to time and material, such as fixed fees, prepayments, and quantities. You can define the following non-T&M contract billing lines:
- Lump sum
- Milestone and progress billing
- Direct and rated draws
- Unit price
- Fees

Component billing lines directly relate to costs for time and materials. However, the system processes component billing lines similar to non-T&M billing lines.

The tasks that you perform for billing depend on whether the billing lines that you set up for your contracts are for costs that are related to time and materials.

If your contracts include time and materials (T&M), you begin the billing process by accumulating costs. When you accumulate costs, the system creates workfile transactions. You can then use the workfile transactions to create invoices automatically.

If your contracts do not include T&M billing lines, you do not need to accumulate costs before initiating the billing process. Instead, you begin the billing process by creating invoices automatically. When you create invoices automatically, the system calculates billing amounts.

You can always create invoices manually, whether your contracts include costs for time and materials or not.

Before You Begin

- Set the Journal Generation Control system constant to allow invoicing (billing)
- Create the contract master records
- Define contract billing lines
What You Should Know About

Alternate displays and system constants

Many of the forms you use in the Contract Billing system change in functionality and appearance, depending on the way you set up your system constants. For example, if you set your system constants for billing (invoicing) only, the forms and functionality apply only to the billing process.

See Also

- Setting Up System Constants (P48091)
Generating the Workfile

Understanding Workfile Information

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

Workfile Generation

The Billing Detail Workfile (F4812) is a repository of transactions used by the system to invoice customers, recognize revenue, and allocate costs. 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).

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 jobs (business units) or work orders associated with the transactions.
Generating the Workfile

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

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.

For the system to create workfile transactions from payroll transactions, all information in the Payroll and Employee tables must be identical to the Account Ledger table. The Payroll system allows summarized accounting entries; therefore, the billing system must retrieve detail information from the Payroll system 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) table to create the workfile transactions:

- Batch Number
- Account Number
- G/L Date
- Subledger Information

Caution: After the system processes payroll, the fields above should not be changed or deleted in the F0911 table.

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 the system to automatically create burden transactions in the workfile:

- The Business Unit Burden Flag in the Payroll system must be set to create burden entries in the Burden Distribution File table (F0724).
- A PDBA must be set up for burden. See Setting Up Deductions, Benefits, and Accruals in the Workforce Management Foundation Guide.
- 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 System Constants table (F48091) must be set to process burden.

Alternatively, in Contract Billing only, you can manually set up billing lines for burden. Creating burden transactions this way allows you to display billing lines for burden separately from the associated billing lines for labor. See Defining a Contract Billing Line for Burden in the Contract Billing Guide.

You use a billing constant to control whether burden entries from the Payroll system 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 labor workfile transaction.

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

For example, if the burden transaction for a labor workfile transaction is eligible for revenue and invoicing, but the labor workfile transaction is eligible only for invoicing, the system overrides the burden transaction eligibility code with the labor workfile transaction eligibility code.

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 labor 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 Info option from the 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 labor 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 create 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 Master table (F4860). 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 Info option from the 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
Generating the Workfile

- Fringe benefits, such as union pensions

The billing system always processes burden transactions in conjunction with the associated labor workfile transactions. You access Burden Information from the Row menu 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 access Component Transaction Inquiry from the Row menu 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 option that you set up in your Billing Constants.

Note: The value stored in the eligibility code field specifies the amounts that are displayed and 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 and costing processes.
2  The workfile transaction is eligible for revenue recognition and costing processes.
3  The workfile transaction is nonbillable.
4  The workfile transaction is eligible for cost processing only.
5  The workfile transaction is eligible for A/P vouchering only (CSMS workfile transactions only). See Service Billing Voucher Processing for more information.

For example, if the Billable Y/N field for an account is set to Y (Billable) and the Journal Generation Control option selected is Inv/Rev w/o Reconciliation, then 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 billing system and the Journal Generation Control option selected is Invoice Only, then 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:
### Assigning Control/Sequence Numbers

When you revise workfile transactions, the system sequentially numbers the workfile transactions and each new revision for audit purposes.

The following graphic illustrates the numbering sequence: 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.

### Table: Generating the Workfile

<table>
<thead>
<tr>
<th>Account Master - Bill Y/N</th>
<th>Billing Constants - Journal Creation</th>
<th>Billing Workfile - Eligibility Code Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (Nonbillable)</td>
<td>Not Applicable</td>
<td>No workfile transaction created</td>
</tr>
<tr>
<td>Y (Billable)</td>
<td>1 (Invoice Only)</td>
<td>1 (Invoice Only)</td>
</tr>
<tr>
<td>Y (Billable)</td>
<td>2 (Revenue Only)</td>
<td>2 (Revenue Only)</td>
</tr>
<tr>
<td>Y (Billable)</td>
<td>3 (Inv/Rev w/o Reconciliation)</td>
<td>0 (Invoicing and revenue)</td>
</tr>
<tr>
<td>Y (Billable)</td>
<td>4 (Inv/Rev with Reconciliation)</td>
<td>0 (Invoicing and revenue)</td>
</tr>
<tr>
<td>1 (Invoice Only)</td>
<td>1 (Invoice Only)</td>
<td>1 (Invoice Only)</td>
</tr>
<tr>
<td>1 (Invoice Only)</td>
<td>2 (Revenue Only)</td>
<td>No workfile transaction created</td>
</tr>
<tr>
<td>1 (Invoice Only)</td>
<td>3 (Inv/Rev w/o Reconciliation)</td>
<td>1 (Invoice Only)</td>
</tr>
<tr>
<td>1 (Invoice Only)</td>
<td>4 (Inv/Rev with Reconciliation)</td>
<td>1 (Invoice Only)</td>
</tr>
<tr>
<td>2 (Revenue Only)</td>
<td>1 (Invoice Only)</td>
<td>No workfile transaction created</td>
</tr>
<tr>
<td>2 (Revenue Only)</td>
<td>2 (Revenue Only)</td>
<td>2 (Revenue Only)</td>
</tr>
<tr>
<td>2 (Revenue Only)</td>
<td>3 (Inv/Rev w/o Reconciliation)</td>
<td>2 (Revenue Only)</td>
</tr>
<tr>
<td>2 (Revenue Only)</td>
<td>4 (Inv/Rev with Reconciliation)</td>
<td>2 (Revenue Only)</td>
</tr>
<tr>
<td>4 (Costing only)</td>
<td>1 (Invoice Only)</td>
<td>4 (Costing only)</td>
</tr>
<tr>
<td>4 (Costing only)</td>
<td>2 (Revenue Only)</td>
<td>4 (Costing only)</td>
</tr>
<tr>
<td>4 (Costing only)</td>
<td>3 (Inv/Rev w/o Reconciliation)</td>
<td>4 (Costing only)</td>
</tr>
<tr>
<td>4 (Costing only)</td>
<td>4 (Inv/Rev with Reconciliation)</td>
<td>4 (Costing only)</td>
</tr>
</tbody>
</table>
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 sequence 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

Use one of the following navigations:

For Service Billing:

From Daily Processing menu (G48S11), choose Workfile Generation

For Contract Billing:
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 (R48120) 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 nonbillable
- 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 Detail Workfile (F4812)
- Assigns appropriate eligibility codes to the copied transactions based on the Journal Generation Control option in the Billing 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 nonbillable) 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 Billing Constants
- Defining Billing Rate/Markup Rules
- Searches for Billing/Rate Markup Rules for more information about calculating markup
- Adding Lump Sum and Unit Price Revenue Records to the Workfile for information about the Revenue Workfile Generation program (R52120) and for the processing options for this program

**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.
- 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.
- Verify that you have assigned a customer number to your projects if you want the system to automatically retrieve the customer for the contract.
- Define all billable accounts in the chart of accounts.
- Verify that the Billing Constants have been set up.
- Define the rules in the Billing Rate/Markup table.

### Processing Options for Workfile Generation (R48120)

**Defaults Tab**

This processing option lets you specify the source for the home business unit for payroll equipment records.

**Process Tab**

This processing option lets you specify the Revenue Workfile Generation program (R52120) to use to generate revenue for lump sum and unit price billing lines.

### Generate the Workfile

From Contract Billing Processing (G52), choose **Workfile Generation**

From Workfile Generation (G4822), choose **Generation (P481201)**

Revenue recognition and invoices are based on billable costs and calculated amounts. The first step in the revenue recognition and billing processes is to accumulate costs associated with T&M billing lines. Although you can process the costs for revenue only, the costs are typically billable and are included on invoices. Billable costs are represented by source transactions that the system stores in the Account Ledger table (F0911) and are in accounts that marked as billable in the Account Master (F0901).

Source 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.

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

Workfile transactions include costs with any applicable markup, taxable amounts and other key billing information. You base the rest of the Contract Billing processes on the information stored in workfile transactions.

**Note:** Workfile transactions for non-T&M billing lines are also created. If non-T&M billing lines are included in the revenue recognition process, then the workfile transactions for lump sum and unit price billing lines are created during Workfile Generation. The workfile transactions for fee billing lines are created during Revenue Journal Generation. For the billing process, the workfile transactions for all non-T&M billing lines are created during Invoice Generation. The workfile transactions for non-T&M billing lines are system-generated and cannot be modified. See *Accumulate Costs for Revenue*.

### About Accumulating Costs for Contracts

When you use the Contract Billing system, the tasks you perform depend on the functionality you choose with the Journal Generation Control system constant and on the billing lines you include on a contract. Billing lines define the billing terms of the contract and whether the costs relate to time and material (T&M).

If you create contracts based on time and material, your company agrees to bill the customer for the actual costs of goods and services that are required to complete the contract. Actual costs can include:

- Labor
- Payroll burden
- Equipment
- Material

If your company does not bill for time and material, you begin the billing process by creating invoices automatically or manually. When you create invoices, the system calculates the billing amounts for the portion of the contract that is not related to time and material, such as fees, prepayments, quantities and price per unit.

**Note:** You must accumulate costs to process costs that are related to time and material billing lines. You do not have to accumulate costs if your contracts do not include T&M billing lines. If you need to recognize revenue on non-T&M billing lines, you must accumulate costs with the appropriate contract revenue generation processing options selected.

The following graphic illustrates the process the system uses to accumulate costs.
When you run the Workfile Generation program to accumulate costs, the system:

- Identifies all unprocessed source transactions in the Account Ledger (F0911)
- Determines whether the account for each eligible 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 Bill Code (BC) field of the source transactions in the Account Ledger table as processed to the workfile (Z) or non-billable (N)
- Updates the payroll transaction history and employee transaction details for all payroll-related transactions
- Calculates markup and tax amounts
- Creates copies of source transactions in the Billing Workfile (F4812)
Generating the Workfile

- 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
- Assigns each transaction in the Billing Workfile a customer number

After you accumulate costs to generate workfile information, the system marks the source transactions in the Account Ledger table with N (non-billable) or Z (billed) to indicate that the transactions have been included in the billing process. The next time you accumulate costs, the system generates workfile transactions for only the source transactions that have not been previously included in the workfile generation process.

Before You Begin

- Define all billable accounts in the chart of accounts
- Set up the system constants to identify the costs that you want to accumulate
- Define the following applicable Contract Billing rules:
  - Cost Plus Markup
  - Component
- Set up contracts with billing lines for costs that are related to time and materials
- Verify that the information for the Contract Billing customers exists in Address Book and Customer Master

What You Should Know About

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 for your system constants.

For example, if the Billable (Y/N) field for a transaction is a Y and the Journal Generation Control field is set for both revenue recognition and billing, the eligibility code for the transaction is 0. An eligibility code of 0 indicates that the transaction is eligible for both revenue recognition and billing. If the same 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 eligible for billing only.
Changing source and payroll transactions

The system might need additional information from the Payroll Transaction History (F0618) or the Employee Transactions Detail (F06116) tables to process certain source transactions.

After the system creates payroll and source transaction tables, do not change or delete any of the following transaction information:

- Account number
- Dates
- Subledger information
- Employee Address Book number

For the system to create workfile transactions from payroll transactions, all information must be identical in the Payroll or Employee tables and Account Ledger tables.

Burden transactions

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. If, for example, the burden transaction for a workfile transaction is eligible for both revenue and billing, but the workfile transaction is eligible only for billing, the system assigns the burden transaction the same eligibility code as the workfile transaction.

See Also

- Defining Markup Rules (P48096)
- Setting Up System Constants (P48091) for more information about Journal Generation Control
- Appendix C - Searches for Markup Rules for more information about calculating markup
- Technical Foundation Guide for information about running, copying, and changing a DREAM Writer version
- Revenue Recognition for more information about the revenue recognition process

Processing Options

See Workfile Generation (P48121).
Reviewing the Billing Workfile

After you accumulate billable cost information, 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:

- Locating transactions in the workfile
- Reviewing transaction totals
- Verifying contract information

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)

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

The following graphic illustrates the windows and forms that you can access as you review workfile transactions.
Locating Transactions in the Workfile

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 system displays more specific transaction information.

Locating transactions in the workfile consists of the following tasks:

- Reviewing workfile transactions
- Reviewing burden transactions
- Reviewing component transactions

You can review the following transactions in the workfile:
Workfile transactions

Workfile transactions are copies of source transactions that represent the billable costs for your company. When you accumulate costs, the system copies source transactions to create workfile transactions with any applicable markup and tax amounts.

Burden transactions

Burden transactions 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 associated labor transactions.

Component transactions

Component transactions represent additional costs that you add to the original cost of services or time and materials when you bill 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.
Reviewing Workfile Transactions

You can review specific workfile transactions to verify accounting and billing information, such as the document type, classification, account number, amount, and eligibility for processing. You can also determine whether a workfile transaction is taxable and whether it includes associated burden or component transactions.

To review workfile transactions

On Revisions

1. Complete one or more of the following fields to locate workfile transactions:
   - Customer Number
   - BCI Number
   - Account Number (or Job/Business Unit)
   - Employee/Supplier
   - Contract Number
   - Equipment Worked

2. To locate specific workfile transactions, complete the following optional fields:
   - Subledger
   - Subledger Type
   - Job Type
   - Job Step
   - G/L Date From
   - G/L Date Thru

3. Review the following fields:
   - Transaction Classification
   - Eligibility Code
   - Taxable
   - Components
   - Burden
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Number (AN8O)</td>
<td>The address book number to which the system posts billing and accounts receivable transactions.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>Enter a customer’s Address Book number in this field to search for transactions associated with that customer.</td>
</tr>
<tr>
<td>Billing Control ID (BCI)</td>
<td>A unique number that identifies a detail transaction in the Billing Workfile (F4812). The system uses the number, which is automatically assigned through the Next Numbers facility (System 48, Index 2), to create an audit trail for tracking transactions through the billing process. A component record has the same billing control ID as the billing transaction on which it is based.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>Enter the billing control ID of the billing transaction you want the system to display.</td>
</tr>
<tr>
<td>Business Unit (MCU)</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Business unit security can prevent you from locating business units for which you have no authority.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>Enter a business unit in this field to search for transactions associated with that business unit.</td>
</tr>
<tr>
<td>Obj Acct (OBJ)</td>
<td>The object account portion of a general ledger account. The term “object account” refers to the breakdown of the Cost Code (for example, labor, materials, and equipment) into subcategories (for example, dividing labor into regular time, premium time, and burden). If you are using a flexible chart of accounts and the object is set to 6 digits, JD Edwards World recommends that you use all 6 digits. For example, entering 000456 is not the same as entering 456, because the system enters three blank spaces to fill a 6-digit object.</td>
</tr>
<tr>
<td>Subsidi (SUB)</td>
<td>A subdivision of an object account. Subsidiary accounts include more detailed records of the accounting activity for an object account.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Employee /Supplr (AN8)</td>
<td>A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other Address Book members.</td>
</tr>
<tr>
<td>Equipment Worked (EQCG)</td>
<td>Enter an equipment number to search for transactions associated with a particular piece of equipment.</td>
</tr>
<tr>
<td>Subledger (SBL)</td>
<td>A number that identifies a work order in the Contract Billing system. In general, if you specify a work order, you must also specify W as the subledger type for the work order.</td>
</tr>
<tr>
<td></td>
<td>Form-specific information</td>
</tr>
<tr>
<td></td>
<td>Enter a work order number in this field to search for transactions associated with that work order.</td>
</tr>
<tr>
<td>Work Order/Subledger Type (SBLT)</td>
<td>A user defined code (UDC 00/ST) that you use with the Work Order (Subledger) field. For a work order, the subledger type must be W.</td>
</tr>
<tr>
<td></td>
<td>Note: If you use A/P speed code entry, the field can be blank.</td>
</tr>
<tr>
<td>Job Type (JBCD)</td>
<td>A user defined code (UDC 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.</td>
</tr>
<tr>
<td>Job Step (JBST)</td>
<td>A user defined code (UDC 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.</td>
</tr>
<tr>
<td>G/L Date From (EFTB)</td>
<td>The date when an address, item, transaction, or table becomes active, or the date from when you want transactions to appear. The way that the system uses this field depends on the program. For example, the date that you enter in this field might indicate when a change of address becomes effective; or it could be a lease effective date, a price or cost effective date, a currency effective date, a tax rate effective date, and so on.</td>
</tr>
<tr>
<td>G/L Date Through (EFTE)</td>
<td>The date on which the item, transaction, or table becomes inactive or the date through which you want transactions to display.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Transaction Classification</td>
<td>A code that identifies the classification of a billing transaction. Valid codes are:</td>
</tr>
<tr>
<td>(TCLS)</td>
<td>blank  Ad hoc entry in the active Billing Workfile (F4812)</td>
</tr>
<tr>
<td></td>
<td>1 Labor</td>
</tr>
<tr>
<td></td>
<td>2 Payroll burden</td>
</tr>
<tr>
<td></td>
<td>3 Equipment</td>
</tr>
<tr>
<td></td>
<td>4 Inventory (future use)</td>
</tr>
<tr>
<td></td>
<td>5 Purchasing</td>
</tr>
<tr>
<td></td>
<td>6 Journal Entry</td>
</tr>
<tr>
<td></td>
<td>7 Ad hoc entry in an existing invoice batch</td>
</tr>
<tr>
<td></td>
<td>8 System-generated control record</td>
</tr>
<tr>
<td></td>
<td>9 System-generated limiting offset for a contract (future use)</td>
</tr>
<tr>
<td></td>
<td>A System-generated revenue record for a non-T&amp;M billing line on a contract (Contract Billing only)</td>
</tr>
<tr>
<td></td>
<td>W Service and Warranty</td>
</tr>
<tr>
<td>Eligibility Code</td>
<td>A code that identifies the type of processing for which a transaction in the Billing Workfile (F4812) is eligible. This code controls the operation at the single transaction level. The values are:</td>
</tr>
<tr>
<td>(ELGC)</td>
<td>0 Eligible for both invoicing and revenue recognition</td>
</tr>
<tr>
<td></td>
<td>1 Eligible for invoicing only</td>
</tr>
<tr>
<td></td>
<td>2 Eligible for revenue recognition only</td>
</tr>
<tr>
<td></td>
<td>3 Non-billable</td>
</tr>
<tr>
<td></td>
<td>4 Eligible for cost processing only</td>
</tr>
<tr>
<td>Taxable - Y/N</td>
<td>A code that indicates whether the item, by itself, is subject to tax.</td>
</tr>
<tr>
<td>(TX)</td>
<td>Note: If the transaction belongs to a billable account, the system generates the eligibility code using the information in the Journal Generation field on the Billing Constants (P48091) form and the Billable Y/N field in the Account Master (P0901).</td>
</tr>
</tbody>
</table>
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component/Burden</td>
<td>A brief description of a code or abbreviation.</td>
</tr>
</tbody>
</table>

**Form-specific information**

An “X” in the C column denotes that components exist for this workfile transaction. An “X” in the B column denotes that there is burden associated with this workfile transaction.

---

### What You Should Know About

#### 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 in the system constants.

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

---

### Reviewing Burden Transactions

**From Contract Billing Processing (G52), choose Workfile Generation**

**From Workfile Generation (G4822), choose Revisions (P4812)**

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 labor 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 billing, but the workfile transaction is eligible only for billing, the system assigns the burden transaction the same eligibility code as the workfile transaction.

The Payroll system calculates the following types of burden:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual burden</td>
<td>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.</td>
</tr>
<tr>
<td>Flat burden</td>
<td>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.</td>
</tr>
</tbody>
</table>

When burden transactions are associated with a workfile transaction, the system displays an X in the Burden (B) field for that transaction. The system also updates the Burden Pending (BDPN) field to indicate the type of burden that was processed for the workfile transaction.

**To review burden transactions**

On Revisions

1. Complete the steps for reviewing workfile transactions.
   
   *See Reviewing Workfile Transactions.*

2. Verify the following field to identify the transactions with burden:
   
   - Burden (B)

3. Choose Burden (Option 6) for the transaction you want to review.
4. On Burden Information, verify the information in the following fields:

- Transaction Number
- Benefit Code
- Tax Type
- Explanation - Remark

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transaction No</td>
<td>The unique number that the system assigns to a transaction in payroll. The system uses this field to tie a payroll transaction to each audit record for actual burden created during the Actual Burden Journaling process.</td>
</tr>
<tr>
<td>(PRTR)</td>
<td></td>
</tr>
<tr>
<td>Benefit Code</td>
<td>A code to define the type of pay, deduction, benefit, or accrual. Pay types are numbered from 1 to 999. Deductions and benefits are numbered from 1000 to 9999.</td>
</tr>
<tr>
<td>(PDBA)</td>
<td></td>
</tr>
<tr>
<td>Tax Type – Payroll</td>
<td>A user defined code (UDC 07/TT) that identifies the type of payroll tax associated with this billing detail transaction.</td>
</tr>
<tr>
<td>(PTAX)</td>
<td></td>
</tr>
</tbody>
</table>
### Reviewing Component Transactions

**From Contract Billing Processing (G52), choose Workfile Generation**
**From Workfile Generation (G4822), choose Revisions (P4812)**

A component is a type of markup. The system calculates component transactions based on amounts or units from source transactions or burden 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.

**To review component transactions**

On Revisions

1. Complete the steps for reviewing workfile transactions.
Review the Workfile

See Reviewing Workfile Transactions.

2. Verify the following field to identify the transactions with components:
   - Component (C)

3. Choose Component (Option 5) for the transaction you want to review.

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

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Link (CLNK)</td>
<td>The component link value attaches the component record to its base workfile record.</td>
</tr>
</tbody>
</table>
### Field | Explanation
--- | ---
Component Cost Rate Table (CCR) | A code that identifies the component bill table used for this entry. The component table identifies the components and their calculation rules. You set up component tables on the Component Table Definition form (P4860).
Component Revenue Rate Table (CRVR) | A code that identifies a component bill table to use for this Cost Plus 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 screen.
Component Invoice Rate Table (CINR) | A code that identifies the component bill table used for this 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.
Cost Amount (AA) | The cost (source) amount for a billing detail transaction.
Units (U) | 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 (ITOL) | The invoice amount for a workfile transaction.
Base Revenue (BTOL) | The revenue amount for a workfile transaction.
Code (CCOD) | A component code identifies the component markup rate.

### 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
- Verify totals with burden and component amounts

Reviewing transaction totals consists of the following:
- Reviewing totals for a specific transaction
- Reviewing totals for a group of selected transactions

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

On Revisions
1. Complete the steps for reviewing workfile transactions.
   See Reviewing Workfile Transactions for Billing.
2. Choose Toggle Amounts (F13) to display totals in the following field:
   - Amount
   The system displays only cost and invoice amounts when the Journal Generation Control system constant is set for invoicing only. Cost and revenue amounts display when the constant is set for revenue only. Cost, invoice, and revenue amounts display if the constant allows revenue recognition and invoicing as separate processes.

What You Should Know About

Alternate formats
You can review six different total formats in the Amount field for workfile transactions. Toggle to review the following amounts:
- Base revenue - Revenue total without components or burden. Applies only when system constants are set to process revenue.
- Base invoice - Invoice total without components or burden. Applies only when the system constants are set to process invoices. This amount includes applicable tax amounts.
- Total revenue - Revenue total with components and burden. Applies only when system constants are set to process revenue.
- Total invoice - Invoice total with components and burden and taxes. Applies only when the system constants are set to process invoices.
- Base cost - Cost without components or burden.
- Total cost - Cost with components and burden.

You can set a processing option to control which amount the system displays when you initially access the Revisions form.
To review totals for a group of selected transactions

On Revisions

1. Complete the steps for reviewing workfile transactions.
   
   See Reviewing Workfile Transactions.

2. Choose Total Amounts for All Records (F6) to access the Grand Totals form.
   
   Grand Totals includes only the transactions that appear on Revisions. To include all transactions that meet the search criteria you specified on Revisions, you must scroll to the end of the subfile in the detail portion of Revisions before you choose Total Amounts.

3. On Grand Totals, review the following fields:
   
   - Revenue
   - Invoice
   - Cost
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| **Revenue** | The revenue amount for a workfile transaction.  
  
  *Form-specific information*  
  The total of the revenue amounts for the workfile transactions are displayed. The total appears in two formats: base revenue amount and total revenue amount.  
  
  - Base revenue = source cost + revenue markup  
    For example, the revenue markup is 10%. A source cost of 1000 then results in a base revenue amount of 1100.  
    \[1100 = 1000 + 100\]  
  
  Total revenue = base revenue + components + burden  
  For example, components consist of 50 for administration and 100 for overhead. Burden consists of 100 for payroll taxes. A base revenue of 1100 then results in a total revenue amount of 1350.  
  \[1350 = 1100 + 150 + 100\]  
| **Invoice** | The invoice amount for a workfile transaction.  
  
  *Form-specific information*  
  The total of the invoice amounts for the workfile transactions that are displayed. The total appears in two formats: base invoice amount and total invoice amount.  
  
  - Base invoice = source cost + invoice markup + sales tax  
    For example, the invoice markup is 10% and the sales tax is 1.5%. A source cost of 1000 then results in a base invoice amount of 1115.  
    \[1115 = 1000 + 100 + 15\]  
  
  Total invoice = base invoice + components + burden  
  For example, components consist of 50 for administration and 100 for overhead. Burden consists of 100 for payroll taxes. A base invoice of 1115 then results in a total revenue amount of 1365.  
  \[1365 = 1115 + 150 + 100\]  

Review the Workfile

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>The cost (source) amount for a workfile transaction.</td>
</tr>
<tr>
<td></td>
<td>Form-specific information</td>
</tr>
<tr>
<td></td>
<td>The total of the cost (source) amounts for the workfile transactions are displayed. The total appears in two formats: base cost amount and total cost amount</td>
</tr>
<tr>
<td></td>
<td>- Base cost = source cost</td>
</tr>
<tr>
<td></td>
<td>For example, a source cost of $1000 results in a base cost amount of $1000.</td>
</tr>
<tr>
<td></td>
<td>- Total cost = base cost + components</td>
</tr>
<tr>
<td></td>
<td>For example, components consist of $50 for administration and $100 for overhead. A base cost of $1000 then results in a total cost amount of $1150. 1150 = 1000 + 150</td>
</tr>
</tbody>
</table>

What You Should Know About

Totals for components

- The system does not calculate the total for components. You must manually compute this amount.

Totals for burden

- You can review totals for burden. On the Revisions form, choose Burden Information. Choose Total Amounts for All Records (F6) to review the burden totals.

Verifying Contract Information

From Contract Billing Processing (G52), choose Workfile Generation
From Workfile Generation (G4822), choose Revisions (P4812)

You can review specific workfile transactions to verify information for the related contract and job. The contract information includes the numbers for the contract, change order, and customer (owner). The job information includes the job and account numbers.

To verify contract information

On Revisions
1. Complete the steps for reviewing workfile transactions. See Reviewing Workfile Transactions.
2. Choose Detailed Transaction (Option 4) for a specific transaction.

Processing Options

See [Unbilled Detail Revisions (P4812)](P4812).
Revising the Billing Workfile

The transactions in the Billing Workfile (F4812) are the basis for the rest of the revenue and billing processes. You should make any necessary additions and revisions to the workfile transactions before you continue. For example, you can:

- Add informational text that you want to print on an invoice.
- Add any G/L transactions that were omitted from the workfile without running the Workfile Generation program again.
- Change the markup for a transaction.
- Add transactions directly to the workfile without entering them into the Account Ledger (F0911) first, such as transactions for expense reports that have not yet been processed in the Accounts Payable system.
- Assign a hold status to a transaction with a release date to prevent a transaction from being included on an invoice until that date.
- Split a transaction into two new transactions. You can then revise the billing status for the new transactions.

You can also move a transaction from the active workfile to the workfile history table so that it is not included on an invoice, and you can print a report that lists the transactions in the workfile.

Revising the workfile consists of the following tasks:

- Adding text to a workfile transaction
- Adding existing G/L transactions
- Changing the markup
- Entering ad hoc transactions
- Assigning a hold status
- Splitting a workfile transaction
- Moving a workfile transaction to history
- Printing workfile transactions

Workfile Revisions and Sequence Numbers

When you revise workfile transactions, the system assigns the transactions and each new revision a series of sequence numbers.
Revise the Billing Workfile

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

What You Should Know About

Cost transactions in the G/L
Any changes 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).

Revised transactions
Revised transactions remain in the workfile. The system retains a copy of the transaction prior to any changes in the Billing Workfile - History table (F4812H) for audit purposes.
Caution: If you add transactions directly to the workfile and then process the original transaction through the normal accounting and billing cycles, the customer might be billed twice for the same costs.

See *Entering Ad hoc Transactions for Billing* for more information.

Adding Text to a Workfile Transaction

You can enter text to associate additional information with a workfile transaction. For example, the text might be a further description of the services for which you bill customers. You can enter text for a transaction at any point in the billing process. You can also print this text on an invoice. The system uses the billing control ID (BCI) number to attach text, which is stored in the Service Billing Invoice/Batch Extended Text File (F4813) to transactions in the Billing Workfile (F4812).

To add text to a workfile transaction

On Revisions

1. Complete the steps for reviewing workfile transactions.
   
   See *Reviewing Workfile Transactions for Billing*.

2. Choose Text (Option 1) for a specific transaction.
3. On Invoice/Batch Extended Text, enter free-form text.

   If you need to enter more text, you can scroll to display additional lines. After you enter text, the system highlights the Option field on the Revisions form to indicate that the text exists for the transaction.

**What You Should Know About**

**Formatting text**
The system prints any text you enter for a workfile transaction exactly as it appears on the Invoice/Batch Extended Text form.

**Inserting a blank line**
You can insert a blank line between two existing lines of text to enter new information. The system inserts a line directly below the line on which you choose Insert Line (Option 1).

**Deleting text**
You can use two methods to delete text you have entered for a transaction:
- To delete all the text, use the Delete action
- To delete individual lines of text, choose Delete Line (Option 9) for the respective lines

**Renumbering lines of text**
The system automatically assigns a sequence number to each line of text. The sequence number is not displayed on the form. If the system prevents you from inserting a blank line, choose Renumber Text (F5). The system updates the numbers to prepare the text for additional lines.
Adding Existing G/L Transactions

You can add transactions from the Account Ledger table (F0911) to the Billing Workfile (F4812) without running the Workfile Generation program (P48120). For example, you can include costs for workfile processing that you did not include in the workfile generation. You can also include costs in the workfile for processing that were entered in the General Accounting system after you ran Workfile Generation.

You can add transactions to the workfile using one of the following amounts:

- The cost without markup
- The cost plus markup, based on the markup rules you define or the default markup percentage you specify in the system constants

When you add a source transaction to the workfile, the system runs Workfile Generation interactively for the selected accounting entries. The system marks the transaction as billed in the Account Ledger (F0911) table. 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**

On Revisions

1. Complete the steps for reviewing workfile transactions.
   
   *See Reviewing Workfile Transactions.*

2. Choose G/L Selection (F10).
3. On G/L Transaction Selection, complete the following field to display the existing source transactions:
   - Business Unit

4. To limit the list of transactions, complete one or more of the following fields:
   - Date From
   - Date Thru
   - Object
   - Subsidiary
   - Subledger
   - Subledger Type
   The system automatically supplies the information for these fields if you completed them on the Revisions form.

5. Choose one of the following for a specific transaction:
   - Select at Cost (Option 1)
   - Select with Markup (Option 2)

**What You Should Know About**

**G/L audit trail**  
If you do not know how a transaction originated, you can choose Audit (Option 3) for the transaction. The system displays the audit trail from the Account Ledger table.
Changing the Transaction Markup

The markup for a transaction is the increase in costs to account for overhead and profit. You define markup rules in the Cost Plus Markup Table (P48096) when you set up your system. You can also change markup information after you accumulate costs.

After you make changes to the markup, you can apply the revised markup information to the transaction, or you can reapply the markup rules you originally defined for your system on the Cost Plus Markup Table.

In addition to changing the markup through Workfile Revisions, you can also make changes to the Amount Basis and Adjustment Reason Code options by choosing Re-extension (P481202) from the Workfile Generation menu.

To change the markup

On Revisions

1. Complete the steps for reviewing workfile transactions.
   
   See Reviewing Workfile Transactions for Billing.

2. Choose Detailed Transaction Window (Option 4) for a specific transaction.

3. To review the origin of the markup for the transaction, choose Table Information (F15). In the following example, Table Not Applicable indicates that no markup table was found and the markup was derived from the system constants.
4. On Table Information, choose Amounts/Units Information (F11) to return to the Amounts/Units Information form.

5. On Amounts/Units Information, complete any combination of the following applicable fields:
   - Override Rate
   - Cap or Rate
   - Mark Up Percent
   - Mark Up Amount

6. Choose Update (F5).
   The system calculates the markup and displays the changes.

7. Choose Exit Program (F3).
   The system displays Transaction Re-Extension.

8. On Transaction Re-Extension, complete the following applicable fields:
- Contract Re-Extension
- Amount Re-Extension
- Adjustment Reason Code

For Amount Re-Extension, the revenue option does not apply if the transaction is not eligible for the revenue recognition process. If you choose 2 for the Amount Re-Extension, the system does not re-extend the invoice information.

9. Choose Process (F6).

The system retains the information you entered on the form and displays it the next time you access the Transaction Re-Extension form.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Ovr Rate/Cap (BRTI, BRT) | The rate the system uses to mark up the invoice or 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. The Override Rate Calculation for the Total Invoice Markup is:  
  \[(\text{Override Rate} \times \text{Unit}) \times (1 + \text{Markup Percent}) + \text{Markup Amount}\] |
| Cap or Override Rate (CAPI, CAP) | This flag indicates whether the associated amount is the override rate or the cap of the rate. Valid codes are:  
  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. |
| Mark Up % (PCIM, PERT) | The percentage the system uses to mark up the invoice or revenue amount reflected in the processing 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. |
| Mark Up Amt (ADCI, ADCR) | An amount the system uses to mark up the invoice or revenue amount. This amount will not affect the employee’s paycheck. |
**Field** | **Explanation**
--- | ---
Option – Contract Re-Extension | You can choose to update the workfile transaction with the revised contract information after you make changes to the contract master.

Option - Amount Re-extension | 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:

- **1** Reapply the established invoice markup rates from the Cost Plus Markup Table. The revenue amount is not changed.

- **2** Reapply the established revenue markup rates from the Cost Plus 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 Cost Plus Markup Table.

blank | Reapply both the invoice and revenue markup rates using the established rates from the Cost Plus Markup Tables.

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.

**Adjustment Reason Code** | A user defined code (UDC 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.

---

**What You Should Know About**

**Multi-currency**

To change the amounts for workfile transactions in a multi-currency environment, you must enter the amounts in the currency of the contract. For example, if the contract was entered in the foreign currency, you must make all revisions in the foreign currency. The system prevents you from entering both foreign and domestic currency amounts on a multi-currency contract.
Revise the Billing Workfile

Updating a workfile transaction
You can update individual workfile transactions to reflect the most current rules you have set up to calculate discounts, taxes, and markups. Choose Transaction Re-Extension (Option 8) on the Revisions form for the transaction you want to update.

Updating workfile transactions globally
You can update multiple workfile transactions to reflect the most current rules you have set up to calculate discounts, taxes, and markups. Choose Re-Extension (P481202) from the Workfile Generation menu (G4822) to access the DREAM Writer. The processing options are identical to the Transaction Re-Extension form.

Identifying taxable transactions
The system determines whether a workfile transaction is taxable by the tax information for the related billing line. You cannot change the tax information for a workfile transaction in the following fields:
- Taxable Y/N
- Tax Explanation
- Tax Rate/Area

You can change the tax information in the contract master on the billing line.

Changing amounts for a workfile transaction
To change the amounts for a workfile transaction, you can change the markup information or complete one of the following fields on Amounts/Units Information:
- Taxable Amount
- Total Billing

If you change an amount for a transaction, the system automatically recalculates and updates all the related amounts, including the Markup % field, when you choose the Update function (F5).

Changing the discount
You can change the discount percent only if the payment terms you define for the transaction allow for a discount. To change the discount for a workfile transaction, complete the Discount Percent field (DCP) on Amounts/Units Information.

See Also
- Defining Markup Rules (F48096) for more information about setting up markup rules on the Cost Plus Markup Table

Entering Ad Hoc Workfile Transactions

From Contract Billing Processing (G52), choose Workfile Generation
From Workfile Generation (G4822), choose Revisions (P4812)

If you do not enter cost information during an accounting cycle, the transactions are not available when you accumulate costs. 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 can record a reason why the transaction was created by adding text to the workfile transaction
- 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, you can overbill your customer. To prevent this, you must manually change the eligibility code for the second workfile transaction to nonbillable and remove it from the workfile.

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

### To enter ad hoc transactions

**On Revisions**

1. Complete the steps for reviewing workfile transactions.
   
   *See Reviewing Workfile Transactions.*

2. Complete the following fields on a blank line of the Revisions form:
   - G/L Date
   - Business Unit
   - Object
   - Subsidiary

   To create ad hoc transactions for costs that are based on time and materials, you must use an account that you have included in the cross-references for the T&M contract billing line. If you do not use an account that is cross-referenced, the system does not update the ad hoc transaction with the contract information.

   *See Defining Cross-References for T&M.*

3. Complete the following optional fields for the new transaction:
   - Employee/Supplier
- Amount
- Eligibility Code

4. Choose More Details (F4).

5. Complete the following optional fields:
   - Subledger
   - Subledger Type

6. Choose the Add action.
   The system displays Transaction Re-Extension.

7. On Transaction Re-Extension, complete the following applicable fields:
   - Contract Re-Extension
   - Amount Re-Extension
   - Adjustment Reason Code

8. Choose Process (F6).

**See Also**

- *Moving a Transaction to History* for more information about changing the status of a transaction to nonbillable.

**Assigning a Hold Status**

| From Contract Billing Processing (G52), choose Workfile Generation | From Workfile Generation (G4822), choose Revisions (P4812) |

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 system stores the release date as part of the audit trail for the transaction.

**To assign a hold status**

On Revisions

1. Complete the steps for reviewing workfile transactions.
   
   See Reviewing Workfile Transactions.

2. Choose Detailed Transaction (Option 4) for a specific transaction.

3. On Amounts/Units Information, choose Accounting/Internal Control Information (F14).
4. On Internal Control Information, complete the following field:
   - Hold Code

   Revenue Hold does not apply if the workfile transaction is eligible only for revenue processing. If you choose R or 4 for the Hold Code, the system does not hold the workfile transaction.

5. On Internal Control Information, complete the following optional field:
   - Released Date

   If you leave the Released Date field blank, the system holds the transaction indefinitely.

6. Choose Update (F5).

7. Choose Exit Program (F3).

   The system displays Transaction Re-Extension.

8. On Transaction Re-Extension, complete the following applicable fields:
   - Contract Re-Extension
   - Amount Re-Extension
   - Adjustment Reason Code

9. Choose Process (F6).
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Hold Code (HLD) | This code identifies the type of “hold” status applied to a Billing Workfile transaction. Valid alpha values are:  
  - 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 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. Valid numeric values are:  
  - 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. |
| Date - Released (Julian) (RDJ) | The release date. This Billing Workfile transaction is not eligible for processing until this date is greater than or equal to the cut-off date specified in Revenue Journal Generation (R48132) or the Bill Thru date specified in the Invoice Generation (P52800) processing option. |

### What You Should Know About Transactions with related transactions

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 of the related transactions.
Overriding a Bill-When-Paid Requirement for Billing

In a contract, your company might have agreed to not bill the customer for costs related to T&M billing lines until the supplier has first been paid. You can define this requirement as bill-when-paid either for the entire contract or for a specific billing line within the contract.

With bill-when-paid, the related workfile transactions are not available for billing until your company has paid the supplier's voucher. However, you can override a bill-when-paid requirement for a specific workfile transaction so that it is available for billing before the supplier is paid. In this case, the system includes the transaction the next time you create invoices automatically or manually.

To override a bill-when-paid requirement

On Revisions
1. Complete the steps for reviewing workfile transactions.
   See Reviewing Workfile Transactions for Billing.
2. Choose Detailed Transaction (Option 4) for a specific transaction.
3. On Amounts/Units Information, choose Accounting/Internal Control Information (F14).
4. On Accounting/Internal Control Information, complete the following field:
   - Reverse Bill When Paid
     You specify N (No) in the field to override a bill-when-paid requirement.
5. Choose Update (F5).
6. Choose Exit Program (F3).
   The system displays Transaction Re-Extension.
7. On Transaction Re-Extension, complete the following applicable fields:
   - Contract Re-Extension
   - Amount Re-Extension
   - Adjustment Reason Code
8. Choose Process (F6).

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reverse Bill When Paid (AREX)</td>
<td>A code that lets you override the bill-when-paid rule for the Billing Workfile transaction. You can specify the bill-when-paid rule for a contract, a change order, or a contract billing line.</td>
</tr>
</tbody>
</table>
Splitting a Workfile Transaction

After you accumulate costs, you can split a workfile transaction into two new 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, but not the other. For example, an employee works overtime and is paid at twice the regular hourly rate. If you need to bill 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.

You can split only payroll transactions that do not include associated burden. You cannot 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 (F4812H).
- Assigns sequence numbers to all the related transactions. The Billing Control ID (BCI) remains the same for the workfile transactions. You can review the sequence numbers and Billing Control ID in the accounting and internal control information.
- Splits associated component transactions.

The following graphic illustrates how the system processes and assigns sequence numbers to transactions when you split a workfile transaction.
To split a workfile transaction

On Revisions

1. Complete the steps for reviewing workfile transactions. See Reviewing Workfile Transactions for Billing.

2. Choose Split (Option 2) for a specific transaction.
3. On G/L Transaction Split Window, complete one of the following fields:
   - Units
   - Cost
   - Invoice Amount

4. Complete the following field:
   - Amount or % for Split Record 1

5. Choose Update with Redisplay (F5) to update the displayed information.

6. Verify that the information is correct.

7. Choose Perform Split (F6) to update the workfile transactions.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units (U)</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td><em>Form-specific information</em></td>
</tr>
<tr>
<td></td>
<td>If you enter X in this field, the system performs the split based on the units of the workfile transaction.</td>
</tr>
</tbody>
</table>

---

Revise the Billing Workfile
Revise the Billing Workfile

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost (AA)</td>
<td>The cost (source) amount for a workfile transaction.</td>
</tr>
<tr>
<td></td>
<td><em>Form-specific information</em></td>
</tr>
<tr>
<td></td>
<td>If you enter X in this field, the system performs the split based on the cost (source) amount of the transaction.</td>
</tr>
<tr>
<td>Invoice Amount (ITXA)</td>
<td>The portion of the invoice amount that is subject to tax.</td>
</tr>
<tr>
<td></td>
<td><em>Form-specific information</em></td>
</tr>
<tr>
<td></td>
<td>If you enter X in this field, the system performs the split based on the taxable portion of the invoice amount of the transaction.</td>
</tr>
<tr>
<td>Split Amount/Percent (#SPT)</td>
<td>The split amount or percent. You can split the taxable amount, the revenue total, the cost, or the units.</td>
</tr>
<tr>
<td></td>
<td>If you enter an amount, it must be less than the amount of the field you are using as the basis of the split. If you enter a percentage (for example, 25% or %25), the percentage must be less than 100%. The system automatically calculates the amount or percentage for the second split record.</td>
</tr>
</tbody>
</table>

What You Should Know About

Splitting a transaction with a hold code

When you split a 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.

Moving a Workfile Transaction to History

From Contract Billing Processing (G52), choose Workfile Generation
From Workfile Generation (G4822), choose Revisions (P4812)

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 nonbillable. For example, if you do not want to bill for a portion of a split transaction, you would move the nonbillable portion to history.

Moving a transaction to history consists of the following:
Revise the Billing Workfile

- Moving a transaction without burden to history
- Moving a transaction with burden to history

If burden is associated with the transaction, you first change the eligibility code for the burden to nonbillable. Then, change the eligibility code for the workfile transaction to nonbillable.

When you move a transaction to history, the system:
- Copies the transaction to the Billing Workfile - History (F4812H) for audit purposes
- Removes the transaction from the active Billing Workfile (F4812)

Transactions that you move to history do not appear on the Revisions form. You must use Detail History (P4812H) on the Workfile Generation menu (G4822) to view transactions in the Billing Workfile – History. You also use Detail History to reactivate the workfile transactions that you moved to history.

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

To move a transaction without burden to history

On Revisions
1. Complete the steps for reviewing workfile transactions.
   See Reviewing Workfile Transactions.
2. Complete the following field for a specific transaction to make it non-billable:
   - Eligibility Code
3. Use the Change action.
   The system displays Transaction Re-Extension.
4. On Transaction Re-Extension, complete the following applicable fields:
   - Contract Re-Extension
   - Amount Re-Extension
   - Adjustment Reason Code
5. Choose Process (F6).
   The system displays Revisions.
6. On Revisions, choose Delete (Option 9) for the workfile transaction.
7. Use the Change action.

To move a transaction with burden to history

On Revisions
1. Complete the steps for reviewing burden transactions for a specific workfile transaction.
   See Reviewing Burden Transactions.
2. On Burden Information, complete the following field for all burden transactions to make them non-billable:
   - Eligibility Code

   You must make all the burden transactions related to the workfile transaction non-billable. If you do not, the system prevents you from moving the workfile transaction to history.

3. Use the Change action.
4. Choose Exit Program (F3).
5. On Revisions, complete the following field for the workfile transaction to make it non-billable:
   - Eligibility Code
6. Use the Change action.

   The system displays Transaction Re-Extension.
7. On Transaction Re-Extension, complete the following applicable fields:
   - Contract Re-Extension
   - Amount Re-Extension
   - Adjustment Reason Code
8. Choose Process (F6).

   The system displays Revisions.
9. On Revisions, choose Delete (Option 9) for the workfile transaction.
10. Use the Change action.

What You Should Know About

Changing the status of burden transactions

You can make burden transactions non-billable without moving the related workfile transaction to history. You can do this if you need to change the billing status of a burden transaction without changing the billing status of the related workfile transaction.

For example, you might want to do this if a burden account in the chart of accounts has been incorrectly designated as billable. You can change the resulting burden transactions for that account to non-billable without changing the billing status of the related workfile transaction.

Printing Workfile Transactions

From Contract Billing Processing (G52), choose Workfile Generation
From Workfile Generation (G4822), choose Print Workfile (P48405)
Revise the Billing Workfile

You can review workfile transactions online. 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 are on hold
- As a comparison with the detail in the general ledger

To compare the workfile transactions to the detail in the general ledger, you can review the general ledger online using Account Ledger Inquiry (P09200), or you can print the G/L by Object Account (P09421) report.

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

### Billing Workfile Listing

<table>
<thead>
<tr>
<th>Date</th>
<th>ID</th>
<th>Type</th>
<th>Account Number</th>
<th>Description</th>
<th>Amount</th>
<th>Account</th>
<th>Type</th>
<th>Status</th>
<th>Note</th>
<th>Seq</th>
<th>Loc</th>
<th>Seq</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/12/20</td>
<td>123</td>
<td>22</td>
<td>4567</td>
<td>J. Class MES Equipment</td>
<td>990</td>
<td>98001</td>
<td>W1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02/13/20</td>
<td>456</td>
<td>33</td>
<td>7890</td>
<td>J. Class MES Equipment</td>
<td>890</td>
<td>98001</td>
<td>W2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### See Also

- Technical Foundation Guide for information about running, copying, and changing a DREAM Writer version

### Processing Options

See Billing Workfile Listing (P48405).
Work 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 in Billing Workfile – History (F4812H). You can review this audit trail to see all the changes you have made to a transaction. For example, if you change a markup and include a reason for the change, you can access the workfile history to review the markup change reason.

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 (BCI) 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 split process
- Transactions copied to history during the modification process

Reviewing Transaction Revisions

From Contract Billing Processing (G52), choose Workfile Generation
From Workfile Generation (G4822), choose Revisions (P4812)

For every revision of a transaction that you create as you process workfile transactions, the system stores a copy of the previous transaction in Billing Workfile – History (F4812H). You can review this audit trail to see all the changes 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

On Revisions
1. Complete the steps for reviewing workfile transactions.
   See Reviewing Workfile Transactions.
2. Choose Transaction History Inquiry (Option 7) for a specific transaction.
3. On Inquire Workfile History, review the revision history for the transaction.
   If text, components, tax, or burden are associated with the transaction, the
   Option field for the transaction is highlighted on the form.

Moving a Transaction Out of History

From Contract Billing Processing (G52), choose Workfile Generation
From Workfile Generation (G4822), choose Detail History (P4812H)

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 components, burden, 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 (F4812H) to the Billing Workfile table (F4812)
To move a transaction out of history

On Detail History

1. To locate a transaction, complete any of the following fields:
   - Customer Number
   - Account Number
   - BCI Number
   - Contract Number
   - Employee/Supplier

2. Choose Reactivate (Option 8) for the transaction.
   After you reactivate a transaction, the system continues to display the transaction on Detail History until you reinquire on the form.

What You Should Know About

Limiting the records that display

You can use the Display All (#DS1) field to display all the transactions in the Billing Workfile - History table. If you use this field, the number of records to display often exceeds the maximum number allowed.

JD Edwards World recommends that you enter additional criteria to narrow your search when you review the history for workfile transactions.
### Work with Workfile History

<table>
<thead>
<tr>
<th>Displaying eligible transactions</th>
<th>You can use a processing option to control whether the system initially displays all transactions or only those eligible for reactivation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billing status for reactivated transactions</td>
<td>Reactivated transactions are nonbillable when they return to the active workfile. You must manually update the eligibility code before you can further process the transaction.</td>
</tr>
</tbody>
</table>

### See Also

- *Moving a Workfile Transaction to History*

### Processing Options

See [Detail History (P4812H)](#).
Understanding Invoice Processing

A typical Contract Billing invoice process consists of the following steps:

- Generating invoices
- Printing draft invoices for internal review
- Maintaining invoice information
- Generating preliminary journal entries
- Creating final journal entries
- Posting invoices to G/L
- Printing customer invoices

After the A/R and G/L entries are created for the invoices, the system moves the workfile transactions that have completed the billing process into the Billing Workfile History table (F4812H).

Generating Invoices

When the system initially creates workfile transactions for the Billing Workfile (F4812), they are undifferentiated, generic transactions. Although they contain the key information needed to create invoices, they are not separated and assigned to a specific invoice number.

The Contract Billing system can create invoices automatically or manually. When Invoice Generation is run from the Invoice Generation menu, the system automatically summarizes the selected workfile transactions from the Billing Workfile (F4812) and stores the summarized records in the Invoice Summary Work File (F4822). The system uses the Invoice Summary entries to create transactions in the Accounts Receivable Ledger (F0311) when Create A/R and G/L Entries is run.

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.

When you create invoices in the following ways:

- Create invoices only for contracts with billing activity. This prevents the system from creating an invoice with all amounts equal to zero
- Create invoices regardless of billing activity. The system creates invoices with all amounts equal to zero
• Create invoices with all amounts initialized to zero, regardless of billing activity (manual invoices only)

**Printing Draft Invoices**

Use the Invoice Print program to print internally reviewed invoices. You print draft invoices to allow your project or account manager to verify the accuracy of invoice information prior to mailing the invoice to a customer. The system retrieves draft invoice information from the Billing Workfile (F4812). If there are errors, you can make corrections to the invoice, usually without having to delete the entire batch of invoices.

**Maintaining Invoice Information**

The billing system allows you to maintain invoice information at four levels, as outlined below:

- **Batch Level**
  - Create a batch header automatically or manually
  - Delete a batch – remove batch header and all associated invoice information

- **Invoice Level**
  - Create invoices automatically
  - Add invoices to existing batch manually

- **Pay Item Level**
  - Delete invoice from batch
  - Create invoice pay items automatically

- **Workfile Transaction Level**
  - Revise existing pay item on invoice
  - 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, but your project manager notices that an invoice amount is incorrect, then incorrect charges exist for 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 that 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.

**Generating Preliminary Journal Entries**

The system creates preliminary invoice journals for a selected invoice batch. The system processes workfile transactions against the Account Derivation Table to create detail journal accounting entries in the Detail Journal Workfile (F48910). The system compresses these detail accounting entries into summarized accounting entries in the Summarized Journal Workfile (F48911). The system uses the
Understanding Invoice Processing

summarized accounting entries to create the Account Ledger (F0911) transactions for invoice journals when Create A/R and G/L Entries are run.

Note: 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 rerun Journal Generation. You can run Journal Generation as many times as necessary until all errors are corrected.

Creating Final Journal Entries

You run the Create A/R and G/L Entries program (P48199) to create final invoice accounting entries and to transfer your invoice information from the billing system to the Accounts Receivable and General Accounting systems. The billing system updates transactions in the Accounts Receivable Ledger (F0311) and the Account Ledger (F0911) from the Invoice Summary Workfile (F4822) and Summarized Journal Workfile (F48911), respectively.

Create A/R and G/L Entries is a batch program. The system processes the invoice batch as a unit. If the system detects one or more errors, the system does not transfer invoices to the Accounts Receivable or General Accounting systems. The billing system sets the invoice batch to an error status. You must correct the error conditions, then re-run Create A/R and G/L Entries. You can run Create A/R and G/L Entries as many times as necessary to correct all errors. You can transfer invoice information to the Accounts Receivable and General Accounting systems.

Note: Create A/R and G/L Entries writes the invoice information to the Accounts Receivable and General Accounting 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.

Posting Invoices to G/L

Select 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

Printing Final Invoices

Use the Reprint Invoices program to print final invoices. Invoices printed before you run Create A/R and G/L Entries are considered draft invoices. Invoices printed after you run Create A/R and G/L Entries 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 Billing Workfile History (F4812H).
Understanding Invoice Processing

JD Edwards World recommends that you print final invoices after you complete Create A/R and G/L Entries and post invoices. If you print invoices after processing A/R information, ensures that the information printed on the invoice matches the invoice information created in the Accounts Receivable Ledger.

**Note:** If you print final invoices prior to completing the Create A/R and G/L Entries and Post Invoices to G/L processes, you run the risk of inadvertently modifying the invoice information that you printed and mailed to the customer.

## Journal Reclassification

Depending on whether you set the billing constants to allow journal reclassification and how you set the processing options for the Workfile Revisions (P4812) program, you can reclassify, or change, the account information for a workfile transaction.

Journal reclassification is available within the billing system to allow you to move the original cost entry to a different account and let the system automatically create the correcting entries in the Account Ledger (F0911). The correcting entries are created as part of the revenue recognition process.

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 the payroll transactions, you review the costs and discover the employee’s data entry error.

You correct the error by changing the work order numbers in the workfile transactions in the Billing Detail Workfile (F4812). With journal reclassification, when you run Journal Generation (P48132), the system creates the correcting journal entries along with the preliminary journal entries for revenue and costing. When the batch is processed to G/L, the adjusting journal entries are created in the Account Ledger (F0911) to reverse the original account and update the new account.

You can identify the correcting journal entries by their document type (AJ).

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 Employee Transaction History (F0618) when the revenue batch is created in G/L. 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.

## Associated G/L Batch Processing

When you process an invoice batch and need to create G/L journal entries to support revenue, cost reallocation and reclassification journal entries, the system creates and associated G/L batch. This associated G/L batch contains the G/L journal entries associated with the invoice journal entries.

If a contract includes Lump Sum or Unit Price billing lines that are eligible for revenue recognition, and if Workfile Generation creates the revenue transactions in the Billing Workfile (Transaction Classification A and Eligibility Code 2), and if the transactions are not included in revenue processing, then the system includes the
transactions in an associated G/L (revenue) batch when the billing lines are invoiced. The G/L batch is created when Invoice Journal Generation (P48131) is run.

If a Fee billing line is eligible for revenue recognition and if the fee is cross-referenced to a billing line that is included in an associated G/L batch, then the system calculates the fee when the associated G/L batch is created.

The associated G/L batch is written to the Account Ledger (F0911) during the Create A/R and G/L Entries process when the invoice journal entries are written to the A/R Ledger (F0311) and Account Ledger. Post the G/L batch from the Revenue Recognition menu (G4823).

**Note:** The journal entries in the associated G/L batch are not voided if the invoice is voided.
Generate Invoices

Generating Invoices for Billing

When you accumulate costs, the system creates the workfile transactions for T&M billing lines and components that contain the information for creating invoices. The next step is to generate invoices.

The term invoice has two meanings in the Contract Billing system:

- Invoice information that the system generates from the workfile transactions in the Billing Workfile (F4812) and stores in the Invoice Summary Workfile (F4822).
- A copy of the invoice that you print for your customer. The system prints invoices based on the invoice layouts that you define using Invoice Formatting.

When you run Invoice Generation (P52800), the system automatically summarizes the selected workfile transactions and stores the summarized records in the Invoice Summary Workfile (F4822). The system uses the contract billing lines you have defined to control the invoice and pay item summarization logic. The system uses the Invoice Summary entries to create A/R Ledger (F0311) transactions when Create A/R and G/L Entries are run.

**Note:** Workfile transactions supporting T&M billing lines are created during workfile generation. Workfile transactions supporting the invoicing of non-T&M billing lines (Lump Sum, Unit Price, Milestone, Progress Billing, Fees, Draws) are calculated during invoice generation.

You can define recurring billing invoices for Lump Sum billing lines. When you generate invoices, the recurring amounts are calculated if you have specified the recurring code in the Invoice Generation processing options.

Pay items represent the individual billing lines that you set up for a contract. Pay items contain either a summary of one or more workfile transactions related to time and materials, or the amount of a billing for costs related to non-T&M contract billing lines. The pay items for a specific invoice make up the total amount of the invoice for a contract.

During Invoice Generation, the system:

- 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 summarize select T&M workfile transactions and stores the summarized records in the Invoice
Summary Workfile (F4822). The workfile transactions are updated with the invoice information (batch number, invoice number, pay item, document type, and invoice date) to indicate that 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 Workfile
- Calculates applicable fees and retainage amounts
- Retrieves the customer from the contract and the G/L Offset from the billing line 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
- Updates the billing batch header with the 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
- Prints the Invoice Generation Exception Report, if applicable

What You Should Know About

Creating preliminary invoices

If you set the system constants to generate draft and final invoices, the system assigns draft numbers to the invoices during invoice generation. When you create the G/L and A/R entries for the final invoices, the system reassigns the numbers and document type.

See Setting Up System Constants.

Calculating invoice amounts for lump sum, unit price, fee, or components

When you create invoices automatically, the system processes workfile transactions related to time and material, including components. At this time, the system can also calculate the invoice, fee, and retainage amounts for contract billing lines that are related to non-T&M, such as lump sum or unit price, if you have defined cross-references for the respective contract billing lines.

See Defining Cross-References for Lump Sum and Defining a Cross-Reference for Unit Price.

Calculating invoice amounts for milestone or progress billing

When you complete an event 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 bill for the event at the percentage you have specified.

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. At this point in the billing process, you cannot change the billing amount.

After the system bills 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.
Retainage on fee lines

The system automatically calculates the retainage on invoice amounts for all applicable contract billing lines.

In some cases, the invoice amount for a fee line either might not exist or might be incomplete. This occurs for fee lines with cross-references that include lump sum or unit price. The system does not automatically calculate fee lines for those two contract billing lines if you enter the billing amounts manually. You must manually revise the pay item amount for both the fee line and retainage.


Limits on invoice amounts

As limits to invoice amounts, you can define the following amounts:

- Minimum amount at the level of a contract
- Maximum amounts at the levels of a contract, change order, and contract billing line

If the current invoice amount for a contract is less than the minimum amount, the system does not create an invoice for the contract.

If the invoice amount for a contract, change order, or contract billing line exceeds the respective maximum amount, the system warns you by:

- Displaying O in the Limit Exceeded field on Invoice Entry Review for the contract
- Displaying O in the Limit Exceeded field on Pay Item Billing Inquiry for the contract billing lines
- Listing the contract, change order, and contract billing line numbers on the Invoice Generation Exception Report (E52800)

The system does not prevent you from creating the invoices and billing transactions.

See Creating the Master Record for a Contract for more information about guaranteed amounts.

Bill when Paid

Any T&M transactions that are attached to a contract or T&M billing line that has a value of Y (only paid A/P invoices can be billed) in the Bill when Paid field are included in the invoice only if the voucher associated with the workfile record has been paid. Any T&M transactions for which associated vouchers have not been paid are listed on the error report.

Note: The T&M workfile transaction might override the Bill when Paid rule defined on the contract or billing line.

See Also

- Creating Invoices Manually for Revenue Recognition and Billing
- Calculating Fee Lines Manually for a Contract for information about calculating fee amounts for lump sum and unit price
Generate Invoices

- Technical Foundation Guide for information about running, copying, and changing a DREAM Writer version

Processing Options

Generate Invoices Automatically

Generating Invoices Automatically

When you accumulate costs, the system creates the workfile transactions for T&M billing lines and components. The transactions are the basis for the invoices that you send to your customers. The next step in the billing process is to generate invoices. If your contracts do not include T&M billing lines, then the billing process begins with generating invoices.

The term invoice has two meanings in the Contract Billing system:

- Invoice information that the system generates from the workfile transactions in the Billing Workfile (F4812). The system stores the summarized invoice information in the Invoice Summary Workfile (F4822).
- A copy of the invoice that you print for your customer. The system prints invoices based on the invoice layouts that you define using Invoice Formatting (P4850).

When you run Invoice Generation (P52800), the system automatically summarizes the selected workfile transactions and stores the summarized records in the Invoice Summary Workfile (F4822). The system uses the contract billing lines you have defined to control the invoice and pay item summarization logic. The system uses the Invoice Summary entries to create A/R Ledger (F0311) transactions when Create A/R and G/L Entries are run.

Note: Workfile transactions supporting T&M billing lines are created during workfile generation. Workfile transactions supporting the invoicing of non-T&M billing lines (Lump Sum, Unit Price, Milestone, Progress Billing, Fees, Draws) are calculated during invoice generation.

You can define recurring billing invoices for Lump Sum billing lines. When you generate invoices, the recurring amounts are calculated if you have specified the recurring code in the Invoice Generation processing options.

Pay items represent the individual billing lines that you set up for a contract. Pay items contain either a summary of one or more workfile transactions related to time and materials, or the amount of a billing for costs related to non-T&M billing lines. The pay items for a specific invoice make up the total amount of the invoice for a contract.

You can run the Invoice Generation program (P52800) to generate invoices automatically, or you can create invoices manually. During invoice generation, the system:
Generate Invoices Automatically

- 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 summarize workfile transactions associated with T&M billing lines and stores the summarized records in the Invoice Summary Work File (F4822). The workfile transactions are updated with the invoice information (batch number, invoice number, pay item, document type, and invoice date) to indicate that 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 Work File.
- Retrieves the customer number from the contract and the G/L offset from the billing line 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.
- Calculates applicable fees and retainage amounts.
- Prints the Invoice Generation Exception Report (R52800) if there are messages or errors associated with the creation of the invoices.
- Updates the billing batch header (F48011) with the 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 the batch.

**Contract Billing Invoice Generation**

The Contract Billing Invoice Generation report (R52800) is generated if there are errors or warnings associated with the batch.

![Invoice Generation Exception Report](image)

**What You Should Know About**

**Creating draft and final invoices**

If you set the system constants to generate draft and final invoices, the system assigns draft numbers to the invoices during invoice generation. When you create the G/L and A/R entries for the final invoices, the system reassigns the numbers and document type.

*See Setting Up System Constants.*
Calculating invoice amounts for lump sum, unit price, fee, or components

When you create invoices automatically, the system processes workfile transactions that are related to time and materials, including components. At this time, the system can also calculate the invoice, fee, and retainage amounts for non-T&M billing lines, such as lump sum or unit price, if you have defined cross-references for the respective billing lines.


Calculating invoice amounts for milestone and progress billing

When you complete an event 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 bill for the event at the percentage you have specified.

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. At this point in the billing process, you cannot change the billing amount.

After the system bills 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.

Retainage on fee lines

The system automatically calculates the retainage on invoice amounts for all applicable billing lines.

In some cases, the invoice amount for a fee billing line might not exist or might be incomplete. This occurs for fee billing lines that have cross-references to lump sum or unit price billing lines.

The system does not automatically calculate fee billing lines for lump sum and unit price billing lines if you enter the billing amounts manually. You must manually revise the billing line amount for fees and retainage.


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 in the processing options.

See Defining Recurring Amounts.
Limits on invoice amounts

As limits to invoice amounts, you can define the following amounts:

- Minimum amount at the level of a contract
- Maximum amounts at the levels of a contract, change order, and contract billing line

If the current invoice amount for a contract is less than the minimum amount, the system does not create an invoice for the contract.

If the invoice amount for a contract, change order, or contract billing line exceeds the respective maximum amount, the system warns you by:

- Displaying O in the Limit Exceeded field on Invoice Entry Review for the contract
- Displaying O in the Limit Exceeded field on Pay Item Billing Inquiry for the contract billing lines
- Listing the contract, change order, and contract billing line numbers on the Invoice Generation Exception Report (E52800)

The system does not prevent you from creating the invoices and billing transactions.

See Creating the Master Record for a Contract for more information about guaranteed amounts.

Bill when Paid

Any T&M transactions attached to a contract or T&M billing line that has a value of Y (only paid A/P invoices can be billed) in the Bill when Paid field are included in the invoice only if the voucher associated with the workfile record has been paid. Any T&M transactions for which associated vouchers have not been paid are listed on the error report.

Note: The T&M workfile transaction might override the Bill when Paid rule defined on the contract or billing line.

See Also

- Creating Invoices Manually
- Calculating Fee Lines Manually for a Contract for information about calculating fee amounts for lump sum and unit price
- Technical Foundation Guide for information about running, copying, and changing a DREAM Writer version

Processing Options

Work with Invoices

When you run the Invoice Generation program (P52800), the system:

- Creates a batch of invoices
- Assigns contract and invoice numbers to individual invoices
- Summarizes workfile transactions for time and materials, including components, to create pay items for the T&M and component billing lines on each invoice
- Calculates billing amounts for non-T&M billing lines
- Calculates applicable fees and retainage amounts
- Stores the information in the Invoice Summary Workfile (F4822)

To prepare the batch for further processing, you can use the batch review process to:

- Review and revise the invoice transactions
- Calculate retainage amounts manually
- Release retainage
- Calculate fee lines manually

Working with invoices consists of the following tasks:

- Reviewing invoices
- Decreasing invoice amounts
- Calculating retainage manually for a contract
- Calculating fee lines manually for a contract
See Also

- Adding T&M Transactions to an Invoice to increase the amount on an invoice

Reviewing Invoices

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Batch Review (P48221)

When you generate invoices, the system creates a batch of invoice transactions. It also updates the workfile transaction with the following information:

- Invoice number
- Invoice date
- Pay item number
- Batch number

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 contracts in a selected batch
- Pay items for selected contracts
- Individual workfile transactions for selected pay items related to T&M billing lines, including components
- Billing information for selected billing lines
As you review the different levels of an invoice, you can revise specific information. For example, you can revise an invoice amount or add transactions to an invoice.

**To review invoices**

**On Batch Review**

1. To locate a batch of invoices, complete any of the following fields:
   - Batch Number
   - Batch Date From
   - Batch Date Thru
   - User ID

   If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status. The system displays the most current batch last.

2. To further limit the list of batches, complete the following optional fields:
   - Skip To Batch Number
   - Batch Status
   - Current Activity

3. Review the following fields for a batch:
   - Batch Number
   - Current Activity
   - Batch Status Description

4. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).
5. On Invoice Entry Review, review the following fields:
   - Contract Number
   - Customer Name
   - G/L Date
   - LE

6. To review the details for an invoice, choose Review Invoice (Option 1).
7. On Pay Item Billing Inquiry, review the following fields:
   - Billing Line
   - Current Billed
   - Limit Exceeded (LE)

8. To review the related transactions, choose Invoice Detail Maintenance (Option 2) for a pay item for a T&M billing line.
9. On Invoice Detail Revisions, review the workfile transactions that make up the pay item.

10. To return to Pay Item Billing Inquiry, choose Exit Program (F3).

11. To review the billing information for the billing line, choose Billing Revisions (Option 1) for a specific pay item.
12. Change the columns on the form by choosing the Pay Item/Description Toggle function (F17).

13. To return to Pay Item Billing Inquiry, choose Exit Program (F3).

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Number (ICU)</td>
<td>A number that identifies a group of transactions that the system processes and balances as a unit. When you enter a batch, you can either assign a batch number or let the system assign it through Next Numbers. When you change, locate, or delete a batch, you must specify the batch number.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>Note: If the OP (Option) field to the left of a batch number is highlighted, the batch has text attached to it.</td>
</tr>
<tr>
<td>Batch Date From (DICJ)</td>
<td>The date of the batch. If you leave this field blank, the system date is used.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>Note: The Batch Date From/Thru fields let you select batches that were created within a specified date range.</td>
</tr>
<tr>
<td></td>
<td>The Batch Date field indicates the date that the individual batches were created.</td>
</tr>
<tr>
<td>Date Thru</td>
<td>The ending date of the range for the batches you want to display. If you specify a From date and leave the Thru date blank, the system displays all batches with that batch date and future batch dates.</td>
</tr>
</tbody>
</table>
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batch Status (BS)</td>
<td>A control function in the Service Billing and Contract Billing systems. The system verifies the following values prior to executing various jobs to ensure the functions are performed in the proper sequence. Valid codes are:</td>
</tr>
<tr>
<td></td>
<td>blank  Invoices have not been created</td>
</tr>
<tr>
<td></td>
<td>0  Manual adjustment in Contract Billing</td>
</tr>
<tr>
<td></td>
<td>1  Invoices generated without errors</td>
</tr>
<tr>
<td></td>
<td>2  Invoices generated with errors</td>
</tr>
<tr>
<td></td>
<td>3  Revenue journals created without errors</td>
</tr>
<tr>
<td></td>
<td>4  Revenue journals created with errors</td>
</tr>
<tr>
<td></td>
<td>5  Invoice journals created without errors</td>
</tr>
<tr>
<td></td>
<td>6  Invoice journals created with errors</td>
</tr>
<tr>
<td></td>
<td>7  Batch changed - rerun journals</td>
</tr>
<tr>
<td></td>
<td>8  Active revenue batch found</td>
</tr>
</tbody>
</table>

The batch status description is a user-defined code (UDC 48/BS).
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Activity (CUAC)</td>
<td>Identifies the processing cycle step that is currently active. This field maintains the integrity of the batch member throughout the Service Billing and Contract Billing systems. The system uses this field to ensure that the batch number selected is qualified for a particular function. Valid values are: 0 Available 1 Generation in process 2 Maintenance in process 3 Journal generation in process 4 Batch delete in process 5 Invoice printing in process 6 Batch posting 7 Selection in progress * Display all batches</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>There are two Current Activity fields on this form.  • Header Field - lets you display batches that are in a particular step of the invoice cycle.  • Detail Field (CA) - indicates the current step of the invoice cycle for the individual batches that display.</td>
</tr>
<tr>
<td>Batch Status Description</td>
<td>A brief description of a code or abbreviation.</td>
</tr>
<tr>
<td>Limit Exceeded Flag (#LEX)</td>
<td>This flag identifies any not-to-exceed (NTE) limit that has been exceeded. The system displays O for over-billed if the limit is exceeded. You can set the NTE amount limitations for contract billing lines, change orders, or contracts.</td>
</tr>
</tbody>
</table>

**What You Should Know About**

**Reviewing the batch number for contracts**  When a contract is in an active batch, the system displays the batch number on Contract Master Revisions (P5201) and Contract Billing Line Details (P5202).
Deleting a batch

Use Batch Delete to delete any unwanted batches. When you delete a batch:

- You can set the processing option to print a report to retain an audit trail of the invoice information you delete. The system stores the audit trail in the Deleted Invoices table (F48229).

Revising a batch header

Use Batch Header Revisions (P480011) to revise the status and current activity of a batch. You might need to do this, for example, 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.

If the current activity of the batch still indicates maintenance in process after an extended period of time, then verify that no users are actually reviewing the batch. Also verify that no Billing jobs are running and processing the batch. If there are no users in the batch and no jobs are running, then access Batch Header Revisions (P480011) on the Service Billing Advanced Operations menu (G4831). Inquire on the batch and change the Current Activity from 2 to 0 (Available).

Note that making this change while a user actually is reviewing or processing a batch can create corrupt data.

Decreasing Invoice Amounts

As you review invoice information in a contract, you might need to revise the invoice amount. You can do this by revising the pay item amount or deleting the invoice.

Revising invoice amounts consists of the following:

- Revising a pay item amount for T&M
- Revising a pay item amount for non-T&M
- Deleting an invoice

See Also

- Adding T&M Transactions to an Invoice to increase the amount on an invoice To decrease a pay item amount for T&M

On Batch Review

1. To locate a batch of invoices, complete any of the following fields:
   - Batch Number
   - Batch Date From
   - Batch Date Thru
Work with Invoices

- **User ID**
  
  If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status. The system displays the most current batch last.

2. To further limit the list of batches, complete the following optional fields:
   - **Skip To Batch Number**
   - **Batch Status**
   - **Current Activity**

3. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

4. On Invoice Entry Review (P48222), choose Review Invoice (Option 1) to review the details for a contract.

5. On Pay Item Billing Inquiry, choose Invoice Detail Maintenance (Option 2) for a pay item for a T&M billing line.

6. On Invoice Detail Revisions, choose Remove Transaction From Invoice (Option 9) to delete transactions from pay items.

**To revise a pay item amount for non-T&M**

On Batch Review.

1. Locate a batch of invoices.

2. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

3. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.


5. On Pay Item Billing Revisions, revise one of the following fields:
   - **Current**
   - **Earned to Date**

6. Use the Change action.

**What You Should Know About**

**Working with percentages** You can choose Toggle (F17) to review and enter percentages rather than amounts or units. Then, if you know the percentage to bill or to have retained, you can enter the percent, and the system automatically calculates the respective amount for the billing line.
### Recalculating fee amounts
If you have cross-referenced billing lines for milestone billing, progress billing, and T&M, including components, to a fee billing line, the system calculates the fee amounts automatically.

The system does not calculate the fee amounts for lump sum and unit price when you manually enter the billing amounts. In this case, you must recalculate the fee lines as a separate task.

See *Calculating Fee Lines Manually for a Contract*.

### Calculating draw amounts
If you have cross-referenced billing lines for direct and rated draws to T&M, lump sum, or unit price billing lines, the system does not automatically calculate the draw amount.

In this case, you must calculate the draw amount manually. To do this, choose Recalculate Fee Amounts during the review process.

### Retainage on fee lines
The system automatically calculates the retainage on invoice amounts for all applicable billing lines when you run Invoice Generation.

In some cases, the invoice amount for a fee line either might not exist or be incomplete. This occurs for fee lines with cross-references that include lump sum or unit price. The system does not automatically calculate fee lines for lump sum or unit price contract billing lines if you enter the billing amounts manually. You must recalculate both the fee line amount and the retainage on the fee line amount as separate tasks.

See *Entering Retainage Rules for a Contract* and *Calculating Retainage Manually for a Contract*.

### Recalculating retainage for a contract
When you change the current billing amount for a non-T&M billing line, the system does not automatically recalculate the retainage amount.

To recalculate the retainage, choose Recalculate Retention (F13) on Pay Item Billing Inquiry during the review process. You can also change the retainage information on Pay Item Billing Revisions.

### Draws, milestones, progress billings
You cannot change the billing amount for direct draw, rated draw, milestone, or progress billing lines.

### To delete an invoice
When you delete an invoice, the system updates the following information:

- Retainage amounts
- Batch header information
- Invoice information in the Invoice Summary Workfile (F4822)
- Invoice information in the Billing Workfile (F4812)
- Invoice information in the Contract Summary table (F5280)
• Accounting and internal control information that is related to the invoice, batch, sequences, and so on

If you delete the only remaining invoice in the batch, the system automatically deletes the batch header information without leaving an audit trail for the invoice number that you delete.

On Batch Review

1. To locate a batch of invoices, complete any of the following fields:
   • Batch Number
   • Batch Date From
   • Batch Date Thru
   • User ID

   If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status. The system displays the most current batch last.

2. To further limit the list of batches, complete the following optional fields:
   • Skip To Batch Number
   • Batch Status
   • Current Activity

3. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

4. On Invoice Entry Review, choose Delete Single Invoice (Option 9) for the contract.

5. On Invoice Delete Window, complete the one-character field to create an audit trail for the invoice number that you delete.

6. Choose Return and Delete (F5).
Calculating Retainage Manually for Billing

Retainage is the amount of the payment withheld to ensure satisfactory contract performance. For example, your customer might require a 10 percent retainage on the billings. In this case, if you bill your customer for 100 dollars, your customer withholds 10 dollars and pays you 90 dollars. After your company completes the work satisfactorily, your customer authorizes the release of the 10 dollars that was retained.

The system automatically calculates the retainage amount for each applicable billing line when you run Invoice Generation. You can calculate retainage amounts manually as a separate task if:

- You manually change the billing amount for a billing line
- You manually enter an invoice amount for lump sum or unit price billing lines

If you make a change after you run Invoice Generation, the system does not automatically recalculate retainage.

To calculate retainage manually

On Batch Review

1. To locate a batch of invoices, complete any of the following fields:
   - Batch Number
   - Batch Date From
   - Batch Date Thru
   - User ID
     
     If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status. The system displays the most current batch last.

2. To further limit the list of batches, complete the following optional fields:
   - Skip To Batch Number
   - Batch Status
   - Current Activity

3. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

4. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.

5. On Pay Item Billing Inquiry, choose Recalculate Retention (F13).
What You Should Know About

Working with percentages
You can choose Toggle to review and enter percentages rather than amounts or units. Then, if you know the percentage to bill or to have retained, you can enter the percent, and the system automatically calculates the respective amount for the billing line.

Revising retainage for a pay item
You can revise the retainage amount for an individual pay item when you review the billing information for a contract billing line. On Pay Item Billing Revisions, change the amount in either the Current Retainage or Retainage To Date field. Depending on the format, you can also change the percentage in those two fields.

Caution: After you update the retainage amount for a pay item and return to Pay Item Billing Inquiry, the system warns you that the billing amount has been changed. Do not choose Recalculate Retention. If you do, the system overrides the retainage amount you entered on Pay Item Billing Revisions.

Retainage on fee lines
The system automatically calculates the retainage on invoice amounts for all applicable billing lines.

If the invoice amount for a fee line does not exist or is incomplete, the system does not automatically calculate fees when you enter the billing amounts manually. This can occur for fee lines with cross-references that include lump sum or unit price billing lines. In this case, you must manually revise the pay item amount for both the fee line and retainage.

See Calculating Fee Lines Manually.

See Also

- Entering Retainage Rules for a Contract for more information about retainage
- Releasing Retainage

Calculating Fee Lines Manually

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Batch Review (P48221)

A fee line is a billing line that represents an amount you charge your customer in addition to another billing amount. You can base a fee line on a percent of either the costs incurred or the amounts invoiced for a contract.

For fee lines related to billing lines for milestone billing, progress billing, and T&M, including components, the system calculates the fee amounts automatically when you run Invoice Generation.

You can calculate fee amounts manually as a separate task if:

- You manually change the billing amount for a billing line
You manually enter an invoice amount for lump sum or unit price billing lines.

If you make a change after you run Invoice Generation, the system does not automatically recalculate retainage.

**To calculate fee lines manually**

On Batch Review

1. To locate a batch of invoices, complete any of the following fields:
   - Batch Number
   - Batch Date From
   - Batch Date Thru
   - User ID

   If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status. The system displays the most current batch last.

2. To further limit the list of batches, complete the following optional fields:
   - Skip To Batch Number
   - Batch Status
   - Current Activity

3. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

4. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.

5. On Pay Item Billing Inquiry, choose Recalculate Fee Line (F11).

**What You Should Know About**

**Revising a fee line pay item** You can revise the amount for a fee line when you review the billing information for the billing line. On Pay Item Billing Revisions, change the amount in either the Current field or the Earned To Date field. Depending on the format, you can also change the percentage in those two fields.

Caution: After you revise the amount for a fee line pay item and return to Pay Item Billing Inquiry, the system warns you that the billing amount has been changed. Do not choose Recalculate Fee Line. If you do, the system overrides the amount you entered on Pay Item Billing Revisions.
Create Invoices Manually

Creating Invoices Manually

You can manually generate invoices without running the Invoice Generation program. When you generate invoices manually, you can:

- Create a new batch header and add the invoices to the new batch
- Add invoices to an existing batch
- Add transactions to the invoices

For example, you might have an existing batch which 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.

Creating invoices manually consists of the following tasks:

- Creating a batch header manually
- Creating an invoice manually
- Adding transactions to an invoice
- Revising an invoice amount for non-T&M
- Releasing retainage

See Also

- Generating Invoices Automatically to create invoices automatically

Creating a Batch Header Manually

You can manually create a new batch header for invoices. When you create a new batch header, you create a new, empty batch. Creating a new batch is optional because you can add invoices to an existing batch. If you do not want to create a new batch, you do not need to create a batch header.

To create a batch header manually

On Batch Review

1. Complete the following field:
Create Invoices Manually

- User ID

2. Choose Create Empty Batch (F6).
   The system displays the new batch on Batch Review. You can then add invoices to the batch on Invoice Entry Review (P48222).

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

On Batch Review

1. Complete any of the following fields to locate a batch of invoices:
   - Batch Number
   - Batch Date From
   - Batch Date Thru
   - User ID
   If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status. The system displays the most current batch last.

2. To further limit the list of batches, complete the following optional fields:
   - Skip To Batch Number
   - Batch Status
   - Current Activity

3. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).
4. On Invoice Entry Review, choose Invoice Adjustment (F6).

5. On Invoice Adjustment Window, complete the following fields:
   - Contract Number
   - Bill From Date
   - Bill Thru Date
   - G/L Date
   - Application Date

6. Complete the following optional fields:
   - Application Number
   - Adjustment Number
   - Recurring Billing Codes
   - Initialize to Zero
7. To override the information from the system constants and contract master information, complete the following optional fields:

- Document Type
- Tax Rate/Area
- Tax Explanation Code
- Payment Terms

8. Choose Edit and Submit (F6).
   The system prompts you to verify the submission.

9. Choose Submit Job (F6).
   The system displays the new invoice on Invoice Entry Review. You can then:

- Add workfile transactions to the invoice
- Add billing amounts for non-T&M billing lines
- Release retainage

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>G/L Date (DG)</td>
<td>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).</td>
</tr>
</tbody>
</table>

  **Form-specific information**
  The system assigns the G/L date during the invoice generation process. You can override that date, however, when you select an invoice batch for invoice journal generation. You control this override function with the billing system constants.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application/Invoice Date (APDT)</td>
<td>The date of the last or current application. (An application is assigned each time an invoice is issued for the contract.)</td>
</tr>
</tbody>
</table>

  **Form-specific information**
  The date that the system assigns to the invoice. This date is updated during the invoice generation process, but you can override it when you select an invoice batch for invoice journal generation. This override function is controlled by the billing system constants.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Number (APPL)</td>
<td>The last or current application number for the specified contract. (The system assigns a new application number each time an invoice is issued for the contract.)</td>
</tr>
</tbody>
</table>
## Create Invoices Manually

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustment Numb (ADJN)</td>
<td>A number used to control changes to closed applications. Closed applications represent invoices that have been sent. This number is always zero unless you reopen a previous application.</td>
</tr>
<tr>
<td>Initialize to Zero (#INZ)</td>
<td>This field creates a new application or adjustment with zero current billing amounts. Valid codes are:</td>
</tr>
<tr>
<td></td>
<td>Y  Create empty invoices with no billing amounts</td>
</tr>
<tr>
<td></td>
<td>N  Do not create empty invoices</td>
</tr>
</tbody>
</table>

### What You Should Know About

**Reviewing the batch number for contracts**

When a contract is in an active invoice batch, the system displays the batch number for the invoices on Contract Master Revisions (P5201) and Contract Billing Line Details (P5202).

**Calculating invoice amounts for non-T&M**

When you create invoices automatically, the system processes workfile transactions related to T&M, including components. At this time, the system can also calculate the invoice, fee, and retainage amounts for non-T&M billing lines, such as lump sum or unit price, if you have defined cross-references for the respective billing lines.

See [Defining Cross-References for Lump Sum](#) and [Defining a Cross-Reference for Unit Price](#).

**Recurring invoices**

You can define recurring invoices for a lump sum billing line. 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.

See [Defining Recurring Amounts](#).

**Retainage on fee lines**

The system automatically calculates the retainage on invoice amounts for all applicable billing lines.

In some cases, the invoice amount for a fee line does not exist or is incomplete. This occurs for fee lines with cross-references that include lump sum or unit price. The system does not automatically calculate fees for those billing lines if you enter the billing amounts manually. You must manually revise the pay item amount for both the fee line and retainage.

See [Calculating Fee Lines Manually for a Contract](#) and [Calculating Retainage Manually for a Contract](#).
Adjusting a previous application for payment

A previously billed invoice or application might need a revision after you have applied cash to the invoice. Instead of voiding the invoice and cash receipt, you can create an adjustment to the previous application.

To do this, follow the steps for creating an invoice manually and enter the application number for the invoice that needs adjusting. The system automatically assigns the adjustment number and creates a new invoice number for the adjusted application.

See Also

- Calculating Fee Lines Manually for a Contract
- Calculating Retainage Manually for a Contract

Adding T&M Transactions to an Invoice

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Batch Review (P48221)

An invoice might not contain all the billable amounts for time and material (T&M) that you have entered during the accounting cycle. To account for this, you need to:

- Review the existing T&M transactions in the Billing Workfile (F4812) 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

You can add workfile transactions for time and material to:

- A new invoice for a contract
- An existing pay item for a contract

Adding transactions to an invoice consists of the following:

- Adding transactions for T&M from the workfile
- Adding existing G/L transactions for T&M
- Adding ad-hoc transactions to a T&M billing line

To add T&M transactions from the workfile

On Batch Review

1. Locate a batch of invoices.
2. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).
3. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.

4. On Pay Item Billing Inquiry, choose Invoice Detail Maintenance (Option 2) for a pay item for a T&M billing line.

5. On Invoice Detail Revisions, choose Workfile Selection (F12).
6. On Work File Transaction Select, choose Select Transaction (Option 1) for one or more available transactions.

7. Choose Merge/Update Invoice (F5).
   The system moves the workfile transaction to the invoice pay item.

   **Caution:** The system prevents you from merging taxable and nontaxable transactions into the same pay item. If you merge taxable transactions into the same pay item, the transactions must have the same tax rate area and tax explanation. A blank in the Tax Rate/Area field is a valid tax code indicating that the pay item is nontaxable.

8. Choose Exit Program (F3).

9. On Invoice Detail Revisions, review the transactions.

**To add existing G/L transactions for T&M**

On Batch Review
1. Locate a batch of invoices.
2. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).
3. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.
4. On Pay Item Billing Inquiry, choose Invoice Detail Maintenance (Option 2) for a pay item for a T&M billing line.
5. On Invoice Detail Revisions, choose Workfile Selection (F12).
6. On Work File Transaction Select, choose G/L Selection (F10).
4. On G/L Transaction Selection, complete the following field:
   - Business Unit

5. To limit the list of transactions, complete one or more of the following fields:
   - Date From
   - Date Thru
   - Object
   - Subsidiary
   - Subledger
   - Subledger Type

6. Choose one of the following for a specific transaction or a group of transactions:
   - Select at Cost (Option 1)
   - Select with Markup (Option 2)

The system processes the source transactions.

7. Choose Exit Program (F3).

8. On Work File Transaction Select, use the Inquire action to review the available transactions.

9. For the G/L transaction you added, complete the steps for adding transactions for T&M from the workfile.

**To add ad hoc transactions to a T&M billing line**

You can add transactions to a T&M billing line on an as-needed basis. For example, you might want to add a transaction to an invoice to create a credit memo.

**On Batch Review**

1. Locate a batch of invoices.

2. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

3. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.

4. On Pay Item Billing Inquiry, choose Invoice Detail Maintenance (Option 2) for a pay item for a T&M billing line.

5. On Invoice Detail Revisions, complete the following fields:
   - G/L Date
   - Business Unit
   - Object
   - Subsidiary
   - Employee/Supplier (optional)
   - Eligibility Code

6. Choose More Details (F4).
7. Complete the following optional fields, then choose the Change action:
   - Subledger
   - Subledger Type
8. Choose the Inquire action, then choose Transaction Detail (Option 4).
9. On Amounts/Units Information, complete the following field:
   - Total Billing
     You can add more detailed information. See *Entering Ad Hoc Transactions for Billing* for more information.
10. Choose Transaction Update with Redisplay (F5).
11. Choose Exit Program (F3).
12. On Invoice Detail Revisions, choose Update and Redisplay (F5).
13. To review the detail for the contract on Pay Item Billing Inquiry, choose Exit Program (F3).

**What You Should Know About**

**Removing ad hoc transactions from an invoice**

Caution: Ad hoc transactions that you add to an invoice are not represented in the Account Ledger (F0911) table. If you void the invoice, the system returns the ad hoc transactions to the workfile. Ad hoc transactions in the workfile are eligible for processing. You must change the status of the ad hoc transactions and remove them from the workfile to prevent billing for the transactions in error. See *Entering Ad Hoc Transactions* for more information.

**Revising an Invoice Amount for Non-T&M Billing Lines**

You can enter an amount to an existing invoice that already contains pay items. In this case, you can manually:
- Enter the non-T&M billing amount
- Revise a related retainage amount
- Revise a related fee line amount

You can update only certain fields, depending on the pricing type of the billing line. You cannot update any field for direct and rated draw pricing types. After you enter the information, the system updates the Invoice Summary Workfile (F4822).
To revise an invoice amount for non-T&M billing lines

On Batch Review

1. Locate a batch of invoices.
2. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).
3. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.
4. On Pay Item Billing Inquiry, choose Billing Revisions (Option 1) for a specific pay item.
5. On Pay Item Billing Revisions, complete the following fields in the appropriate column:
   - Current
   - Earned to Date
   
The column names vary according to the pricing type. The first column is:
   - Work In Place for lump sum, fees, milestone billing, progress billing, direct draw, and rated draw
   - In Place - Quantity for unit price
   
The second column is:
   - Stored Material for lump sum
   - Unit Price for unit price
   - Not applicable for fees, milestone billing, progress billing, direct draw, and rated draw
   
The Total Billed column is applicable only to lump sum and unit price.
6. To revise the retainage, complete one of the following fields:
   - Current Retainage
   - Retainage To Date
   
The system automatically calculates the other amount.

   **Caution:** After you update the retainage amount for a pay item and return to Pay Item Billing Inquiry, the system warns you that the billing amount has been changed. Do not choose Recalculate Retention (F13). If you do, the system overrides the retainage amount you entered on Pay Item Billing Revisions.

7. Choose Update with Redisplay (F5).
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current</td>
<td>The amount that is being billed for this contract pay item.</td>
</tr>
<tr>
<td>(THPD)</td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>You can enter this amount using the following three methods:</td>
</tr>
<tr>
<td></td>
<td>- Dollar Amount. Enter the dollar amount to be billed for this pay item. If this pay item is taxable, this amount will be the gross amount of the pay item. The taxable amount and tax will equal this amount.</td>
</tr>
<tr>
<td></td>
<td>- Percent Complete. Enter a percent sign % before or after the percent complete amount. For example, you can enter 10% complete as %10 or 10%. The system computes the billing amount by multiplying this percent by the Schedule of Values minus any previous billings.</td>
</tr>
<tr>
<td></td>
<td>- Number of Units. Enter a forward slash / before or after the number of units. For example, you can enter 10 units as /10 or 10/. The system calculates this amount as the number of units multiplied by the unit rate. You must have a unit rate payment type and a valid unit price for the contract pay item in order to use this entry method.</td>
</tr>
<tr>
<td></td>
<td><strong>Note:</strong> Use the Toggle (F17) to switch between the dollar format and percent format on this screen.</td>
</tr>
<tr>
<td>Stored Materials</td>
<td>Use this field to accrue or defer additional costs to a job. A deferred cost can be the value of stored materials which have been received but have not been used on a job.</td>
</tr>
<tr>
<td>(STML)</td>
<td>A positive amount in this field is a deferred cost that decreases the job-to-date actual costs.</td>
</tr>
<tr>
<td></td>
<td>A negative amount in this field is an accrued cost that increases the job-to-date actual costs.</td>
</tr>
<tr>
<td>Earned to Date</td>
<td>The total amount earned to date.</td>
</tr>
<tr>
<td>(EATD)</td>
<td></td>
</tr>
<tr>
<td>Stored Material - Total to Date</td>
<td>The total amount of stored material to date.</td>
</tr>
<tr>
<td>(STTD)</td>
<td></td>
</tr>
</tbody>
</table>
What You Should Know About

Working with percentages
You can choose Toggle (F17) to review and enter percentages rather than amounts or units. Then, if you know the percentage to bill or to have retained, you can enter the percent, and the system automatically calculates the respective amount for the contract billing line.

Stored materials
You can bill for an inventory of materials on the job in addition to the work in place for lump sum. To do this:

- Enter the billing amount for stored material in the Current or Earned to Date field in the Stored Material column on Pay Item Billing Revisions.
- Enter the applicable retainage in the Earned Retainage or Retainage To Date field. If you don't enter retainage at this time, you can calculate the retainage manually on Pay Item Billing Inquiry.

Alternate format for T&M and Component
On Pay Item Billing Revisions, the column names are different for the T&M and component billing lines. The first column is Cost and the second column is Markup. The Total Billed column is also applicable to these billing lines.

Retainage on fee lines
The system automatically calculates the retainage on invoice amounts for all applicable billing lines when you run Invoice Generation.

In some cases, the invoice amount for a fee line either might not exist or be incomplete. This occurs for fee lines with cross-references that include lump sum or unit price. The system does not automatically calculate fee lines for those billing lines if you enter the billing amounts manually. You must recalculate both the fee line amount and the retainage on the fee line amount as separate tasks.

See Entering Retainage Rules for a Contract.

See Also

- Calculating Retainage Manually for a Contract for Billing
- Calculating Fee Lines Manually for a Contract for Billing

Releasing Retainage

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Batch Review (P48221)

You release retainage (retention) when a job has been completed and your customer authorizes the reduction of the retained amounts. The Contract Billing system decreases the retained amount for each contract billing line. You can release partial retained amounts at the levels of a contract, change order, or billing line.
To release retainage

On Batch Review

1. Locate a batch of invoices.

2. To review the invoice information for a specific batch, choose Detailed Batch Review (Option 1).

3. On Invoice Entry Review, choose Review Invoice (Option 1) to review the details for a contract.


5. On Retention Release Window, complete one of the following fields:
   - Retained to Date at Level
   - Incremental (Retained to Date)
   - Aggregate Percent Retained at Level
   - Incremental (Aggregate Percent Retained)

6. Choose Update with Redisplay (F5).

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Retained Amount at Level      | The amount that is currently retained for the level specified in the Retainage Release Level.  
                                | Use this field to change the total percent of retainage for this level. If you enter a change, the system distributes the amount over all pay items that are included in the specified change order level.  
                                | Distribution is based on the percentage of the actual billing amount computed for the pay items. |

**Field Explanation**

- **Retained Amount at Level**: The amount that is currently retained for the level specified in the Retainage Release Level.  
  Use this field to change the total percent of retainage for this level. If you enter a change, the system distributes the amount over all pay items that are included in the specified change order level.  
  Distribution is based on the percentage of the actual billing amount computed for the pay items.
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retained Amount at Level - Incremental</td>
<td>An incremental amount by which you want to change the calculated retainage to date. You can specify a positive or negative amount in this field. When you enter an incremental change, the system distributes the amount specified over all pay items that are included in the change order level indicated in the Retainage Release Level field. Distribution is based on the percentage of the actual billing amount computed for the pay items.</td>
</tr>
<tr>
<td>Aggregate Percent Retained</td>
<td>The aggregate percent retained at the change order level defined in the Retainage Release Level field. The percentage in this field reflects the ratio of the retained-to-date amount and the actual billed-to-date amount for the defined level. Use this field to change the total percent of retainage for this level. If you enter a change, the system distributes the amount over all pay items that are included in the specified change order level. Distribution is based on the percentage of the actual billing amount computed for the pay items.</td>
</tr>
<tr>
<td>Aggregate Percent Retained - Incremental</td>
<td>An incremental percent by which you want to change the calculated retainage to date. When you enter an incremental change, the system distributes the percentage specified over all pay items that are included in the change order level indicated in the Retainage Release Level field. Distribution is based on the percentage of the actual billing amount computed for the pay items.</td>
</tr>
</tbody>
</table>

**What You Should Know About**

**Releasing retainage for a change order**  
The system automatically releases retainage for all change orders related to a contract. To release retainage for a specific change order, specify the number of the change order in the Retention Release Level field.

**Distributing retainage**  
You can increase or decrease the retainage amounts for a contract by specifying an amount or percent on Retention Release Window. The system distributes the new retainage amounts to all the pay items for a contract by using the following calculations:

\[
\text{Amount of Pay Item in Invoice} / \text{Total Amount of Invoice} \times \text{Retainage Amount.}
\]
See Also

- Entering Retainage Rules for a Contract for Billing
- Calculating Retainage Manually for a Contract for Billing
You use the Invoice Print (P48504) program to print draft or final invoices for your customers. The timing of when you print these invoices determines the draft or final status. If you print invoices before you create Accounts Receivable invoices (Create A/R and G/L Entries, P48199), the invoices are draft invoices. If you print invoices after you create the A/R invoices, the invoices are final invoices.

The system allows you to print draft invoices to allow project or account managers to verify the accuracy of invoice information prior to mailing the invoice to a customer, using the information from the Billing Workfile (F4812).

If you find errors, you can make corrections to the invoice, usually without having to delete the entire batch of invoices.

You can print final invoices to send to a customer for goods or services rendered. Printing final invoices or reprinting an invoice retrieves invoice information from Billing Workfile – History (F4812H).

JD Edwards World recommends that you print the final invoices for the customer after you create A/R and G/L entries and post the invoices to A/R. To ensure that the information on the invoice matches the invoice information in the Accounts Receivable Ledger (F0311), print invoices after the A/R information is processed.

Caution: If you print final invoices prior to completing creating and posting the A/R invoices, 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:

**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

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Print Invoices (P48504)
After you create an invoice batch, you can print the invoices. You use the following methods to control the layouts that the system uses to print invoices:

- Key Type and Table Key fields on Format Cross Reference (P4858) to specify a default layout
- Invoice Format field on Contract Master Revisions (P5201) to assign a layout for a specific contract

If you have not specified an invoice layout for a contract, the system uses the key type and table key combination that you have defined on Format Cross-Reference to determine the invoice layout to print. The system uses the following hierarchy to search for layouts:

- Work order (SBL)
- Work order class (WR07)
- Contract number (DOCO)
- Parent contract number (PCTN)
- Customer (AN8O)
- Job number (MCU)
- Job class (RP11)
- Company number (CO)

**Before You Begin**

- Define invoice layouts
- Assign a key type and table key combination to an invoice layout on Format Cross-Reference or assign an invoice format code to a contract on Contract Master Revisions
  
  You can access Format Cross-Reference from within Invoice Layout Revisions (P4850)
- Create invoices automatically or manually
To print invoices

On Print Invoices

1. Enter the batch number that contains the invoices to be printed.

2. Place the cursor in the following field:
   - Version

3. Choose Field Sensitive Help (F1).
   - The system displays DREAM Writer Selection List.

4. On DREAM Writer Selection List, choose Select Value (Option 4) for a specific program version.
   - After you enter the information, the system displays the version number you selected in the Version field on Print Invoices. If you do not specify a version in the Version field on Print Invoices, the system runs version ZJDE0001.
Note: The value for the invoice type in the processing option for the ZJDE0001 program might not correspond to the value indicated in the DREAM Writer title. If you need to change the invoice type for the print program, you can access this processing option when you select Print Invoices. Choose the Versions List function (F8) and then select Change (Option 2) for the version.

5. Choose Submit Batch (F6).
   The system displays the message Verify Invoice Print Submission.

7. Choose Submit Batch again.

What You Should Know About

Locating a batch number
If you do not know the batch number for the invoices you want to print, you can locate the batch in Batch Review (P48221) or you can locate it Print Invoices.

1. Place the cursor in the following field:
   Batch Number

2. Choose Field Sensitive Help (F1).
   The system displays Batch Selection Window.

3. On Batch Selection Window, complete the following field:
   User ID
   If you enter an asterisk in the User ID field, all batches created by all users are displayed, regardless of the batch activity status. The most current batch is displayed last.

4. Choose Select (Option 4) for a specific invoice batch.
   The selected batch number is displayed in the Batch Number field on Print Invoices.

Invoice types
The invoice type in the processing option for Print Invoices must correspond to the invoice type for the layout design you assign to the invoices.

If the invoice types do not match, the system cannot print the invoices.

Printing selected invoices in a batch
You can print selected invoices rather than an entire batch. To do this, use the data selection for the DREAM Writer version that you specify on Print Invoices. For example, you can limit the print selection to a business unit or an invoice number.

Printing invoices from multiple batches
You can use the Restricted Global Invoice Print program (P48506G) on the Contract Billing Advanced Operations menu to print selected invoices or all invoices from multiple batches.

Processing Options
See Invoice Print Sequence Derivation (P48504).
Work with A/R and G/L Entries

You complete the billing process by creating journal entries. First, create preliminary invoice journal entries and then you can print the Journal Edit Register (R48300). Carefully review this report to ensure that the final journal entries are correct.

The system creates proof invoice journals for the selected invoice batch and processes the workfile transactions through the Account Derivation Table rules to create detail journal entries. The system stores the entries temporarily in the Detail Journal Workfile (F48910) and then compresses them into summarized journal entries, which are temporarily stored in the Compressed Journal Workfile (F48911). The system uses the summarized journal entries to create the Account Ledger (F0911) transactions when Create A/R and G/L Entries (P48199) is run.

**Note:** Invoice Journal Generation is a batch process and the invoice batch is processed as a unit. If the system detects one or more errors, the invoice batch is set to an error status. Correct the error condition and re-run Invoice Journal Generation. You can run Invoice Journal Generation as many times as necessary until you correct all errors.

Working with A/R and G/L entries consists of the following tasks:

- Creating preliminary A/R and G/L entries
- Reviewing preliminary A/R and G/L entries
- Creating final A/R and G/L entries
- Reviewing and posting journal entries

JD Edwards World strongly recommends that you create and carefully review preliminary G/L entries before you create the final entries that post to the general ledger. If you post incorrect records to the general ledger, the only way to correct these balances is to void and regenerate the invoice.

**Before You Begin**

- Generate invoices
- Define account derivation rules

**Creating Preliminary A/R and G/L Entries**

From Contract Billing Processing (G52), choose **Invoice Generation**
From Invoice Generation (G5221), choose **Invoice Journal Generation (P48131)**
You complete the billing process by creating journal entries. You first create preliminary A/R and G/L entries. When you create the entries, the system prints the Invoice Journal Generation report (R48131). You can also set a processing option to print the Billing Journal Register (R48300). You should carefully review these reports to ensure that you create final journal entries that are for the correct accounts and amounts in the general ledger.

Creating preliminary A/R and G/L entries consists of the following:

- Creating preliminary A/R and G/L entries
- Revising override dates

When you run Invoice Journal Generation (P48131), the system:

- Updates the Current Activity (CUAC) field in the batch header (F48011) to 3, indicating that journal generation is in progress
- Uses the invoice batch number to select data. The workfile transactions (F4812) are processed against the Account Derivation Table (P48126) rules to create detail journal entries in the Detail Journal Workfile (F48910)
- Summarizes the Detail Journal Workfile entries into the Compressed Journal Workfile (F48911). These entries are used to create the Account Ledger (F0911) entries when Create A/R and G/L Entries (P48199) is run
- Updates the Compressed Journal Workfile with invoice information from the Invoice Summary Workfile (F4822). The entries from the Invoice Summary Workfile are used to create Accounts Receivable Ledger (F0311) entries when Create A/R and G/L Entries is run
- Creates an associated G/L batch, if necessary, to store journal entries for any revenue entries associated with the invoice journal entries
- Prints the Invoice Journal Generation report (R48131) with accounting rule information and journal entry detail
- Prints the Service Billing Journal Register (R48300) with the compressed information as a summary of the journal entry detail
- Updates the Current Activity field in the batch header to 0, indicating that the batch is available for further processing

See Also

- Defining Account Derivation Rules (P48126)
- Appendix D - Accounting for the Billing Cycle for more information about how the Contract Billing system uses account derivation rules
To create preliminary A/R and G/L entries

On Invoice Journal Generation

1. Complete the following fields and press Enter:
   - Batch Number
   - Version (optional)
     If you leave the Version field blank, when you choose Enter, the system automatically uses the ZJDE0001 version.

2. Choose Submit Batch (F6).
   The system displays the Exit and Submit Job Window so you can verify the batch post submission.

3. Choose Submit Job (F6).

To revise override dates

You use the Invoice Date Override Control 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 (F10)
   - Never displays the window

The default date displayed in the Date Override Window is always the current system date.

On Invoice Journal Generation
1. Complete the following fields:
- Batch
- Version

2. Choose Override Date (F10).

3. On Date Override Window, complete the following fields and press Enter:
   - Enter G/L Date
   - Enter Invoice Date

4. Choose Process (F6).

5. Choose Submit Batch (F6).

   The system displays the Exit and Submit Job window so you can verify the batch post submission.

6. Choose Submit Job (F6).

**Processing Options**

See [Invoice Journal Generation (P48131)](#).

**Reviewing Preliminary A/R and G/L Entries**

When the system creates preliminary A/R and G/L entries, you can review the batch status on Batch Review to determine whether the entries were generated with errors. To verify the information for the general ledger journal before you create the final A/R and G/L entries, you can review the following reports:

- Invoice Journal Generation Report (R48131), to review the detail of all cost transactions that make up the pay items for your invoices, and the accounting rules for the transactions
- Billing Journal Register (R48300), to review journal entry details summarized by business unit, object, subsidiary, and subledger

Depending on the processing options, the reports can include error messages and warnings related to the journal information.

Review the Billing Journal Register first for errors and warnings. Use the Invoice Journal Generation Report to locate errors resulting from the account derivation rules.
Invoice Journal Generation

You can run the Journal Register Listing to print additional copies of the journal register after you have created the preliminary G/L entries.

Reconciling errors

If you find errors on the reports, you do not always need to delete the batch and regenerate the invoices. Once you identify the errors, you can correct them and run Invoice Journal Generation again. Common errors include:

- Incorrect dates or invalid accounts related to the general ledger
- Incorrect table types or invalid accounts related to the rules you define on the Account Derivation Table form
Deleting a batch

To delete a batch, inquire on it in Batch Review on the Invoice Generation menu, then choose the Delete option (Option 9) and press Enter. On the Batch Submission Screen, choose Submit Batch (F6). To verify the batch delete, choose Submit Job (F6).

Creating Final A/R and G/L Entries for Billing

<table>
<thead>
<tr>
<th>From Contract Billing Processing (G52), choose Invoice Generation</th>
<th>From Invoice Generation (G5221), choose Create A/R and G/L Entries (P48199)</th>
</tr>
</thead>
</table>

Complete the billing process within the billing system by creating the final A/R and G/L entries. Final invoice journal entries are created when Create A/R and G/L Entries (P48199) is run to process the invoice information from the Service Billing system to the A/R and G/L systems. The system updates the A/R Ledger (F0311) and Account Ledger (F0911) transactions from the Invoice Summary Workfile (F4822) and Summarized Journal Workfile (F48911), respectively.

**Note:** Create A/R and G/L Entries is a batch process. The system processes the invoice batch as a unit and if the system detects one or more errors, no invoices are processed to the A/R and G/L systems. Because the invoice batch is set to an error status within the Service Billing system, you must correct the error conditions, then re-run Create A/R and G/L Entries. You can re-run Create A/R and G/L Entries as many times as necessary until you correct all errors and then invoice information can be processed to the A/R and G/L systems.

To complete the overall invoice process, you then post the journal entries to the general ledger and accounts receivable.

When you create final A/R and G/L entries for a batch of invoices, the system:

- Creates a batch heater in Financials (F0011), using the same batch number assigned in the billing system. The amount of the batch and the number of documents are passed to the new batch header
- Writes the Account Ledger (F0911) transactions using Compressed Journal Workfile entries (F48911)
- Writes the A/R Ledger (F0311) transactions using the Invoice Summary (F4822) entries
- Writes the Billing Workfile – History (F4812H) transactions, based upon the Billing Workfile (F4812) transactions for the invoice batch, and marks the transactions as processed by updating the Journal Status (JRST) field with a 4 and the Last Sequence (LSSQ) field with a 1
- Deletes the Billing Workfile (F4812) transactions for the invoice batch
- Updates the Application Posted Code (APPO) field in the Invoice Summary Workfile (F4822) with a P to indicate that the invoice has been processed to A/R
- Writes invoice information to the Invoice Summary Access file (F48520), if the Invoice Summary Access Control (ISAC) option is activated in the Billing Constants (P48091)
- Writes Payroll History (F0618) transactions, using the Payroll Reclassification Workfile (F480618), if the Journal Reclassification Control (JRNL) option is activated in the Billing Constants and a payroll reclassification was detected during invoice journal generation
- Creates G/L Link (F48912) transactions, if the Create Link (LINK) option is activated in the Account Derivation Table rules
- Deletes the Detail Journal Workfile (F48910), Summarized Journal Workfile (F48911), and Payroll Reclassification Workfile (F480618) records for this invoice batch
- Removes the invoice batch number (and revenue batch number, if applicable) from the Contract Master (F5201)
- Deletes the Billing Batch Header (F48011) record for this invoice batch

**Note:** If errors are detected, the system deletes the batch header (F0011) created in Financials and sets the Service Billing batch header (F48011) to an error status. No further processing is performed for any Service Billing files.

**Caution:** Before you create final A/R and G/L entries, ensure that the invoice amounts and journal transactions are correct. To make any changes after you create A/R and G/L entries, you must either void the invoices or create an adjusting invoice batch.

### To create final A/R and G/L entries

**On Create A/R and G/L Entries**
1. Complete the following fields and press Enter:
   - Batch Number
   - Version

2. Choose Submit Batch (F6).

   If the Invoice Date Override Control option in the Service Billing Constants is set to automatically display the date override window, then enter the override G/L date and invoice date to assign to the invoices and invoice journal entries. Choose Process (F6).

   The system displays a message prompting you to verify the batch submission.

3. Choose Submit Job (F6).

See Also

- Defining Account Derivation Rules (P48126)
- Appendix D - Accounting for the Billing Cycle for more information about how the Contract Billing system uses account derivation rules

### Processing Options

See A/R and G/L Journal Generation (P48131).

### Reviewing and Posting Journal Entries

From Contract Billing Processing (G52), choose Invoice Generation.

From Invoice Generation (G5221), choose Post Invoices to G/L (P09800)

After creating the final A/R and G/L entries, complete the overall billing process by reviewing, approving, and posting the journal entries.

When you post a batch of invoices, the system creates the automatic entries for offsets to the general ledger for the receivables account. The journal review and post programs are the same programs you use in the Accounts Receivable and General Accounting systems.
See Also

- Working with Final Invoices
- Reviewing and Approving Invoices (P03201) in the Accounts Receivable Guide
- Posting Invoices (P09800) in the Accounts Receivable Guide

Posting Associated G/L Batches

| From Work Order/Service Billing Processing (G48), choose Service Billing |
| From Service Billing (G4821), choose Revenue Recognition |
| From Revenue Recognition (G4823), choose Post General Journal (P09800) |

After you create the final A/R and G/L entries, 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 as well.

When you post associated batch of journal entries, the system creates the automatic offsetting entries, if necessary, and updates the Account Ledger (F0911) table entries as posted. The journal review and post programs are the same programs you use in the General Accounting system.

See Also

- Reviewing and Approving Journal Entries in the General Accounting Guide
- Posting Journal Entries (P09800) in the General Accounting Guide
Work with Final Invoices

Working with Final Invoices

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 (F4812H). You can work with final invoices to access these transactions.

Working with final invoices includes the following tasks:

- Reviewing the billing history for contracts
- Printing invoices from history
- Voiding a final invoice

When you work with final invoices, you can review the invoices on an as-needed basis. 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 Billing Workfile with a status of not billed. You can then reprocess these transactions or change them to a non-billable status.

Reviewing the Contract Billing History

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Contract History Inquiry (P52250)

You can review the billing history for contracts. The system displays information specific to a contract by pay application number and invoice number. You can also view the pay items by contract and invoice number.
To review the billing history for contracts

On Contract History Inquiry

1. To display the invoice history for a contract, complete the following field:
   - Contract Number

2. Choose Review Detail (Option 1) for an invoice to review the individual pay items.

3. On Pay Item Billing Inquiry, choose one of the following options for a specific pay item:
   - Billing Revisions (Option 1)
   - Invoice Detail Maintenance (Option 2)

   You can choose Invoice Detail Maintenance only for T&M owner pay items.

What You Should Know About

Reviewing cumulative contract amounts

On Contract History Inquiry, you can choose Owner Pay Item Status (F16) to review the contract-to-date details by the owner pay items for a contract.

See Also

- Voiding a Final Invoice for Billing for more information about billed transactions
Printing Invoices from History

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Reprint Invoices (P48506H)

The system moves the workfile transactions that have completed the billing process into the Billing Workfile – History (F4812H). You can access these transactions from history and reprint invoices using the Reprint Invoices program (P48506H). For example, if an invoice gets lost in the mail, but you’ve already completed the billing process, you can print the invoice from history.

For the transactions related to an invoice, the value in the Printed Flag (PRTF) field in Billing Workfile - History identifies:

- Whether the transaction has been printed
- The invoice type you used to print the last copy of the invoice

**Caution:** The system does not store a copy of the printed invoice. If you change the layout associated with the invoice type, the reprinted invoice will not look the same as the invoice you previously printed.

See Also

- Reviewing the Billing History for Contracts
- Technical Foundation Guide for information about running, copying, and changing a DREAM Writer version

Processing Options

See Print Invoices from History (P48506H).

Voiding a Final Invoice

From Contract Billing Processing (G52), choose Invoice Generation
From Invoice Generation (G5221), choose Contract History Inquiry (P52250)

After you create A/R and G/L entries, you can void invoices. When you void an invoice, the system:

- Returns the transactions included in the invoice that are related to T&M, components, and burden to the Billing Workfile (F4812).
- Assigns a status to the workfile transactions that indicates that they are not billed. You can then reprocess the transactions or change them to a non-billable status.
- Zeros out the billing amounts related to any other pricing type.
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 (F0311) table
- Creates credit information in the Account Ledger (F0911)
- Updates batch header information in Financials (F0011)
- Updates the Invoice Summary Workfile (F4822) to indicate that the invoice was voided
- Updates the Billing Workfile – History (F4812H) to indicate that the invoice was voided
- Returns the voided transactions to the Billing Workfile (F4812) and resets them for further processing
- Resets retainage amounts withheld for the invoice

Caution: You must use the void process in the Contract 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 Contract Billing records.

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 Batch to Detail and Out of Balance (P007031) 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 Financials batch status to Pending or Approved. You must post these adjusting entries for the batch number displays in the Invoice Void Window.
To void a final invoice

On Contract History Inquiry

1. To display the invoice history for a contract, complete the following field:
   - Contract Number

2. Choose Void (Option 6) for an invoice.

3. On Invoice Void Window, complete the following optional field:
   - G/L Date

4. Choose Void (F6).
   The system places V in the Void field for the invoice on Contract History Inquiry.

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Void Flag</td>
<td>A code that indicates whether the billing detail transactions associated with the invoice have been voided. Valid codes are:</td>
</tr>
<tr>
<td>V</td>
<td>Voided</td>
</tr>
<tr>
<td>blank</td>
<td>Not voided</td>
</tr>
</tbody>
</table>

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What You Should Know About

**Voiding posted invoices**  
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.

**Voided invoices**  
You cannot void an invoice that has already been voided. Voided invoices display with V in the Void field.

See Also

- *Working with Batch Headers* in the *General Accounting II Guide* for more information about deleting batch headers
4 Revenue Recognition
Overview to Revenue Recognition

About 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 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:

- To understand revenue recognition
- To create revenue recognition transactions for T&M, lump sum, unit price, and fee line pricing types
- To create and record accounting journal entries

About the Revenue Recognition and Billing Processes

You can complete the revenue recognition and billing processes separately or together as a combined process. When you combine the processes, you can recognize revenue prior to or during the billing process, depending on how you define the system constants.

When you combine the processes, the system assigns an associated G/L batch to the invoice batch to contain the G/L journal entries associated with the invoice journal entries. The system writes an associated G/L batch to the Account Ledger when the system writes invoice journal entries to the A/R Ledger and Account Ledger.

When you combine the revenue recognition and billing processes using the Contract Billing system, you can:
Accumulate billable costs from multiple systems, such as Accounts Payable, Equipment/Plant Management, and Payroll, without re-entering the cost information into the billing system

Calculate markup amounts and taxes based on a hierarchy of multiple user-defined rules

Revise the workfile transactions for T&M costs, including components

Print income statements and balance sheets that reflect the amounts earned for a realistic picture of the company's financial status

Reallocate internal costs

Calculate the billing amounts at the time you create invoices

Facilitate immediate billing upon entering the costs into the system

Print invoices to customer specifications

Automatically create and record the journal entries for the Accounts Receivable and General Accounting systems that result from revenue recognition and billing

The revenue recognition and billing processes consist of the following tasks:

- Accumulating costs
- Reviewing the workfile
- Revising the workfile
- Working with the workfile history
- Working with G/L entries
- Recognizing revenue separately from billing, or recognizing revenue as part of the billing process
- Generating invoices automatically
- Working with invoices
- Creating invoices manually
- Printing invoices
- Working with A/R and G/L entries
- Working with final invoices

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 option in the Billing Constants (P48091).

Service Billing offers a range of journal processes that allow you to select the mode that best suits your organization’s accounting needs. These modes, controlled by you Journal Generation Control option in the Billing Constants, are as follows:

- Invoice Processing Only
Choose this mode if your organization does not require revenue to be recognized independently of the billing cycle.

- **Revenue Processing Only**
  Choose this mode if your organization is only billing interdepartmentally and does not require customer receivables updates in the Accounts Receivable Ledger (F0311).

- **Invoicing with Revenue**
  Choose this mode to allow revenue to be recognized independently of the billing process.
  
  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 (F0911) and posted by the General Journal Post (P09800) program.

  Accrued receivables is credited and trade A/R is debited at the time the final invoice journal entries are written to the Account Ledger (F0911) and posted by the General Journal Post (P09800) program.

- **Invoicing with Revenue Reconciliation**
  Choose this mode to allow accrued revenue to be recognized independently of the billing cycle or if you mark up 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 A/R) is debited when final G/L entries are written to the Account Ledger (F0911) and posted by the General Journal Post (P09800) 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 (F0911) and posted by the General Journal Post (P09800) program.

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**Revenue Reconciliation**

You can manage the revenue recognition and billing processes 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 unbilled accounts receivable.
Overview to Revenue Recognition

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 unbilled 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 unbilled accounts receivable nets to zero

In the case of a timing difference, over time, all variances are reconciled and net to zero for unbilled 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 unbilled accounts receivable and unbilled 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 unbilled accounts receivable.

Without revenue reconciliation, the system creates debits and credits respectively for the following journal entries:

Revenue recognition 150 dollars for unbilled accounts receivable and unbilled revenue
Billing  140 dollars for actual accounts receivable and unbilled 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 unbilled accounts receivable and unbilled revenue
Revenue reconciliation  140 dollars for unbilled revenue and unbilled accounts receivable
  150 dollars for unbilled accounts receivable and actual revenue
Billing  150 dollars for actual accounts receivable and unbilled accounts receivable

**Journal Reclassification**

Depending on how you set the Journal Reclassification option in the Billing Constants (P48091) and the Update processing option for Workfile Revisions (P4812), you can reclassify or change the account information, for a Billing Workfile (F4812) transaction.

Journal reclassification exists within Contract Billing 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 the Billing Constant to allow journal reclassification, the system creates the correcting journal entries in the Account Ledger during journal creation.

For example, an employee can 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 using Workfile Revisions (P4812). With journal reclassification, when you run G/L Journal Generation (P48132), 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 (F0618) file during the Create G/L Entries (P48198) process. Burden is not eligible for reclassification.
Overview to Revenue Recognition

General Ledger Document Types

As you complete the billing and revenue recognition processes, the system can create seven different types of G/L entries. You can identify the origination of journal entries using the following document types:

- **EU (Revenue)**: Journal entry created during revenue recognition
- **AJ (Adjustment)**: Adjusting journal entry created during revenue recognition for journal entries previously recognized for revenue
- **BA (Billing Adjustment)**: Reclassification of a billable source journal entry which originated from accounts payable or general accounting
- **RI (Invoice Default)**: Journal entry created during billing
- **T2 (Payroll Labor Distribution)**: Reclassification journal entry which originated from payroll labor
- **T4 (Labor Billing Distribution)**: Reclassification journal entry which originated from labor billing
- **T5 (Equipment Distribution)**: Reclassification journal entry which originated from equipment billing

Revenue and Billing for Time and Material (T&M) and Non-T&M

The tasks that you perform for revenue recognition and billing depend on whether the billing lines that you set up for your contracts are for costs that are related to time and materials.

- **T&M contract billing lines**: The portion of a contract that you bill for the actual costs of goods and services plus specific markup amounts for the work. The actual costs include payroll-based costs, such as labor and burden, and non-payroll-based costs, such as the equipment and material required to complete the contract.

- **Non-T&M contract billing lines**: The portion of the contract that is not related to time and material, such as fixed fees, prepayments, and quantities. The following contract billing lines are for costs that are not related to time and materials (non-T&M):
  - Lump sum
  - Milestone and progress billing
  - Direct and rated draws
  - Unit price
  - Fees
  
  Contract billing lines for components directly relate to costs for time and materials.

If the contracts for your company include T&M billing lines, you begin the billing process by accumulating costs. When you accumulate costs, the system creates
workfile transactions. You can use the workfile transactions to recognize revenue or create invoices automatically.

If your company does not bill for time and material, you do not need to accumulate costs. Instead, you can recognize revenue, or begin the billing process by creating invoices.

The system calculates revenue only for the following billing line types:

- T&M
- Lump Sum
- Unit Price
- Fee

**Before You Begin**

- Set the independent revenue/invoice control in the system constants
- Set the journal generation control in system constants to perform revenue recognition or revenue recognition and invoice processes with or without revenue reconciliation
- Set the Contract Billing Revenue on Non-T&Ms field in the system constants to generate revenue transactions for non-T&Ms, if applicable
- Define account derivation rules for revenue recognition
- Define account derivation rules for billing, if you are going to perform billing after revenue is recognized
- Define markup rules

**What You Should Know About**

**Alternate displays and system constants**

Many of the forms you use in Contract Billing change in functionality and appearance, depending on the way you set up your system constants. For example, if you set up your system constants for revenue recognition and billing ( invoicing), the forms and functionality apply to both processes.

**See Also**

- Defining Account Derivation Rules (P48126)
- Setting Up System Constants (P48091)
- Appendix D - Accounting for the Billing Cycle for more information about how the Contract Billing system uses account derivation rules and creates journal entries
Accumulating Costs for Revenue Recognition

Revenue amounts are based on calculated amounts and on eligible, typically billable, costs. The first step in the revenue recognition process is to accumulate the costs that are associated with time and materials (T&M) billing lines, these costs are represented by source transactions that the system stores in the Account Ledger table (F0911). Use the costs posted in the F0911 and Account Balances (F0902) tables to calculate revenue amounts for lump sum and unit price billing lines.

Source 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.

To maintain the integrity of the original source transactions, the system creates copies of the source 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, taxable amounts and other key billing information. You base the rest of the Contract Billing processes on the information stored in workfile transactions.

About Accumulating Costs for Revenue Recognition for T&M Billing Lines

Accumulating costs for revenue recognition of T&M lines on a contract requires running Workfile Generation.

After the costs are accumulated in the Billing Workfile (F4812), working with workfile transactions consists of the following tasks:

- Reviewing the workfile
- Revising workfile transactions
- Working with the workfile history
About Accumulating Costs for Revenue Recognition for non-T&M Billing Lines

Create workfile transactions for lump sum and unit price billing lines consists of the following tasks:

- Creating or modifying a version of Contract Revenue Workfile Generation
- Running Workfile Generation

The Contract Revenue Workfile Generation program creates one record in the Billing Workfile (F4812) for each lump sum and unit price billing line on a contract. System-calculated amounts are based on actual costs and projected final costs from the cross-referenced accounts on the lump sum billing lines. Fixed (recurring) amounts are also calculated for the lump sum revenue amount regardless of the actual costs that are incurred. Revenue amounts for the lump sum billing lines are calculated using the percent complete method of calculation. For units, the system-calculated amounts are based on the AU (actual units) ledger from the cross-referenced account on the billing line. The date range is specified in the processing options of the Workfile Generation program.

What You Should Know About Eligible non-T&M billing lines

Lump sum, unit price, and fee lines are the only non-T&M billing line types that can be included in the revenue recognition process. The revenue workfile transactions for lump sum and unit price billing lines are created by Workfile Generation; the revenue for fee lines is calculated by Revenue Journal Generation (P48132).

Creating or modifying a version of Contract Revenue Workfile Generation (P52801)

This DREAM Writer is accessed from Versions List (P98300) on the DREAM Writer menu (G81). The data selection must include the contracts that will be included in the revenue recognition process.

Running Workfile Generation (P48120)

For the non-T&M revenue workfile transactions to be created, the Contract Revenue Workfile Generation version name must be included in the Workfile Generation processing option.

Revising a Non-T&M Revenue Workfile Transaction

You can revise the eligibility code, hold code, and release date on these non-T&M revenue workfile transactions. You cannot delete non-T&M revenue workfile transactions.

<table>
<thead>
<tr>
<th>Eligibility Code</th>
<th>Journal Generation Constant</th>
<th>Eligibility Code Change Allowed</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – Invoicing and Revenue</td>
<td>4 – Inv/Rev with Reconciliation</td>
<td>3 – Non-billable</td>
</tr>
<tr>
<td>Eligibility Code</td>
<td>Journal Generation Constant</td>
<td>Eligibility Code Change Allowed</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>2 – Revenue</td>
<td>2 – Revenue</td>
<td>3 – Non-billable</td>
</tr>
<tr>
<td></td>
<td>3 – Inv/Rev without Reconciliation</td>
<td></td>
</tr>
<tr>
<td>3 – Non-billable</td>
<td>2 – Revenue</td>
<td>2 – Revenue</td>
</tr>
<tr>
<td></td>
<td>3 – Inv/Rev without Reconciliation</td>
<td></td>
</tr>
<tr>
<td>3 – Non-billable</td>
<td>4 – Inv/Rev with Reconciliation</td>
<td>0 – Invoicing and Revenue</td>
</tr>
</tbody>
</table>

**Before You Begin**

- Define all billable accounts in the chart of accounts
- Define the system constants to identify the costs you want to accumulate
- Define the following applicable Contract Billing rules:
  - Cost Plus Markup
  - Component
- Enter contract billing lines

**What You Should Know About**

**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 for your system constants.

For example, if the Billable (Y/N) field for a transaction is a Y and the Journal Generation Control field is set for both revenue recognition and billing, the eligibility code for the transaction is 0. An eligibility code of 0 indicates that the transaction is eligible for both revenue recognition and billing. If the same 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 eligible for billing only.
Changing source and payroll transactions

The system might need additional information from the Payroll Transaction History (F0618) or the Employee Transactions Detail (F06116) tables to process certain source transactions.

After the system creates payroll and source transaction tables, do not change or delete any of the following transaction information:

- Account number
- Dates
- Subledger information
- Employee Address Book number

In order for the system to create workfile transactions from payroll transactions, all information must be identical in the Payroll or Employee tables and Account Ledger tables.

Burden transactions

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. If, for example, the burden transaction for a workfile transaction is eligible for both revenue and billing, but the workfile transaction is eligible only for billing, the system assigns the burden transaction the same eligibility code as the workfile transaction.

See Also

- *Accumulating Costs* for more information about accumulating costs
- *Review the Billing Workfile* for more information about locating and reviewing the accumulated cost and calculated revenue transactions
- *Revise the Billing Workfile* for information about revising the accumulated cost and calculated revenue transactions
- *Work with Workfile History* for information about reviewing the transaction audit trail and about moving the transactions to and from the active workfile (F4812)

Processing Options

See *Workfile Generation* (P52801).
Work with G/L Entries for Revenue

To record the unbilled revenue for the current period, you must create General Ledger (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 company.

Working with G/L entries consists of the following tasks:

- Creating preliminary G/L entries
- Reviewing preliminary G/L entries
- Creating final G/L entries
- Reviewing and posting G/L entries

JD Edwards World strongly recommends that you create and carefully review preliminary G/L entries before you create the final entries that post to the general ledger. If you post out-of-balance records to the general ledger, you must manually correct these balances.

The following graphic illustrates the revenue recognition process.
Creating Preliminary G/L Entries for Revenue

When you use the revenue recognition and billing process, you recognize revenue before you create invoices. You recognize revenue by creating journal entries for the General Ledger (G/L). You first create preliminary G/L entries.

When you create the entries, the system calculates revenue amounts for fee line pricing types and prints the Revenue Journal Generation report. You can also set processing options to print the Billing Journal Register and to segregate error journals in an error batch.
You must run the Journal Generation program to calculate revenue for fees and create preliminary G/L entries for T&M, component, unit, lump and fee line pricing types.

You should carefully review the Revenue Journal Generation and Billing Journal Register reports to ensure that the preliminary entries are correct so that you do not create final journal entries that create out-of-balance records in the general ledger.

When you run Journal Generation, the system:

- Uses data selection and processing options to select Billing Workfile (F4812) transactions to process
- Calculates revenue amounts for fee line pricing types and creates transactions in the Billing Workfile for the fees.
- Creates journal reclassification entries if the Journal Reclassification Control option is activated in the Billing Constants
- Processes the workfile transactions against the Account Derivation Table rules to determine the accounts for the journal entries
- Temporarily stores the details for the preliminary G/L entries in the Detail Journal Workfile (F48910).
- Prints the Revenue Journal Generation report (R48132) with journal entry detail.
- Compresses the detail journal workfile information and temporarily stores it in the Compressed Journal Workfile (F48911).
- Prints the Billing Journal Register (R48300) with the compressed information as a summary of the journal entry detail.

### Revenue Journal Generation - Job

<table>
<thead>
<tr>
<th>Account</th>
<th>Job</th>
<th>Description</th>
<th>Original Account No.</th>
<th>Ledger Y Number</th>
<th>Journal Entry</th>
<th>Revenue Journal Generation - Job</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>1</td>
<td>12345</td>
<td>12345</td>
<td>12345</td>
<td>12345</td>
<td>12345</td>
</tr>
<tr>
<td>2000</td>
<td>2</td>
<td>67890</td>
<td>67890</td>
<td>67890</td>
<td>67890</td>
<td>67890</td>
</tr>
<tr>
<td>3000</td>
<td>3</td>
<td>45678</td>
<td>45678</td>
<td>45678</td>
<td>45678</td>
<td>45678</td>
</tr>
<tr>
<td>4000</td>
<td>4</td>
<td>98765</td>
<td>98765</td>
<td>98765</td>
<td>98765</td>
<td>98765</td>
</tr>
</tbody>
</table>

### Journal Register Listing

<table>
<thead>
<tr>
<th>Account</th>
<th>Description</th>
<th>Original Account No.</th>
<th>Ledger Y Number</th>
<th>Journal Entry</th>
<th>Journal Register Listing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0100</td>
<td>0200</td>
<td>3.500.00</td>
<td>AA</td>
<td>12345</td>
<td>12345</td>
</tr>
<tr>
<td>0300</td>
<td>0400</td>
<td>2.500.00</td>
<td>AA</td>
<td>12345</td>
<td>12345</td>
</tr>
</tbody>
</table>
What You Should Know About

G/L document types

The system can create seven different types of G/L entries. You can use the following document type codes to determine the origination of your journal entries:

- **EU (Revenue)** – Journal entry created during revenue recognition
- **AJ (Adjustment)** – Correction to a journal entry for revenue recognition
- **BA (Billing Adjustment)** – Reclassification of a billable source journal entry that originated from accounts payable or 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

Error batch segregation

If you have an error in a batch of journal entries, you do not have to stop processing the journal entries until it is corrected. If you set the processing option for error batch segregation, the system places any journal entries with errors in a separate batch. Then, you can continue processing the batch of journal entries without errors and correct the batch with errors at a later time.

The error batch segregation processing option works as follows:

- If two transactions are related, such as a base and its component, or a payroll transaction with burden, and one transaction is in error, the system places both transactions in an error batch with a separate batch number.
- The system prints a separate journal register for the error batch.

Note: If you select error batch segregation, the Revenue Journal Generation program requires additional processing time.

See Also

- *Defining Account Derivation Rules (P48126)*
- *Setting Up System Constants (P48091)* for more information about using journal reclassification
- *Appendix D - Accounting for the Billing Cycle* for more information about how the Contract Billing system uses account derivation rules
- *Technical Foundation Guide* for information about running, copying, and changing a DREAM Writer version
Work with G/L Entries for Revenue

Processing Options

See Revenue Journal Generation (P48132).

Reviewing Preliminary G/L Entries

After you create preliminary G/L entries, you can review the resulting journals to verify that the account information is correct.

Reviewing journals for G/L entries consists of the following:

- Reviewing the batch header and status
- Reviewing revenue journal details

JD Edwards World strongly recommends that you create and carefully review preliminary G/L entries before you create the final entries that post to the general ledger. If you post out-of-balance records to the general ledger, you must manually correct these balances.

To review the batch header and status

From Contract Billing Processing (G52), choose Revenue Recognition
From Revenue Recognition (G4823), choose Batch Review (P48221)

On Batch Review

1. Complete the following field:
   - User ID

If you place an asterisk in the User ID field, the system displays all batches created by all users regardless of the batch activity status.
2. To limit the list of batches, complete the following optional fields:
   - Batch Number
   - Batch Date From
   - Batch Date Thru
   - Batch Status
   - Current Activity

3. Review the following fields for a batch:
   - Batch Number
   - Total Amount
   - Current Activity
   - Batch Status Description

**To review revenue journal details**

| From Contract Billing Processing (G52), choose | Workfile Generation |
| From Workfile Generation (G4822), choose | Revisions (P4812) |

If you want to review the workfile transaction details for a batch of revenue journals, you must use the Revisions form. You use a processing option to control whether the system displays the Revenue Batch Number field in the upper portion of the form.

When you enter the revenue batch number on the Revisions form, the system displays all transaction information. The system marks transactions in an active revenue batch with an R and displays the revenue batch number in the lower portion of the form. You cannot revise workfile transactions in a revenue batch.

**On Revisions**

1. Complete the following field to locate transactions in a revenue batch:
   - Revenue Batch Number

2. To limit the display of transactions, complete a combination of the following fields:
   - Customer Number
   - BCI Number
   - Account Number
   - Employee/Supplier
   - Contract Number
   - Equipment Worked
   - Subledger
   - Subledger Type
   - Job Type
   - Job Step
• G/L Date From
• G/L Date Thru

3. Choose Total Amounts For All Records.

You can also re-print the Journal Edit Register (R48300) from the Revenue Recognition menu (G4823) to view the preliminary summarized journal entries. You can use this report to verify the accounting entries.

Revising Preliminary G/L Entries

Due to the complexity and volume of preliminary revenue or costing 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. You can correct errors and reset the error status of a batch, as outlined below.

When you create a batch of preliminary revenue or costing journal entries, the system validates the entries. Any resulting errors are either General Accounting setup errors or Billing system setup errors.

Correcting General Accounting Setup Errors

These errors are caused by incorrect setup information in General Accounting (System 09). You can usually correct these errors without having to delete the revenue batch. You can make the necessary corrections in the General Accounting system and re-run the Journal Edit Register. The system edits the preliminary journal entries again, and if the system does not detect errors, the batch status updates and indicates 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 (System 48S). These errors require that you delete the batch of preliminary journal entries and make the necessary corrections to setup information in the Service Billing system. You must then re-run Revenue Journal Generation (P48132) to create the preliminary journal entries. Note that each time you run Revenue Journal Generation, the system assigns a new batch number. If the system does not detect errors, the batch status indicates no errors and you can continue processing final journal entries.

What You Should Know About Deleting a batch

To delete a batch, inquire on it in Batch Review on the Revenue Generation menu, then choose the Delete option (Option 9) and press Enter. On the Batch Submission Screen, choose Submit Batch (F6). To verify the batch delete, choose Submit Job (F6).
Creating Final G/L Entries for Revenue

You complete the revenue recognition process by creating and posting journal entries that relate to the transactions. The system stores the final G/L entries in the Account Ledger table. When you create final G/L entries, the system:

- Uses the Billing Batch Header (F48011) information to create a batch header in Financials (F0011)
- Uses the Compressed Journal Workfile (F48911) transactions to write the final journal entries to the Account Ledger (F0911)
- Uses the Detail Journal Workfile (F48910) transactions to update the G/L Link (F48912), if the Create Link (LINK) field is populated in the Account Derivation Table (P48126)
- Updates the Payroll History File (F0618) with any payroll reclassification entries, if applicable
- Updates the workfile transactions as processed to G/L. If the Eligibility Code (ELGC) of the workfile transactions is 2 (revenue and cost only) or 4 (cost only), the system copies the workfile transaction to Billing Workfile – History (F4812H) and deletes it from the Billing Workfile (F4812)
- Changes the journal status (JRST) for the related workfile transactions
- Deletes the records in the Detail Journal Workfile and the Compressed Journal Workfile
- Removes the batch header number for the revenue journals from the Billing Batch Header (F48011)

After you create the final G/L entries, you cannot change or delete the batch of journal information.
To create final G/L entries

On Create G/L Entries

1. Complete the following field and press Enter:
   - Batch Number

2. Choose Submit Batch (F6).
   The system displays a message prompting you to verify the batch post submission.

3. Choose Submit Job (F6).

Reviewing and Posting G/L Entries for Revenue

From Contract Billing Processing (G52), choose Revenue Recognition
From Revenue Recognition (G4823), choose Post G/L Journal

After you create the final G/L entries, you complete the revenue recognition process by reviewing, approving, and posting the journal entries.

The journal review and post programs are the same programs you use in the Accounts Receivable and General Accounting systems.

See Also

- Reviewing and Approving Journal Entries (P00201) in the General Accounting I Guide
- Posting Journal Entries (P09800) in the General Accounting I Guide
Setup
Overview to System Setup

About System Setup

Before you can use the Contract Billing system, you must define the constants and rules you want the system to use during the billing processes. The information you define in the system constants and rules determines:

- How the system uses dates (such as service and tax dates, G/L dates, and effective dates) in combination with the markup, account derivation, and tax derivation rules to process source transactions
- Whether the system creates revenue recognition journal entries for non-T&M pricing types
- How the system uses account derivation rules to create journal entries
- How the system processes payroll transactions

Setup Features

<table>
<thead>
<tr>
<th>Setup Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System constants</td>
<td>Control the global processing of:</td>
</tr>
<tr>
<td></td>
<td>• Billable costs</td>
</tr>
<tr>
<td></td>
<td>• Customer information</td>
</tr>
<tr>
<td></td>
<td>• Dates</td>
</tr>
<tr>
<td></td>
<td>• Invoices</td>
</tr>
<tr>
<td></td>
<td>• Revenue</td>
</tr>
<tr>
<td></td>
<td>• Journals</td>
</tr>
<tr>
<td></td>
<td>• Default markup</td>
</tr>
<tr>
<td>Markup rules</td>
<td>Define the calculation for the amount that you add to costs to account for overhead and profit.</td>
</tr>
<tr>
<td>Component rules</td>
<td>Define an additional markup that is based on amounts and units. The markup and account derivation rules use this information.</td>
</tr>
<tr>
<td>Account derivation rules</td>
<td>Define the accounting rules that the system uses to process journal transactions for billing, revenue recognition and reallocations.</td>
</tr>
<tr>
<td>Condition codes</td>
<td>Define the conditions under which the system uses specific account derivation rules to create journal entries</td>
</tr>
<tr>
<td>Automatic accounting instructions (AAIs)</td>
<td>Define accounting information and general ledger relationships.</td>
</tr>
</tbody>
</table>
User defined codes

Define custom codes for the system, such as condition codes and adjustment reasons.
Set Up System Constants

Setting Up System Constants

From Contract Billing Processing (G52), enter 29
From Contract Billing System Setup (G5241), choose System Constants (P48091)

The billing constants represent your company’s decisions on how source transactions and related revenue and billing are processed. The constants control how the system processes:

- Billable costs
- Dates
- Invoices
- Revenue
- Journals
- Default markup percentage
- Multi-currency transactions
- Draft and final invoice numbering
- Revenue recognition

After you set up the constants, you should not change them. The system stores the constants in the Billing System Constants table (F48091).

Considerations for Independent Revenue and Invoice Amounts

When the invoice and revenue amounts are marked up independently, the Journal Generation Control for revenue recognition with or without reconciliation (values 4 and 3, respectively) affects the variance balance that the system maintains in the Unbilled Accounts Receivable and Unearned Revenue accounts.

The Independent Revenue/Invoice constant specifies whether the markup amounts calculated for the workfile transactions must use the same rules for the invoice and revenue amounts. If the constant is set to allow different markup rules for the invoice and revenue amounts, processing invoices and revenue recognition without reconciliation (Journal Generation Control value 3) creates a permanent variance between Unbilled Accounts Receivable and Actual Accounts Receivable (A/R Trade) accounts. Invoice and revenue amounts can be different.

If the Independent Revenue/Invoice constant is set to allow different markup rules for the invoice and revenue amounts, processing invoices and revenue recognition with reconciliation (Journal Generation Control value 4) forces the Unbilled...
Accounts Receivable and Unearned Revenue accounts to reconcile, but allows the invoice and revenue amounts to be different.

The following results occur based upon the relationships between the system constants and the revenue recognition process.

<table>
<thead>
<tr>
<th>System Constants</th>
<th>Revenue Recognition Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Generation Control</td>
<td>Independent Revenue/Invoice</td>
</tr>
<tr>
<td>3 0</td>
<td>Same</td>
</tr>
<tr>
<td>3 1</td>
<td>Different</td>
</tr>
<tr>
<td>4 0</td>
<td>Same</td>
</tr>
<tr>
<td>4 1</td>
<td>Different</td>
</tr>
</tbody>
</table>

**Note:** If the Journal Generation Control is 3, process revenue recognition without reconciliation.

If the Journal Generation Control constant is 4, process revenue recognition with reconciliation.

If the Independent Revenue/Invoice constant is 0, the revenue and invoice amounts must always be equal.

If the constant is 1, the revenue and invoice amounts can differ.

**Before You Begin**

- Verify that the default document type for invoices is set up on User Defined Codes (UDC) tables 00/DT (Document Type - All Documents) and 00/DI (Document Type - Invoices Only)
To set up system constants

On System Constants

1. To specify how you want the system to process billable costs, complete the following fields:
   - Bill Burden
   - Bill Unposted F0911s

2. To specify how the system processes revenue, complete the following field:
   - Independent Revenue/Invoice

3. To recognize revenue for non-T&M contract billing lines prior to the billing process and control whether the system recognizes Not to Exceed rules for revenue, complete the following field:
   - Revenue on Contract Non-T&Ms
   
   See Defining Cross-References for Lump Sum and Defining a Cross-Reference for Unit Price for information about revenue on non-T&M owner pay items.

4. To specify the dates you want the system to use when processing workfile transactions, complete the following fields:
   - Effective Date Basis
   - Labor Effective Basis

5. To specify the date the system uses when processing accounts receivable transactions, complete the following field:
   - Service Date Basis

6. To build an additional audit table for invoice information, complete the following field:
   - Invoice Summary Access Control
7. To specify how the system processes invoices, complete the following fields:
   - Invoice Date Override Control
   - Draft/Final Invoice Generation Control
   - Default Invoice Document Type

8. To specify how the system processes journal entries, complete the following fields:
   - Journal Generation Control
   - Journal Reclassification Control
   - PDBA Code Override

9. To specify how the system processes multi-currency transactions, complete the following fields:
   - Exchange Rate Date Basis
   - Currency Basis Flag

10. To specify the default value that the system uses when workfile transactions do not meet the criteria for any other markup rules, complete the following field:
    - Default Markup Percentage

---

Field | Explanation
--- | ---
Bill Burden (BBDR) | 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.

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:

- The system processes all burden associated with billable payroll transactions if the burden is recorded in the Burden Distribution File (F0624).
- The burden account must be a billable account.

Valid codes are:
0 The system does not include burden.
1 The system includes burden.
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Revenue/Invoice (INDI)</td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td>0 The system ensures that the invoice amounts and the revenue amounts in the billing detail transactions are always equal.</td>
</tr>
<tr>
<td></td>
<td>1 You can manipulate and process invoice amounts without affecting the associated revenue amounts, and vice versa.</td>
</tr>
<tr>
<td>Bill Unposted F0911s (BUNP)</td>
<td>A constant that controls whether the system includes unposted billable transactions from the G/L Account Ledger file (F0911) during workfile generation for the Service Billing and Contract Billing systems. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>0 Only posted billable transactions in the Account Ledger will be processed.</td>
</tr>
<tr>
<td></td>
<td>1 Both unposted and posted entries in the Account Ledger will be processed.</td>
</tr>
<tr>
<td></td>
<td>Note: Since unposted billable transactions are subject to change or deletion, you do not include them during workfile generation. However, if there is very little time between the entry of costs and the recognition of resulting revenue, you might find it helpful to generate revenue for unposted transactions.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Revenue on Contract non-T&Ms (CNTM)            | Use this flag to control whether the system generates billing detail transactions to recognize revenue for non-T&M contract billing lines prior to the billing process. In addition, the value you enter in this field determines whether or not the system recognizes the Not to Exceed (NTE) rules that you set up for revenue. The following values are valid:
| 0 Do not generate billing detail transactions to recognize revenue for non-T&M contract billing lines. Not to Exceed (NTE) rules for revenue are not applicable to the revenue associated with non-T&M contract billing lines or T&M contract billing lines. |
| 1 Generate billing detail transactions to recognize revenue for non-T&M contract billing lines. Recognize NTE rules for revenue, except for the contract billing lines for fees. NTE rules are not applicable to the revenue associated with T&M contract billing lines. |
| 2 Generate billing detail transactions to recognize revenue for T&M contract billing lines only. Recognize NTE rules for revenue associated with T&M contract billing lines. NTE rules are not applicable to the revenue associated with non-T&M contract billing lines. |
| 3 Generate billing detail transactions to recognize revenue for non-T&M contract billing lines. Recognize NTE rules for the revenue associated with non-T&M contract billing lines (except for fees) and T&M contract billing lines. |

Note: When you choose to generate billing detail transactions to recognize revenue for non-T&M billing lines, the system:

- Generates revenue amounts for lump sum and unit price billing lines at the time of workfile generation.
- Generates revenue amounts for fee billing lines during revenue generation.
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Date Basis (EBAS)</td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td>1 G/L date</td>
</tr>
<tr>
<td></td>
<td>2 Service/tax date</td>
</tr>
<tr>
<td></td>
<td>Note: The Service Billing and Contract Billing systems use tables, such as the Cost Plus Markup Table and the Account Derivation Table, during the billing process. A range of dates can control when the table information is valid. The date specified here is used to populate the Table Basis Date (TBDT) field. The Table Basis Date is the basis for comparison with the effective dates for the tables.</td>
</tr>
<tr>
<td>Invoice Summary Access Control (ISAC)</td>
<td>A constant that determines whether the system builds and maintains the Invoice Summary Access (F48520) file. 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 file, 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:</td>
</tr>
<tr>
<td></td>
<td>blank Do not build and maintain the file.</td>
</tr>
<tr>
<td></td>
<td>1 Build and maintain the file.</td>
</tr>
<tr>
<td></td>
<td>The system stores billed-to-date amounts in the Invoice Summary (F4822) file by Owner Pay Item. The Invoice Summary Access (F48520) file stores the billed-to-date amounts in more detail than the Invoice Summary (F4822) file.</td>
</tr>
</tbody>
</table>
### Set Up System Constants

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Effective Basis (LBAS)</td>
<td>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:</td>
</tr>
<tr>
<td></td>
<td>1  G/L date</td>
</tr>
<tr>
<td></td>
<td>2  Service/tax date</td>
</tr>
<tr>
<td></td>
<td>3  Work date</td>
</tr>
<tr>
<td></td>
<td>4  Ending date of the pay period</td>
</tr>
<tr>
<td></td>
<td>If your billing process does not involve payroll, the system ignores this constant.</td>
</tr>
<tr>
<td></td>
<td>Note: The Service Billing and Contract Billing systems use tables, such as the Cost Plus Markup Table and the Account Derivation Table, during the billing process. A range of dates can control when the table information is valid.</td>
</tr>
<tr>
<td>Invoice Date Override Control (INDO)</td>
<td>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 &amp; G/L programs. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>0  You cannot access the Date Override window.</td>
</tr>
<tr>
<td></td>
<td>1  The Date Override window is optional.</td>
</tr>
<tr>
<td></td>
<td>2  The system automatically displays the Date Override window.</td>
</tr>
<tr>
<td>Customer Number Basis (CNBS)</td>
<td>For Service Billing only, a constant that determines which customer number the system retrieves for a billing detail transaction. Valid codes are:</td>
</tr>
<tr>
<td></td>
<td>0  Owner address number from the Job Master (F0006).</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Draft/Final Invoice Gen. Control (ICTL) | An option that determines whether to use draft and final document types and invoice numbers. In some countries, you are required to assign invoice numbers sequentially and without gaps in the numbering. If you choose to assign sequential invoice numbers, you must use two different document types. The system assigns the first document type to preliminary invoices and assigns the subsequent document type when you create final A/R and G/L entries. Valid values are:  
0 Use the same invoice numbers and document types  
1 Assign new invoice numbers and document types  
The setup for this involves the following:  
- 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. |
| Service Date Basis (DSVB)           | 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:  
0 G/L date  
1 Invoice date |
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
</table>
| Default Invoice Document Type (DCTI) | A user-defined (UDC 00/DI) document type for invoice entry. Any document type set up for invoice-only entry should begin with the letter R (receivables). The default is RI, RR, or RM. Reserved document types have been defined for vouchers, invoices, receipts, and time sheets. The reserved document types are:  
  P_ Accounts Payable Documents  
  R_ Accounts Receivable Documents  
  T_ Payroll Documents  
  I_ Inventory Documents  
  O_ Order Processing Documents  
  Note: For invoice entry, if you are using document type DI, you must also set up document type DT in User Defined Codes.  

  **Form-specific information**  
  A constant that controls the default document type for invoices. The system automatically uses this code when you do not specify the document type on invoice-related forms and programs.  
  If you set the Invoice Numbering Control field in the system constants to renumber invoices, the system uses the default document type for the preliminary invoices. |
### Field: Date - Exchange Rate Date Basis (ERDB)

A constant that controls the date that the system uses to retrieve the exchange rate.

Valid codes are:

1. Use the last day of the prior calendar month. The system determines this date based on the company date patterns.
2. Use the date of the billable cost (source) transaction. The system determines this date based on the value of the Effective Date Basis and Labor Effective Date Basis billing constants.
3. Use the system date. (You should only use this value if you operate in an hyper-inflationary economy.)

Note: The Contract Billing and Service Billing modules can recognize TWO exchange rates; the first during the workfile generation process when creating the billing detail transaction and the second during the invoice generation process. This constant controls the workfile generation process. You can override this constant during invoice generation.

### Field: Journal Generation Control (PRRR)

A constant that controls the process for journal generation in the Service Billing and Contract Billing systems. Valid codes are:

1. Invoicing only
2. Revenue recognition only
3. Revenue recognition and invoicing, without requiring revenue reconciliation
4. Revenue recognition and invoicing, requiring revenue reconciliation

(Use this value if you are using Independent Revenue/Invoice amounts.)

The following functions are also affected:

- 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 Account Derivation Table form
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency Basis Flag (CRRM)</td>
<td>A code that specifies whether amounts are in the domestic currency of the contract or the foreign currency of the supplier.</td>
</tr>
<tr>
<td></td>
<td>Valid codes are:</td>
</tr>
<tr>
<td></td>
<td>D  Domestic</td>
</tr>
<tr>
<td></td>
<td>F  Foreign</td>
</tr>
<tr>
<td></td>
<td>For conversions, D indicates domestic to foreign, and F indicates foreign to domestic.</td>
</tr>
<tr>
<td>Journal Reclassification Control (JRN1)</td>
<td>A constant that controls whether the system performs journal reclassification as a function within the journal generation process. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>0  Do not perform journal reclassification.</td>
</tr>
<tr>
<td></td>
<td>1  Perform journal reclassification.</td>
</tr>
<tr>
<td></td>
<td>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). Payroll transactions with associated burden transactions cannot be reclassified within the Billing system.</td>
</tr>
<tr>
<td>PDBA Code Override (PDBO)</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Note: Pay types are numbered from 1 to 999.</td>
</tr>
</tbody>
</table>
### Field

**Default Markup Percentage (PERT)**

### Explanation

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.

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 Cost Plus Markup Table entry. If the system finds a markup table entry for the source transaction, the table entry overrides this constant.

Note: If you leave this constant blank, and the system does not find a markup table entry for a source transaction, the system will process that transaction at cost (without any markup).

### What You Should Know About

**Billing burden**

If you want to bill for burden, you must set up the appropriate Automatic Accounting Instructions (AAIs) in the Payroll system as well as the system constants for the Billing system.

See **Setting Up Burden and Premium Labor Distribution Instructions** in the Payroll Guide.
Define Markup Rules

Defining Markup Rules

Before you generate or revise a workfile transaction, you must define markup rules in the Cost Plus Markup Table (P48096). The billing rate is defined as the rate multiplied by the number of units to calculate the amount you invoice your customer for goods or services rendered. The markup is defined as a percent or an amount you add to costs for overhead and profit. The system stores this markup information in the Cost Plus Markup Information table (F48096).

The system calculates markup amounts when you accumulate costs or revise workfile transactions based on the billing rate and markup rules you define when you set up the billing system. The markup rules you define when you set up the Contract Billing system apply only to the costs related to time and materials (T&M) pricing types.

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 generate or revise workfile transactions, the system marks up costs as follows:

1. Accesses the markup rules
2. Searches and selects rules that match the values for specific source transactions for the major key
3. Continues the search, narrowing the selection of rules based on the value for source transactions from the minor key.
4. Calculates the markup amount for individual transactions based on the applicable markup rules.
5. Updates the workfile transaction with the applicable markup amount.

When you define markup rules, you specify the following information:

- Major key
- Minor key
- Markup calculation rules
Define 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 it can locate to calculate the markup for a transaction.

Typically, you define general markup rules that apply to most of the source transactions for time and materials 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 contract.

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 Cost Plus 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 transactions 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 as the key type and *ALL as the table key. For a minor key default markup rule, leave the account range blank and specify a markup calculation.

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 that you have defined, the system uses the default markup percentage that you have defined in the Billing Constants.

Markup rules are effective for the dates that you specify when you set them up. You cannot change the effective dates, however, you can create new billing rate/markup rules based on existing markup rules by copying the rules and specifying new effective dates.

The Billing Rate/Mark up Table is accessed during workfile generation and workfile re-extension to apply markup information to the workfile transaction.

**Major Key**

You must specify a major key for each markup rule you define. A major key must include the following information:

**Generation Type**

Markup rules and component calculations are applied based upon the markup table Generation Type (GTYP). Markup tables are read in reverse order of the generation
types: Generation Type 3 (component default) tables are read first; Generation Type 2 (revenue override) tables, if applicable, are read second; and Generation Type 1 (invoice, revenue, and component) tables are read last.

If the Billing Constants (P48091) allow Independent Revenue/Invoice amounts, then Generation Types 1, 2, and 3 can be used. If the Billing Constants do not allow Independent Revenue/Invoice amounts, then Generation Type 2 cannot be used.

- **Generation Type 3**
  
  Generation Type 3 tables are optional and used only to create components. Component information specified in a Generation Type 3 table overrides, component information in Generation Type 1, and Generation Type 2 tables. Markups specified in a Generation Type 3 table are ignored; the system uses the component information from the Generation Type 3 table and markup rules from Generation Type 1 and 2 tables. If a component field in a Generation Type 3 table is blank, the system reads the Generation Type 2 tables, then the Generation Type 1 tables to determine the component calculation, if any.

- **Generation Type 2**
  
  If the Billing Constants (P48091) do not allow Independent Revenue/Invoice amounts, then Generation Type 1 and 3 tables can be used. Only if the Billing Constants allow Independent Revenue/Invoice amounts, Generation Type 2 tables can be used. Generation Type 2 tables are not applicable when the Billing Constants are set up for revenue recognition only (Journal Generation Control (PRRR) = 2).

  Define a Generation Type 2 table to calculate revenue and revenue component amounts independent from the invoice amounts and components. Define the markup rules for the revenue amount using Generation Type 2 tables and the markup rules for the invoice amount using Generation Type 1 tables. If no Generation Type 2 table is found, the calculations found on the Generation Type 1 table are used for the revenue amounts.

- **Generation Type 1**
  
  Generation Type 1 tables are default tables that are read last, but used most commonly. These tables can create markups of both invoice and revenue amounts and can create components based upon cost, revenue, and invoice amounts. If a Generation Type 2 table is defined, the Generation Type 1 table applies only to invoice amounts and invoice components. If no Generation Type 2 or Generation Type 3 tables are defined, all markup and component information is derived from the Generation Type 1 tables. If no Generation Type 1 table exists, the system uses the default markup percentage (PERT) specified in the Billing Constants (P48091).

**Key Type**

Key types are hard-coded values specified in combination with Table Keys. The key type and table key determine which rules apply to a specific transaction. The key types are read in order from 1 to 9. The system uses the most specific rule it can locate.

- **Key Type 1 - Work Order**
  
  The system searches for matches between the associated Table Key and values in the Billing Workfile (F4812) Subledger (SBL) field. The F4812 SBL field is
populated with the SBL value from the Account Ledger (F0911) file. Often the F0911 SBL field is populated with a work order number from the Work Order (DOCO) field in the Work Order Master (F4801) file.

- **Key Type 2 - Work Order Class**
  The system searches for matches between the associated Table Key and values in the F4812 Service Type (WR07) field. When the Subledger Type (SBLT) field in the Account Ledger (F0911) file is W (work order), the system retrieves the value for the F4812 WR07 field from the WR07 field in the Work Order Master (F4801) file. Values in WR07 are validated against User Defined Code (UDC) table 00/W7.

- **Key Type 3 - Contract Number**
  The system searches for matches between the associated Table Key and values in the F4812 Order Number (DOCO) field. This field contains the contract number with which the F4812 transaction is associated. The system retrieves the value for the F4812 DOCO field from the DOCO field in the Cross-Reference Accounts (F5212) file. Records in this file link accounts to a specific owner pay item on a specific contract.

- **Key Type 4 - Parent Contract Number**
  The system searches for matches between the associated Table Key and values in the F4812 Parent Contract Number (PCTN) field. This field contains the parent contract number with which the F4812 transaction is associated. The system retrieves the value for the F4812 PCTN field from the PCTN field in the Contract Master (F5201) file.

- **Key Type 5 - Customer Number**
  The system searches for matches between the associated Table Key and values in the F4812 Owner/Receivable Address Number (AN8O) field. This field contains the owner address number with which the F4812 transaction is associated and to which billing and accounts receivable transactions will be posted. The system retrieves the value for the F4812 AN8O field from one of three locations:

  1) The AN8O field in the related Contract Master (F5201) file;
  2) The AN8O field in the related Job/Business Unit (F0006) file; or
  3) The Address Number (AN8) field in the Work Order Master (F4801) file for the related subledger.

- **Key Type 6 - Job/Business Unit**
  The system searches for matches between the associated Table Key and values in the F4812 Job/Business Unit (MCU) field. This field contains the job or business unit with which the F4812 transaction is associated. The system retrieves the value for the F4812 MCU field from the MCU field on the related Account Ledger (F0911) file cost record.

- **Key Type 7 - Job Class**
  The system searches for matches between the associated Table Key and values in the F4812 Category Code 11 (RP11) field. The system uses the job/business unit in the Home Business Unit (HMCU) field to retrieve the value for the F4812
RP11 field from the RP11 field in the Job/Business Unit Master (F0006) file. Values in RP11 are validated against UDC table 00/11.

- **Key Type 8 - Company**
  The system searches for matches between the associated Table Key and values in the F4812 Company (CO) field. This field contains the company with which the F4812 transaction is associated. The system retrieves the value for the F4812 CO field from the CO field on the related Account Ledger (F0911) file cost record.

- **Key Type 9 - Default**
  If the system does not find a match in any of the previous levels, then the system applies the remaining eligible transactions to tables with this Key Type.

**Table Key**

The table key defines the major key value, based upon the key type.

Note: The system uses the key type and table key in combination. For example, if the key type is contract number, the table key must be a specific contract number. If you have three contracts that require different markup rules, you must set up three different markup rules, each with contract number as the key type and a specific contract number as the table key.

**Currency Code**

The currency code key controls the currency decimals of the markup amount defined in the markup table. Use the currency code of the markup table to identify the currency of 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 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 searches for a markup table set up for French francs (FRF). All markup calculations are in French francs and uses the exchange rate to calculate the US dollars.

**Effective Dates**

The effective dates specify when the markup table is effective. The Table Basis Date of the workfile transaction is compared to these dates when searching the markup table.

**Minor Keys**

You must specify a minor key for each markup rule that you define in the Cost Plus Markup Table. The minor key will include the following information.
Define Markup Rules

Account Range

The 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. If the subsidiary fields are blank, then all subsidiaries are included in the account range.

Payroll Information

The 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. Payroll information includes job type, job step, cost pool, home business unit, employee, and pay type.

Equipment Information

The 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. Equipment information includes equipment number, rate group, and rate code.

Note: You can specify a combination of payroll or equipment information. Payroll and equipment information are mutually exclusive.

Markup Calculations

You can associate any combination of three markup calculations with a minor key. To mark up workfile transactions, the system applies the following calculations for a minor key in the following order:

- 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 relate more than one markup calculation to a minor key.

For example, a source transaction with 10 units might use a minor key with the following markup calculations:

1. Rate override of 50 dollars per unit
2. Percentage markup of 10 percent
3. Amount markup of 25 dollars

The system calculates the compounded markup amount as follows:
1. 10 units $50 = 500 dollars
2. $(500 \times 10\%) + 500 = 550 dollars
3. 550 dollars + 25 dollars = 575 dollars

Using the same compound markup rule, a workfile transaction with zero units, but a cost of 200.00 USD would be calculated as follows:
1. No rate calculation because there are zero units
2. $(200 \times 10\%) + 200 = 220 dollars
3. 220 dollars + 25 dollars = 245 dollars

To define markup rules

On Cost Plus Markup Table

1. To identify the major key for a markup table, complete the following fields:
   - Generation Type
   - Currency (if applicable)
   - Key Type
   - Table Key
   - Effective Date From
   - Effective Date Thru
2. To specify the account range for the table, complete the following fields:
Define Markup Rules

- Object From
- Object Thru
- Subsidiary From
- Subsidiary Thru

If you leave the account range blank, the system applies the markup rule to all account ranges within the major key.

3. To specify the markup calculation, complete one or more of the following fields:
   - Rate Override
   - Cap/Override Rate
   - Percent
   - Amount

4. Choose More Details (F4).

5. To specify payroll information for each minor key, complete any of the following fields:
   - Job Type
   - Job Step
   - Cost Pool
   - Home Business Unit
   - Employee
   - Pay Type

6. To specify equipment information for each minor key, complete any of the following fields:
   - Equipment Number
- Rate Code
- Rate Group

Payroll and equipment information are mutually exclusive.

7. Complete the following optional field to override the descriptions from the related source transactions:
   - Override Description

8. To associate component calculations with this markup rule, complete the following fields:
   - Cost Table
   - Invoice/Revenue Table

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generation Type (GTYP)</td>
<td>A code the system uses to determine the applicable Cost Plus Markup table when retrieving markup rates. Depending on how you define the billing constants, different markup rules can apply to different amounts. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>1 Apply the markup rule to invoice, revenue, and component amounts. If the billing constants specify that invoice and revenue amounts are always to be equal, 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 will apply to revenue, invoice, and component amounts if no Generation Type 2 or 3 rules exist.</td>
</tr>
<tr>
<td></td>
<td>2 Override revenue and component markups are calculated if the Independent Invoice Constant is set to 1. If no component markups are specified, component markups will be calculated using the Generation Type 1 rules.</td>
</tr>
<tr>
<td></td>
<td>3 Apply the markup rule to component amounts only. This rule overrides rules in Generation Type 1 and 2 tables. This rule is not dependent upon billing constants settings.</td>
</tr>
</tbody>
</table>
### Define Markup Rules

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Type (TYKY)</td>
<td>A code that the system uses in combination with the table key to locate and edit source and billing detail transactions against the various tables in the Service Billing and Contract Billing systems. Valid key type codes and related tables are:</td>
</tr>
<tr>
<td>1</td>
<td>Work order number - Work Order Master (F4801)</td>
</tr>
<tr>
<td>2</td>
<td>Work order class - User Defined Code (00/W7)</td>
</tr>
<tr>
<td>3</td>
<td>Contract number - Contract Master (F5201)</td>
</tr>
<tr>
<td>4</td>
<td>Parent contract number - Contract Master (F5201)</td>
</tr>
<tr>
<td>5</td>
<td>Customer - Address Book Master (F0101)</td>
</tr>
<tr>
<td>6</td>
<td>Job or business unit - Business Unit Master (F0006)</td>
</tr>
<tr>
<td>7</td>
<td>Job class - User Defined Code (00/11)</td>
</tr>
<tr>
<td>8</td>
<td>Company - Company Constants (F0010)</td>
</tr>
<tr>
<td>9</td>
<td>Default</td>
</tr>
</tbody>
</table>

*Form-specific information*

The system uses the Key Type field in conjunction with the Table Key field to locate the applicable Cost Plus Markup table for each source transaction from the Account Ledger table (F0911).
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Key (TKEY)</td>
<td>A value that the system uses in combination with the key type to locate and edit source and billing detail transactions against the various tables in the Service Billing and Contract Billing systems.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>The system uses the Table Key field in conjunction with the Key Type to locate the applicable Cost Plus Markup table for each source transaction from the Account Ledger table (F0911) or workfile transaction from the Billing Workfile (F4812).</td>
</tr>
<tr>
<td>Date - Beginning Effective (EFTB)</td>
<td>The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to display.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>This field identifies an effective begin date for a Cost Plus Markup Table.</td>
</tr>
<tr>
<td></td>
<td>Note: The effective dates for Cost Plus Markup tables with the same key values cannot overlap.</td>
</tr>
<tr>
<td>Date - Ending Effective (EFTE)</td>
<td>The date on which the item, transaction, or table becomes inactive or the date through which you want transactions to display.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>This field identifies an effective end date for a Cost Plus Markup table.</td>
</tr>
<tr>
<td></td>
<td>Note: The effective dates for Cost Plus Markup tables with the same key values cannot overlap.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Currency (CRCD)</td>
<td>A code that indicates the currency of a customer’s or a supplier’s transactions.</td>
</tr>
<tr>
<td></td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>The system retrieves default currency codes for the following key types:</td>
</tr>
<tr>
<td></td>
<td>- Contract - default currency from the Contract Master table (F5201)</td>
</tr>
<tr>
<td></td>
<td>- Parent Contract - default currency from the Contract Master table (F5201)</td>
</tr>
<tr>
<td></td>
<td>- Company - default currency from the Company Information table (F0010)</td>
</tr>
<tr>
<td></td>
<td>- Customer - default currency from the Customer Information table (F0301)</td>
</tr>
<tr>
<td></td>
<td>- Job - default currency from the Business Unit Master table (F0006)</td>
</tr>
<tr>
<td></td>
<td>- Work Order - default currency from the Work Order Master table (F4801)</td>
</tr>
<tr>
<td></td>
<td>The currency code that you specify in this field controls the decimal display on the Cost Plus Markup Table form.</td>
</tr>
<tr>
<td></td>
<td>Note: The currency code on the markup tables must correspond to the currency code set up for any related component tables.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>From/Thru Object and Subsidiary (OBJ/OBJT, SUB/SUBT)</td>
<td>The From and Thru fields for Object and Subsidiary identify the range of billable source accounts.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Markups Rate Override</td>
<td>The rate the system uses to markup 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.</td>
</tr>
<tr>
<td></td>
<td>The Override Rate Calculator for the Total Revenue markup is:</td>
</tr>
<tr>
<td></td>
<td>(Override Rate * Unit) * (1 + Markup %) + Markup Amount</td>
</tr>
<tr>
<td></td>
<td>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.</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>Enter a markup rate to override an existing rate. For example, if you want a standard consulting fee to be higher than the normal hourly rate, you can type the consulting fee in this field.</td>
</tr>
<tr>
<td></td>
<td>You can also use the Rate Override to indicate a maximum rate for the entry when you use it in conjunction with the C (Cap) field.</td>
</tr>
<tr>
<td>Cap or Override Rate</td>
<td>A code that indicates whether the associated amount is the override rate or the cap of the rate.</td>
</tr>
<tr>
<td>(CAP)</td>
<td>Values are:</td>
</tr>
<tr>
<td></td>
<td>blank Override Rate.</td>
</tr>
<tr>
<td></td>
<td>1 Cap 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.</td>
</tr>
</tbody>
</table>
### Define Markup Rules

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markup Percent</td>
<td>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 Cost Plus Markup Table using Generation Type 1 to specify a table for revenue/invoice markup percentage rates. Enter percentages as whole numbers. For example, 50.275% would be entered as 50.275.</td>
</tr>
<tr>
<td>Field Explanation</td>
<td><strong>Form-specific information</strong></td>
</tr>
<tr>
<td>Markup Percent</td>
<td>The field lets you include a markup percentage for the amount of revenue recognition.</td>
</tr>
<tr>
<td>(PERT)</td>
<td>In the billing systems, you can set up a Generation Type 2 Cost Plus Markup table that lets you enter and maintain revenue amounts that are different from the amounts used in invoicing. In Generation Type 2 tables, this field lets you apply a markup rate that will be specific to the revenue recognition amount for the table entry.</td>
</tr>
<tr>
<td>Amount (AA)</td>
<td>A number that identifies the amount the system adds to the transaction. For credits, enter a minus sign (-) either before or after the amount. Enter debits with no sign.</td>
</tr>
<tr>
<td>Override Description (EXR)</td>
<td>A description, remark, explanation, name, or address retrieved from the following cost (source) transactions:</td>
</tr>
<tr>
<td></td>
<td>- Journal entry (Explanation 2 field)</td>
</tr>
<tr>
<td></td>
<td>- A/P voucher entry (Explanation field)</td>
</tr>
<tr>
<td></td>
<td>- Payroll (pay type description — regular, overtime, and so on)</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>A description, remark, explanation, name, or address that you want to apply to the billable detail transaction.</td>
</tr>
<tr>
<td>Job Type (JBCD)</td>
<td>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.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Job Step</td>
<td>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.</td>
</tr>
<tr>
<td>Cost Pool</td>
<td>Category code 12 associated with the Business Unit Master file (F0006). This is a user defined code (system 00, type 12) for use in flex account mapping and in printing selected information on reports.</td>
</tr>
<tr>
<td>Business Unit</td>
<td>The number of the business unit in which the employee generally resides.</td>
</tr>
<tr>
<td>Employee</td>
<td>A number that identifies an entry in the Address Book system. Use this number to identify employees, applicants, participants, customers, suppliers, tenants, and any other Address Book members.</td>
</tr>
<tr>
<td>Pay Type</td>
<td>A code to define the type of pay, deduction, benefit, or accrual. Pay types are numbered from 1 to 999. Deductions and benefits are numbered from 1000 to 9999.</td>
</tr>
<tr>
<td>Equip No</td>
<td>An 8-digit number that uniquely identifies an asset.</td>
</tr>
<tr>
<td>Rate Cde</td>
<td>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.</td>
</tr>
</tbody>
</table>

*Form-specific information*

The field lets you identify and search for specific cost resources by geographical or functional groups and apply specific markup instructions to them.

This field tells the system to apply the specified markup rates only to accounts (costs) with the designated home business unit.

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.
## Define Markup Rules

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate Grp (ACL0)</td>
<td>A user defined code (12/CO) 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.</td>
</tr>
<tr>
<td>Cost Component (CCR)</td>
<td>A code that identifies a component cost rate table to use for this 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.</td>
</tr>
<tr>
<td>Inv/Rev Tbl (CRVR)</td>
<td>A code that identifies a component invoice/revenue table to use for this Cost Plus 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. The generation type of the Cost Plus 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.</td>
</tr>
</tbody>
</table>

### What You Should Know About

**Default markup rules**

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 for a key type and "ALL" for the table key. For a minor key default markup rule, leave the account range blank and specify a markup calculation.
Source transactions without markup

If you do not want to markup 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

Otherwise, the system marks up the transaction using a default markup rule or the default percentage in the system constants.

Markup rate cap

If you want to force a comparison between the rate override and the per unit rate of the source transaction, you can use the Markup Rate Cap field. The system uses the lower of the two rates.

Multi-currency

The currency code that you set up for your markup tables must correspond to the currency code that you set up for any related component tables.

See Setting Up Component Codes.

Printing Cost Plus Markup Rules

You can print a report showing the markup rules using the Cost Plus Markup Listing (P48596) on the Contract Billing Table Information menu (G4843).

See Also

- Changing the Markup for a Transaction (P4812)
- Appendix C - Searches for Markup Rules

Processing Options

See Cost Plus Mark Up Information (P48096).
Define Component 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 for the system to automatically calculate the component.

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.

Component tables allow you to set up provisional burdens, which are attached at the billing detail transaction level. You can base the component calculations on the cost, invoice (including taxes), and/or revenue amounts of the base billing detail transaction.

For example, components based on the cost amount allow you to apply additional overhead to costs that the organization incurs. Components based on the invoice amount allow you to apply charges in addition to the markup amount for billing.

You control the amount basis for this calculation in the detail area of the Cost Plus Markup table. When you enter the name of the component table in the Cost Table field, the system bases all calculation on the cost amount. Similarly, when you enter the name of the component table in the Invoice/Revenue Table field, the system bases all calculations on the invoice or revenue amounts, depending on the generation type of the Cost Plus Markup table and the setting for the Journal Generation Control code in the system constants.

You define component rules using the following information:

- A name to identify a set of component calculation rules
- Currency Code (multi-currency environments only)
- 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 X 2 percent = 20
2. 1000 X 40 percent = 400
3. 400 X 2 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 user defined code table (system 48, code 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 (P4812) for more information about components and workfile transactions
- Adding Component Rules to Cost Plus Markup Rules (P48096)
- Adding Component Rules to Account Derivation Rules (P48126)
- Defining a Cross-Reference for a Component (P5202)
To define component calculation rules

On Component Table

1. To identify a specific set of component calculation rules, complete the following fields:
   - Component Table
   - Description

2. If you work in a multi-currency environment, complete the following field:
   - Currency Code

3. To specify effective dates for the rules, complete the following optional fields:
   - Beginning
   - Ending

4. To define one or more component calculation rules, complete the following fields:
   - Component Code
   - Rate Basis
   - Component Rate

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Component Table (CTBL)</td>
<td>A user-specified code that identifies a set of component rules. 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.</td>
</tr>
<tr>
<td>Currency Code (CRCD)</td>
<td>A code that indicates the currency of a customer’s or a supplier’s transactions. Form-specific information Specify a currency code in conjunction with the component table and effective dates to identify a set of component rules. The currency code that you specify in this field controls the decimal display on the Component Table form.</td>
</tr>
<tr>
<td>Beginning (EFTB)</td>
<td>The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to display.</td>
</tr>
<tr>
<td>Ending (EFTE)</td>
<td>The date on which the item, transaction, or table becomes inactive or the date through which you want transactions to display.</td>
</tr>
</tbody>
</table>
Define Component Rules

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comp Code (CCOD)</td>
<td>A component code identifies a provisional burden that is accounted for at the billing detail transaction level.</td>
</tr>
<tr>
<td>Component Rate Basis (UORC)</td>
<td>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.</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Note: You can enter C for 1 or U for 2.</td>
<td></td>
</tr>
<tr>
<td>Component Rate Percent (CRTP)</td>
<td>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. 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. 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.</td>
</tr>
</tbody>
</table>

What You Should Know About

Multi-currency

The currency code that you set up for your component tables must correspond to the currency code that you set up for any related markup tables.

See Defining Markup Rules.
To set up compound components

On Component Table

1. To locate a set of component rules, complete the following field:
   - Component Table

2. Choose Cross Reference (Option 3) for a specific component calculation rule.

3. On Component Cross Reference, choose Select for Cross Reference (Option 4) for each component calculation rule that you want to include in the cross-reference.

   A component link number associates component calculations with its related workfile transaction.

   **Note:** You can include only previously defined component calculation rules in your cross-reference information.

   The system highlights the Option field on Component Table for component calculation rules that include cross-reference information.

What You Should Know About

**Printing Component Rules**

You can print a report showing the component rules using the Component Table Listing (P4860P) on the Contract Billing Table Information menu (G4843).
Account Derivation Rules

Defining Account Derivation Rules

Before you generate accounting entries in preliminary or final mode, you must define accounting rules for T&M billing lines in the Account Derivation Table. You can choose to use the Account Derivation Table for non-T&M billing lines, as well.

These accounting rules are the links between your day-to-day accounting functions, chart of accounts, and financial reports. The system uses the account derivation rules to determine how to distribute G/L entries that the system generates. For example, the account derivation rules identify how to record the transaction when you invoice a customer for goods or services rendered.

The billing system accesses account derivation rules when you generate journals. You define account derivation rules to indicate to the system:

- Which workfile transactions you are journaling
- How you want specific transactions processed
- Where to direct the resulting journal entries

About Defining Account Derivation Rules

You must define separate rules with a unique combination of key values for each journal process as it relates to revenue recognition and invoicing.

You specify the following key values to define account derivation rules:

- Table type
- Key type
- Table key
- Effective dates
- Source object and subsidiary account ranges

Table Types

The system uses table types to create journal entries based on the value you specify for the Journal Generation Control field in the system constants. The table types relate directly to the business needs of your company.
When you define account derivation rules, you can specify the following table types, depending on your system constants:

<table>
<thead>
<tr>
<th>Journal Generation Control Constant</th>
<th>Account Derivation Table Table Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Invoicing Only</td>
<td>3 – Actual Revenue (credit)</td>
</tr>
<tr>
<td>2 – Revenue recognition only</td>
<td>1 – Unbilled Revenue (credit)</td>
</tr>
<tr>
<td></td>
<td>3 - Unbilled Accounts Receivable (debit)</td>
</tr>
<tr>
<td>3 – Revenue recognition and invoicing</td>
<td>1 – Actual Revenue (credit)</td>
</tr>
<tr>
<td></td>
<td>3 - Unbilled Accounts Receivable (debit during revenue recognition, credit during invoicing)</td>
</tr>
<tr>
<td>4 – Revenue recognition and invoicing, with revenue reconciliation</td>
<td>1 – Unbilled Revenue (credit during revenue recognition, debit during reconciliation)</td>
</tr>
<tr>
<td></td>
<td>2 – Actual Revenue (credit during reconciliation)</td>
</tr>
<tr>
<td></td>
<td>3 - Unbilled Accts Receivable (debit during revenue recognition, credit during invoicing, debit and credit during reconciliation)</td>
</tr>
</tbody>
</table>

**Key Types and Table Keys**

Key types are hard coded values that you specify in combination with table keys. The system uses the key type and table key to determine whether the account derivation rule applies to a specific transaction.

For example, if the key type is customer number, the table key must be a specific customer number. If you have three customers that require different account derivation rules, you must set up three different account derivation rules, each with customer number as the key type and a specific customer number as the table key. The system matches the key type and table key with the information in individual transactions and applies the correct account derivation rules.

**Types of Account Derivation Rules**

You can define the following types of account derivation rules:

- Base
- Reallocation

**Base Rules**

Base account derivation rules indicate which accounts you want the system to use when creating journal entries for the revenue recognition and billing processes. The value you choose for the Journal Generation Control field in the system constants determines the table types for the account derivation rules and which journal entries the system creates for the base rule.
The system uses the base rule to create journals for the total of the base and component amounts. You must define a base rule for every key value combination you set up on the Account Derivation Table form.

**Reallocation Rules**

You use reallocations to move amounts from one account to another. A reallocation consists of at least two offsetting reallocation rules that must balance. The first reallocation rule is an offset journal entry that represents a reduction to the base amount. The second reallocation rule is a journal entry that represents an increase to the new account.

Your company might have many different reasons for using reallocation rules. For example, you might define reallocation rules when you want to change the costs for a work order from a work-in-process account to a cost-of-sales account. You can also define reallocation rules if the costs for a work order come from several departments within your company and you want the resulting revenue to be split among the departments.

**Before You Begin**

- Set the value of the Journal Generation Control in the system constants.

**See Also**

- *Appendix D - Accounting for the Billing Cycle* for more information about journal processes

**To define a base rule**

On Account Derivation Table
1. Complete the following fields:
   - Table Type
   - Key Type
   - Table Key
   - Object From
   - Object Thru

2. Complete the following optional fields:
   - Effective Date From
   - Effective Date Thru
   - Subsidiary From
   - Subsidiary Thru

   If you leave these optional fields blank, the rule applies to all dates and subsidiaries.

3. To specify the accounts for which the system creates journal entries, complete any of the following fields:
   - Business Unit
   - Object
   - Subsidiary
   - Subledger
   - Subledger Type

4. Complete the following fields:
   - Table Amount Basis (AB)
   - Split Amount Basis (TX)
   - Positive/Negative

   Leave these fields blank if you want the system to assign the default values that define a base rule.

5. Choose More Details (F4).
6. To further define the base rule, complete any of the following optional fields:

- Create Link
- Equipment
- Units

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table Type (TBTY)</td>
<td>This field tells the system how to process the entries in this table. The Journal Generation Control Flag in the system constants controls the table setup and journal processing.</td>
</tr>
<tr>
<td>Key Type (TYKY)</td>
<td>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. Valid key type codes and their related tables or user defined codes are:</td>
</tr>
<tr>
<td></td>
<td>1  Work order number - Work Order Master (SBL, F4801)</td>
</tr>
<tr>
<td></td>
<td>2  Work order class - User Defined Code 00/W7 (WR07, F4801)</td>
</tr>
<tr>
<td></td>
<td>3  Contract number - Contract Master (DOCO, F5201)</td>
</tr>
<tr>
<td></td>
<td>4  Parent contract number - Contract Master (PCTN, F5201)</td>
</tr>
<tr>
<td></td>
<td>5  Customer – Contract Master (AN8O, F5201)</td>
</tr>
<tr>
<td></td>
<td>6  Job or business unit - Business Unit</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Master (MCU, F0006)</td>
<td></td>
</tr>
<tr>
<td>7 Job class - User Defined Code(00/11 (RP11, F0006)</td>
<td></td>
</tr>
<tr>
<td>8 Company - Company Constants (CO, F0010)</td>
<td></td>
</tr>
<tr>
<td>9 Default</td>
<td></td>
</tr>
</tbody>
</table>

**Program-Specific Information**

The system uses the Key Type field in conjunction with the Table Key field to locate the applicable Account Derivation table for each transaction that is in the Billing Workfile (F4812).

**Effective Start Date**

(EFTB) The date on which an address, item, transaction, or table becomes active or the date from which you want transactions to display.

**Program-Specific Information**

This field identifies a begin date for an Account Derivation table.

Note: The effective dates for Account Derivation tables with the same key values cannot overlap.

**Effective End Date**

(EFTE) The date on which the item, transaction, or table becomes inactive or the date through which you want transactions to appear.

**Program-Specific Information**

This field identifies an effective end date for an Account Derivation table.

NOTE: The effective dates for Account Derivation tables with the same key values cannot overlap.

**Object From/Through**

(OBJ/OBJT) The object account range for which the rule applies.

**Subsidiary From/Through**

(SUB/SUBT) The subsidiary account range for which the rule applies. If both fields are blank, then all subsidiaries are included in the range.

**Resulting Business Unit**

(MCUN) This field determines the business unit for the resulting transactions. You can specify a business unit or use one of the following values:

- blank — The business unit from the default revenue account in the master information for the customer.
- *SRC — The business unit from the source transaction.
- *WO — The charge-to business unit from
### Field Explanation

- **the master information for the work order.**
- **HOME** — The home business unit (HMCU) from the source transaction. If no home business unit exists, the system uses the business unit from the source transaction.
- **PROJ** — The project number (MCUS) from the master information for the job.
- **CO** — The company number from the source transaction.
- **HOST** — The host business unit (JMCU) from the master information for the contract.
- **EHMCU** — The responsible business unit from the master information for the equipment.

### Resulting Object Account (OBJN)

This field determines the object account for the resulting transactions. You can use one of the following methods:

- 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:
  - **blank** - The object account from the default revenue account in the master information for the customer
  - **SRC** - The object account from the source transaction
<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resulting Subsidiary (SUBLN)</td>
<td>This field determines the subsidiary for the resulting transactions. You can specify a subsidiary or use one of the following values:</td>
</tr>
<tr>
<td></td>
<td>blank — The subsidiary from the default revenue account in the master information for the customer.</td>
</tr>
<tr>
<td></td>
<td>*BLANK — The subsidiary is blank for the resulting transactions.</td>
</tr>
<tr>
<td></td>
<td>*SRC — The subsidiary from the source transaction.</td>
</tr>
<tr>
<td></td>
<td>*WO — The cost code (subsidiary) from the master information for the work order.</td>
</tr>
<tr>
<td>Resulting Subledger/Subledger Type (SBLN/SBLT)</td>
<td>This field 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:</td>
</tr>
<tr>
<td></td>
<td>*SRC — The subledger and subledger type from the source transaction</td>
</tr>
<tr>
<td></td>
<td>*WO — The work order number and the subledger type W</td>
</tr>
<tr>
<td></td>
<td>*CUST — The address number for the customer and the subledger type A</td>
</tr>
<tr>
<td></td>
<td>*CC — The business unit from the source transaction and the subledger type C</td>
</tr>
<tr>
<td>Amount Basis (AMBS)</td>
<td>A code that identifies the amount to post to the resulting account. The amount comes from the billing detail transaction in the Billing Workfile (F4812). Valid codes are:</td>
</tr>
<tr>
<td></td>
<td>B Base amount (The base amount represents either the revenue or invoice amount, depending on the type of processing you choose and on the stage of journal processing.)</td>
</tr>
<tr>
<td></td>
<td>C Cost amount</td>
</tr>
<tr>
<td></td>
<td>I Invoice amount</td>
</tr>
<tr>
<td></td>
<td>M Margin amount (Revenue minus Cost)</td>
</tr>
<tr>
<td></td>
<td>N Net margin (Invoice amount minus Cost)</td>
</tr>
<tr>
<td></td>
<td>R Revenue amount</td>
</tr>
<tr>
<td></td>
<td>If you leave this field blank, the system automatically enters B.</td>
</tr>
<tr>
<td>Field</td>
<td>Explanation</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Split Amount Basis (TX) (TSBS)</td>
<td>This field tells the system how to split the amount identified in the Amount Basis field for the resulting accounts it creates.</td>
</tr>
<tr>
<td>blank</td>
<td>Used with Cost, Margin, or Net Amount Basis. (These amount fields cannot be logically split into a taxable amount and a tax amount).</td>
</tr>
<tr>
<td>B</td>
<td>Invoice Amount + Tax OR Revenue Amount</td>
</tr>
<tr>
<td>A</td>
<td>Taxable Invoice Amount Only</td>
</tr>
<tr>
<td>T</td>
<td>Tax Only</td>
</tr>
<tr>
<td>Positive or Negative (PONE)</td>
<td>This field designates whether or not the entries are normal entries. For example, a normal entry to a revenue account is a credit.</td>
</tr>
<tr>
<td></td>
<td>If the Table Type specifies Actual Revenue, then a positive in this field indicates that a normal (credit) entry will be made to the resulting account.</td>
</tr>
<tr>
<td>Ledger Type (LT)</td>
<td>A user defined code (09/LT) that specifies the type of ledger, such as AA (Actual Amount), 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.</td>
</tr>
<tr>
<td>Form-specific information</td>
<td>On this screen, the code tells the system the ledger type to which the resulting transactions should be sent. If you leave this field blank, the system automatically enters AA.</td>
</tr>
<tr>
<td>Create Link (LINK)</td>
<td>A value that allows you to link an amount and the associated revenue transaction created by the Account Derivation table to the Billing Workfile (F4812) transaction from which it originated. This historical linkage information (F48912) lets you track costs and revenues using customized reports and inquiries. The G/L Linkage file (F48912) contains information linking the Account Ledger (F0911) and Billing Workfile/Billing Workfile History (F4812/F4812H) tables. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>0 Do not create link.</td>
</tr>
<tr>
<td></td>
<td>1 Create link.</td>
</tr>
<tr>
<td>Equipment Number (EQCF)</td>
<td>Use this field to control the update of the equipment number on the Account Ledger (F0911) accounting entry. Valid values are: Blank Do not update the equipment</td>
</tr>
</tbody>
</table>
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>number on the accounting entry.</td>
<td></td>
</tr>
<tr>
<td>1 Use the number of the Equipment Worked to update the asset number on the accounting entry.</td>
<td></td>
</tr>
<tr>
<td>2 Use the number of the Equipment Worked On to update the asset number on the accounting entry.</td>
<td></td>
</tr>
<tr>
<td>Units (UNCF)</td>
<td>Use this field to control whether the system records units on the Account Ledger (F0911) accounting entry. Valid values are:</td>
</tr>
<tr>
<td></td>
<td>Blank Do not record units on the accounting entry.</td>
</tr>
<tr>
<td></td>
<td>1 Record units on the accounting entry.</td>
</tr>
</tbody>
</table>

### What You Should Know About

**Setting up default account derivation rules**

On Account Derivation Table, complete the steps for setting up an account derivation rule. Include the following information:

- Key Type of 9.
- Table Key of *ALL.
- Leave the From and Thru fields for the minor key blank. In this case, the system assigns *DFT to the Object From field to indicate that all objects and subsidiaries are eligible for the table.

You should create a default rule for each table type that your billing process requires. The system uses a default table to process the transactions that do not match the key values of other rules.

Caution: If you do not define a default table, the system can create journals that do not balance.

**Associating equipment with journal entries**

When you enter an equipment number to associate a piece of equipment with a journal entry, the system uses the responsible business unit of the equipment.

### To define reallocation rules

On Account Derivation Table

1. To locate the base rule from which you want to reallocate, complete the following fields:
   - Table Type
   - Key Type
2. Complete the following fields for the reallocation rule:
   - Object From
   - Object Thru
   - Subsidiary From
   - Subsidiary Thru
   The account ranges for the reallocation rule must be identical to the range for the base rule.

3. To define the reallocation rule that reduces the base, complete the following fields:
   - Business Unit
   - Object
   - Subsidiary
   - Subledger
   - Subledger Type
   - Table Amount
   - Split Amount Basis
   - Positive/Negative (populate with a negative (-))

4. Choose More Details (F4).

5. To further define the reallocation rule, complete any of the following fields:
   - Component Code
   - Condition Code
   - Ledger Type
   The values you enter in these fields must be identical to the values you use to define the offsetting reallocation rule.

6. Complete any of the following optional fields:
   - Percent to Include
   - Create Link
   - Equipment
   - Revenue Entry Control
   - Units

7. On the next blank line, complete steps 2 through 6 to define the offsetting reallocation rule.
   You must define at least one positive and one negative reallocation rule for each amount basis and split basis for a reallocation to balance.

8. Use the Change action.
# Adding Component Codes to Derivation Rules

If you want the system to create separate journal entries for component amounts, you can assign a component code to an account derivation rule.

## To add component codes to account derivation rules

### On Account Derivation Table

1. Complete the following fields to locate a specific reallocation rule:
   - Table Type
   - Key Type
   - Table Key
   - Effective Date From
2. Choose More Details.
3. Complete the following field to specify the component code for the component calculation rule you want to add:
   - Component Code (Comp)

You cannot add a component code to a base rule.

4. Use the Change action.

## What You Should Know About

### Percentage reallocations

You can reallocate any portion of the base amount, up to 100%, to one or more accounts. For example, you might want to reallocate the tax portion of a base to a different account.

To do this, you use the Percent To Include field. The percent by which you reduce the base amount must equal the percent that you reallocate.

### Conditional reallocation rules

If you want the system to create journal entries only under certain conditions, you can specify conditions for a reallocation rule. For example, if you want to create journal entries only when a workfile transaction’s home business unit does not equal its source business unit, you can set up a condition.

Before you can specify a condition for a reallocation rule, you must set up condition codes.

Note: If you use conditional reallocation rules, the Journal Generation programs for Revenue Recognition and Billing require additional processing time.

*See Setting Up Condition Codes.*

### Printing Account Derivation Rules

You can print a report showing the account derivation rules using the Account Derivation Table Listing (P48126P) on the Contract Billing Table Information menu (G5243).
Processing Options

See Account Derivation Information (P48126).
Setting up Condition Codes

Whenever you create journals for revenue recognition or billing, the system must follow instructions that you set up in the account derivation rules. If you want the system to create journals only under certain conditions, you can specify condition codes for reallocation rules that you define on Account Derivation Table.

For example, if you want the costs for a job to go to one account and the revenue for the job to go to another account, but only when the home business unit for the related workfile transactions does not equal the job, you can set up a condition.

You use the Condition Code Revisions form to set up and revise the codes that you apply to your reallocation rules. These codes define the conditions that transactions must meet before the system can create the resulting journal entries specified by the account derivation rules.

When you use condition codes, the system requires additional processing time to test each condition before creating the resulting journal entries.

About Conditions

You use logical operators, retrieval references, and specific values to define the conditions that make up a condition code. Logical operators include and, or, equal, not equal, and so on. Retrieval references direct the system to specific variable information stored in system tables, such as data items. If you set up a condition code with multiple conditions, you use an and/or statement.

For example, you might define a condition as "Job equal to 5001." Equal is the logical operator. The retrieval reference directs the system to the data dictionary item for Job. Finally, 5001 is a specific value that refers the system to a specific job in the system. If you assigned a condition code that included this condition to a reallocation rule, the rule would only apply to transactions that included Job 5001 in the account information.

Before You Begin

- Set up the names for your condition codes on the user defined codes table 48/CC
To set up condition codes

On Account Derivation Table

1. Complete the following fields to locate a specific reallocation rule:
   - Table Type
   - Key Type
   - Table Key
   - Effective Dates

2. Choose Condition Code Definition (F13).
3. On Condition Code Revisions (P4871), complete the following field to locate a condition code:
   - Condition Code

4. Complete the following field to define more than one condition for the code:
   - And/Or Selection (AO)

5. Complete the following fields to define the conditions:
   - Value One
   - Relationship (Ds RI)
   - Comparison Value Two
   - Sequence Number (optional)

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition Code (CNDC)</td>
<td>A descriptive name for a condition code. The code represents a set of logical tests of the relationships between specified values. You enter the values and their relationships to test on the Condition Code Revision form. When you use a condition code, all of the specified relationships for that code must exist before the system will create the resulting transactions for the table entry.</td>
</tr>
<tr>
<td>And/Or (AO)</td>
<td>A code that determines whether compound data selection logic is based on an A = AND condition or an O = OR condition.</td>
</tr>
<tr>
<td>Value One (CMV1)</td>
<td>The information entered in this field will determine the first value in a comparison of two values. This field must contain a Retrieval Reference Number, preceded by an ampersand (&amp;). The retrieved value will then be compared to the value specified in Comparison Value 2 to determine if the relationship entered in the Relationship field is satisfied.</td>
</tr>
<tr>
<td>Relationship (VALS)</td>
<td>A code that identifies the operands in Boolean logic. You can specify any of the following: EQ Equal to LT Less than LE Less than or equal to GT Greater than GE Greater than or equal to NE Not equal to NL Not less than NG Not greater than</td>
</tr>
</tbody>
</table>
Set Up Condition Codes

### Field

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison Value Two (CMV2)</td>
<td>This field represents the second of two values that will be compared. You can enter a specific value to be used in the comparison, or you can enter a Retrieval Reference Number, preceded by an ampersand (&amp;). This value will be compared to the value referenced in the Value One field to determine if the relationship specified in the Relationship field is satisfied.</td>
</tr>
</tbody>
</table>

### What You Should Know About

<table>
<thead>
<tr>
<th>Retrieval references</th>
<th>You must specify a retrieval reference in the Value One field for each condition you define on the Condition Code Revisions form. Use only the retrieval references associated with variable information in system tables. Special retrieval references, such as Add, Total, and Page, do not apply to conditions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison values</td>
<td>You can specify a retrieval reference or a specific value in the Comparison Value Two field to define a condition.</td>
</tr>
<tr>
<td></td>
<td>Note: If you specify a value in the Comparison Value Two field, you must enter the value using the same format that is used to store the information in the table you specify for the Value One field.</td>
</tr>
<tr>
<td>Sequencing conditions</td>
<td>The system applies conditions to transactions in the order that the conditions appear on the Condition Code Revisions form. You can use the Sequence Number field to resequence the order in which the conditions apply to transactions. When you resequence conditions, the system redisplays the conditions in the appropriate order. Conditions for which you do not assign a sequence number appear before sequenced conditions in the order that they were entered on the form.</td>
</tr>
</tbody>
</table>

### See Also

- *Defining Retrieval References (P4850)* for more information about defining retrieval reference codes
- *About Retrieval References* for more information about retrieval references
Work with Conditional Reallocation Rules

Working with Conditional Reallocation Rules

Reallocation rules can be dependent on the results of a conditional test. When you specify a test for a conditional reallocation rule, the system must test each condition before it can execute each account derivation rule. This additional processing increases the time it takes for the system to create the resulting journal entries.

Each conditional test can include one or more types of tests the system must execute for the Condition Code before it applies the reallocation rule. To assign a condition code to a reallocation rule, you must determine the following:

- Appropriate journal processing stage for the conditional reallocation
- Base rule associated with the conditional reallocation rule
- Object account range for the workfile transactions associated with the conditional reallocation rule
- Resulting accounts for the conditional reallocation amount
- Applicable amount basis and tax basis for the conditional reallocation rule
- Condition code tests.
Work with Conditional Reallocation Rules

Working with conditional reallocation rules consists of the following tasks:

- Defining retrieval references
- Setting up condition codes

See Also

- Appendix A - Retrieval Reference Codes for a listing of retrieval reference codes and their applicable parameters
- Appendix B - Field Derivations for the F4812 for a listing of the source information for each field in the Billing Workfile (F4812)

Defining Retrieval References

You use retrieval references to direct the system to the information stored in various files that you want to include in a conditional reallocation rule.

The information that is stored in system tables is directly related to data items. Each data item corresponds to a particular field in a table. To define retrieval references, you need to know the name and specifications of the data items for the information stored in system tables that you want to print on your invoices.

You can review a list of all the tables from which you can retrieve variable information for your invoices. You can access the File Field Description window to review a list of the names of the data items within a specific table.

When you define retrieval references, you must specify how you want the system to use each reference based on the following information:

- Retrieval code
- Parameters
Retrieval Codes

The retrieval code you specify for a retrieval reference determines the type of reference that you define. You must specify a retrieval code for each retrieval reference. Retrieval codes tell the system what kind of variable information you want the retrieval reference to retrieve and whether you want the system to display the information as is or to use it to perform a calculation. Retrieval codes can also direct the system to a table from which you can retrieve variable information that is related to a specific data item.

Parameters

You use parameters in combination with retrieval codes to further define a retrieval reference. For example, you might define parameters for a retrieval code to specify:

- Names of data items within a specific table
- Mathematical applications, such as add
- The code for another retrieval reference

You can assign up to five parameters for a retrieval reference. The number of parameters you are required to specify for a retrieval reference depends on the retrieval code for the reference.

Each retrieval code has different parameter requirements. To determine whether a specific retrieval code requires parameters, choose Field Sensitive Help (F1) for the first parameter. After you define the first parameter, continue choosing Field Sensitive Help for the subsequent parameters. When you choose Field Sensitive Help for the first parameter that is not required for the retrieval code, the system displays the following message:

A generalized 10 character parameter value passed to a called program.

To define retrieval references

On Account Derivation Table

1. Choose Condition Code Definition (F13).
2. On Condition Code Revisions (P4871), choose Retrieval Reference Definition (F13).
3. On Retrieval Reference, choose Field Sensitive Help (F1) for the following field to see a list of the predefined retrieval codes:
   - Retrieval Code

4. On Retrieval Code Selection, choose the code you want to use to define the retrieval reference.

5. On Retrieval Reference, complete the following fields to specify any of the parameters required for the retrieval code:
   - Parameter 1 - 5

6. Use the Add action.

7. Choose Exit Program (F3).
   
   The system closed the Retrieval Reference window.

8. To use the new retrieval reference in a condition, on Condition Code Revisions, enter an ampersand (&) and the number of the retrieval reference (without leading zeros) in one of the following fields:
   - Value One
   - Comparison Value Two

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value One (CMV1)</td>
<td>The information entered in this field will determine the first value in a comparison of two values. This field must contain a Retrieval Reference Number, preceded by an ampersand (&amp;). The retrieved value will then be compared to the value specified in Comparison Value 2 to determine if the relationship entered in the Relationship field is satisfied.</td>
</tr>
</tbody>
</table>
### Field Explanation

<table>
<thead>
<tr>
<th>Field</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Comparison Value Two</strong>&lt;br&gt;(CMV2)</td>
<td>This field represents the second of two values that will be compared. You can enter a specific value to be used in the comparison, or you can enter a Retrieval Reference Number, preceded by an ampersand (&amp;). This value will be compared to the value referenced in the Value One field to determine if the relationship specified in the Relationship field is satisfied.</td>
</tr>
<tr>
<td><strong>Retrieval Number</strong>&lt;br&gt;(RTVN)</td>
<td>Retrieval Codes are automatically numbered consecutively. After you have defined a Retrieval Code, the Retrieval Number, preceded by an ampersand (&amp;), is used to reference the retrieval number on other forms.</td>
</tr>
<tr>
<td><strong>Retrieval Code</strong>&lt;br&gt;(RTVC)</td>
<td>You can use Retrieval Codes to extract information from the database. The code tells the system what kind of data to extract, where the data is stored, and whether to display it as is or to calculate it. Many retrieval codes require additional parameters to more specifically define the desired information.</td>
</tr>
<tr>
<td><strong>Parameters</strong>&lt;br&gt;(PRM1 – PRM5)</td>
<td>Depending on the retrieval code, this value may be a field within a file or a value to be included in a calculation.</td>
</tr>
<tr>
<td><strong>Data Item to Retrieve</strong></td>
<td>Each piece of information within a file is associated with a unique “field name.” The field name consists of a two-character file prefix and a four character Data Item. Enter the Data Item which is associated with the information you want to retrieve from the file. You can use cursor-sensitive help or the appropriate function key (F8 on most systems) to review a list of possible values.</td>
</tr>
</tbody>
</table>

---

**What You Should Know About**

**Numbering retrieval references**

The system automatically numbers the retrieval references you define. These sequential reference numbers are unique to each Condition Code.

If you have not defined retrieval references for a particular Condition Code, the system numbers the first retrieval reference you define as 1. If you had already defined 6 retrieval references for the Condition Code, the system automatically uses 7 for the Retrieval Number.

**NOTE:** The Condition Code Revisions form might not display all previously defined retrieval references.
Comparison values

To delete retrieval references, follow the steps to locate a retrieval reference. On Retrieval Reference, use the Delete action to remove the information that defines the reference. When you return to the Condition Code Revisions form, clear the code for the retrieval reference.

NOTE: After you delete a retrieval reference and its code from the Format Definition form, the system does not reassign that number. You can then manually assign the number to a new retrieval reference.
Set Up Automatic Accounting Instructions

You must set up the RC Automatic Accounting Instruction (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.

You must set up the BC AAIs to define the rules by which the Contract Billing and General Accounting systems interact. The Contract Billing system can use the BC AAI to determine the G/L account for the revenue credit journal entry for non-T&M billing lines. If the Account Override Flag on a non-T&M billing line is set to use the account on the billing line as a cost account, then the BC AAI specifies the default cost account. The cost account is used to search the Account Derivation Table and determine the resulting journal entry account.

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 AAIs:

- **RC** Receivables class accounts
- **RCRETN** Retainage
- **BC01** Lump sum
- **BC02** Unit price
- **BC03** Fee lines
- **BC04** Milestone billing
- **BC05** Progress billing
- **BC06** Direct draw
- **BC07** Rated draw

### See Also

- *Setting Up AAIs for General Accounting (P00121)* in the *General Accounting I Guide*
- *Setting Up AAIs for A/R (P00121)* in the *Accounts Receivable Guide*
Set Up User Defined Codes

Setting Up User Defined Codes

To customize JD Edwards World 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.

The system stores the information for user defined codes in the User Defined Codes table (F0005).

You should be thoroughly familiar with user defined codes before you change them.

The following user defined codes are the primary codes that affect processing in the Contract Billing system:

- Adjustment Reasons (48/AR)
- Condition Codes (48/CC)
- Component Codes (48/CM)

You can use other user defined codes, such as Contract Status (52/CS) and Category Codes (52/01 - 05, 52/11 - 15) for informational and reporting purposes.

See Also

- Changing the Markup (P4812)
- Setting Up Condition Codes (P48126)
- Defining Component Rules (P4860)
- Technical Foundation Guide for more information about setting up user defined codes
Set Up Retainage Rules

Setting Up Retainage Rules

Retainage is the amount of payment that your customer might withhold to ensure satisfactory contract performance. For example, you might agree to a 10 percent retainage on the amount you bill your customer. If you bill the customer for 100 dollars, the customer withholds 10 dollars and pays you 90 dollars. After your company completes the work satisfactorily, the customer remits the 10 dollars retained.

Retainage is based on the percent of work that has been completed. During the billing process, the system uses the retainage rules that you set up for your contract to calculate retained amounts. When you set up the retainage rules for a contract, you can specify the following:

- The percent of billing to calculate for retainage
- The offset account that you set up in the AAIs for retainage
- Whether to calculate tax on the total taxable amount of the contract or defer the tax calculation on retainage until the retainage amount for the contract is released

As you manage your contracts, your billing terms might require different retainage rules. You can set up retainage rules for the following items:

- **Contract masters**
  
  When you set up a retainage rule for a contract master, the rule applies to the base contract (change order 000) and all of the related billing lines. If you do not define a retainage rule for the contract master, the system does not calculate retainage for the contract as a whole.

- **Change orders**
  
  When you set up a retainage rule for a specific change order, the rule applies to the total billing amount of all the billing lines associated with the change order.

  The system calculates the retainage for change order 000 (the base contract) based on the retainage rule that you define for the contract master.

- **Contract billing lines**
  
  When you set up a retainage rule for a contract billing line, the rule applies only to that billing line.
Working with retainage consists of the following:

- Defining a retainage rule
- Assigning a retainage rule to a contract master or change order
- Assigning a retainage rule to a billing line

**Retainage Calculation for Change Orders**

The system determines the percent complete for a change order by dividing the total billed-to-date amount for all billing lines that do not have specific retainage rules at the billing line level by the total of the schedule of values for the billing lines. If a billing line does not have a schedule of values amount, the system uses the total billed-to-date amount for the billing line as the schedule of values amount.

Using the percent complete, the system then applies the retainage rule to the total billed-to-date amount to derive the total amount of retainage withheld for the change order. The system then subtracts previously withheld retainage from the total amount of withheld retainage to derive the current retained amount for the change order. The system then allocates the current retained amount to each billing line by dividing the billing line’s current billing amount by the total current billing amount for the change order and then multiplies that percent by the current retained amount for the change order.

**Retainage Calculation for Contract Billing Lines**

The system determines the percent complete for a contract billing line by dividing the total billed-to-date amount by the schedule of values for the billing line. If the billing line does not have a schedule of values amount, the system uses the total billed-to-date amount as the schedule of values amount.

Using the percent complete, the system then applies the retainage rule to the total billed-to-date amount to derive the total amount of retainage withheld. The system then subtracts previously withheld retainage from the total amount of withheld retainage to derive the current retained amount from the billing line.
Defining a Retainage Rule

To define a retainage rule

On Retainage Rules Table

1. To identify the retainage rule, complete the following fields:
   - Retainage Rule
   - Description

2. Complete the following fields for one or more detail lines:
   - Retainage Percent
   - Percent Complete

   If you leave the Percent Complete field blank, the system uses 100 percent as the default value.
Set Up Retainage Rules

To assign a retainage rule to a contract master or change order

On Contract Master Revisions

1. To locate a contract, complete the following field:
   - Contract Number

2. To specify whether to defer the tax on the retained amount for the contract or change order, complete the following field:
   - Retainage Control

3. To specify offset account for retainage, complete the following field:
   - Retn Offset

4. Choose Field Sensitive Help (F1) for the following field:
   - Retainage Rule

5. On Retainage Rules Window, choose Select (Option 4) for the correct retainage rule.

To assign a retainage rule to a billing line

On Contract Master Revisions

1. To locate a contract, complete the following field:
   - Contract Number

2. Choose Contract Billing Line Details (F2)

3. On Contract Billing Line Details, choose More Details (F4)

4. Choose Field Sensitive Help (F1) for the following field:
   - Retainage Rule
5. On Retainage Rules Window, choose Select (Option 4) for the correct retainage rule.

**What You Should Know About**

<table>
<thead>
<tr>
<th>Prepayments and retainage</th>
<th>The system does not calculate retainage for direct or rated billing lines. The system does not include the schedule of values for direct or rated billing lines in the retainage calculations.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Searching for retainage rules</td>
<td>When the system calculates retainage for a contract, it first searches for retainage rules in the billing lines. Next, the system searches the change orders related to the contract.</td>
</tr>
<tr>
<td>Defining a rule for no retainage</td>
<td>If a billing line is exempt from the retainage rule that applies to a change order, you must assign a specific rule for no retainage to the billing line. You can define the retainage rule with the retainage percent as 0 and the percent complete as 100. In this case, you cannot leave the field for the retainage rule blank for the respective billing line. If the field is blank, the system uses the retainage rule for the change order.</td>
</tr>
<tr>
<td>Deleting a retainage rule</td>
<td>If you delete a retainage rule, the system does not automatically update the Retainage Rule wherever you have assigned that rule. You must manually change the retainage rule for the related base contract, change orders, and billing lines.</td>
</tr>
</tbody>
</table>
Set Up Fee Rate Codes

Setting Up Fee Rate Codes

You can use Fee Rate Codes to maintain fee rates associated with fee billing lines. During invoice generation, the system compares the billing date against the date ranges in the Rate Code table to determine which fee markup percent to use for a fee line if the indicated rate code is assigned.

Defining a Fee Rate Code

To define a fee rate code

On Fee Rate Code Table.

1. To identify the fee rate code, complete the following fields:
   - Rate Code
   - Description
Set Up Fee Rate Codes

2. Complete the following fields for one or more detail lines:
   - Effective From
   - Effective Through
   - Fee Percent
   - From date (optional)
   - Through date (required)

**To assign a fee rate code to a fee billing line**

On Contract Billing Line Details.

1. To locate a contract, complete the following field:
   - Contract Number

2. For a Fee billing line, choose Cross Reference (Option 2).

3. On Fee Cross Reference, enter the Rate Code.
Multi-Currency Setup

Understanding multi-currency is vital to establishing a global customer network. The following concepts help you understand how the billing system processes multi-currency transactions.

Currency Modes

In the billing system, 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 control in the constants and, as with all constants, JD Edwards World recommends that you not change it after you set it up. You can override the global setup in the G/L Offset and Retainage table for Service Billing or in the Contract Master table for Contract Billing. In Service Billing, if the constant is set to foreign mode and you need to manage a particular job in the domestic currency, you can set up the G/L Offset and Retainage table for that job in the domestic mode. In Contract Billing, if the constant is set to foreign mode but you need to manage a particular contract in the domestic currency, you can set up the individual Contract Master in the domestic mode.

Fixed and Unfixed Amounts

When the Multi-currency Conversion option in the General Account Constants has a value of Y or Z and a transaction has two currencies, the system calculates the amounts and stores both currencies within the billing system. The domestic amount fields always display amounts in the currency of the company to which the job belongs and the foreign amount fields always display amounts in the customer currency, unless you override these settings. You must define one of these currencies as fixed, based on the currency mode that you specified in the billing constants. The fixed currency becomes the control currency for the workfile transactions and is maintained by the system. While the fixed amounts remain static, fluctuations in currency can affect the unfixed amounts.

Currency Modes for Invoicing

For invoicing, your company must decide which currency you use to manage billing relationships with customers. For example, your company is in the United States and uses 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 operate your billing system in a foreign mode (the foreign amounts are fixed). Conversely, if you negotiate most of your deals in USD, regardless of your customers’ currencies, you set your billing system to the domestic mode (the domestic amounts are fixed).
Multi-Currency Transactions

In a multi-currency environment, you can create transactions in different currencies. Regardless of the currency of the originating entry, the Workfile Generation program (R48120) and the G/L Transaction Selection program (P48124) retrieve the cost amount from the AA (Actual Amount) ledger of the Account Ledger table (F0911) and place this value in the domestic cost field of the workfile.

In contrast, the system retrieves JD Edwards World payroll entries 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, if the currency of the job is USD, the currency of the customer is French francs (FRF), and the currency of the home business unit is USD, then the system uses the cost amount (USD) from table F0618 as the domestic cost amount, and the foreign amount is converted. Conversely, if the home business unit is FRF, then the system uses the cost amount (FRF) from table F0618 as 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 used as the domestic cost amount and then the foreign amount is converted.

After the system updates the cost amount in the Billing Detail Workfile table (F4812), the system calculates the unfixed cost amount using the exchange rate table for the date basis that you specify in the 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 unfixed taxable amount is calculated using the exchange rate on the fixed taxable amount. Tax and discount rates are calculated independently for each of the currencies.

Assuming a non-payroll entry, the following equations describe the process by which the system calculates the domestic and foreign amounts. (Calculations are not necessarily performed in the exact order in which they appear.)

**Domestic Mode Calculations**

The following equations demonstrate how the system calculates various amounts in domestic mode:

- 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**

The following equations demonstrate how the system calculates various amounts in foreign mode:

- 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)**

The following equations demonstrate how the system calculates invoice amounts in domestic mode. All fields are from the Billing Detail Workfile table (F4812):

- Cost (AA) + Markup Amount (ADCI) = Taxable Amount (ITXA)
- Taxable Amount (ITXA) x Tax Rate = Tax Amount (ITAM)
- Taxable Amount (ITXA) + Tax Amount (ITAM) = Total Amount (ITOL)
- Cost (AA) x Exchange Rate = Foreign Amount (AA2)
- Taxable Amount (ITXA) x Exchange Rate = Foreign Taxable Amount (CITA)
- Foreign Taxable Amount (CITA) x Tax Rate = Foreign Tax Amount (CITX)
- Foreign Taxable Amount (CITA) + Foreign Tax Amount (CITX) = Foreign Total Amount (CITL)
- Taxable Amount (ITXA) x Discount Rate = Discount Amount (IDSC)
- Foreign Taxable Amount (CITA) x Discount Rate = Foreign Discount Amount (CIDS)
- Cost (AA) / Units = Unit Price (PRIC)
- Foreign Amount (AA2) / Units = Foreign Unit Price (PRIF)

**Note:** These equations are based on the assumption that the home business unit of the payroll transaction has the same currency as the job.
Invoice Amount Calculations (Foreign Mode)

The following equations demonstrate how the system calculates invoice amounts in foreign mode. All fields are from the Billing Detail Workfile table (F4812):

- Cost (AA) x Exchange Rate = Foreign Amount (AA2)
- Foreign Amount (AA2) + Markup Amount (ADCI) = Foreign Taxable Amount (CITA)
- Foreign Taxable Amount (CITA) x Exchange Rate = Taxable Amount (ITXA)
- Taxable Amount (ITXA) x Tax Rate = Tax Amount (ITAM)
- Taxable Amount (ITXA) + Tax Amount (ITAM) = Total Amount (ITOL)
- Foreign Taxable Amount (CITA) x Tax Rate = Foreign Tax Amount (CITX)
- Foreign Taxable Amount (CITA) + Foreign Tax Amount (CITA) = Foreign Total Amount (CITL)
- Taxable Amount (ITXA) x Discount Rate = Discount Amount (IDSC)
- Foreign Taxable Amount (CITA) x Discount Rate = Foreign Discount Amount (CIDS)
- Cost (AA) / Units = Unit Price (PRIC)
- Foreign Amount (AA2) / Units = Foreign Unit Price (PRIF)

See Also

- For more information about setting up your system for multi-currency, see Multi-Currency Setup in the General Accounting Guide

Setup of Constants for Multi-currency

Verify that the following two controls are set correctly in the System Constants:

<table>
<thead>
<tr>
<th>Exchange Rate Date Basis</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This date controls which exchange rate the system applies to the workfile records when you run the Workfile Generation (P48120) and Workfile Re-extension (P481202) programs.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Foreign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>This option controls which currency is fixed during the billing process. When you turn on this option, then the customer currency is the fixed currency and the business unit or company currency is considered unfixed. In this case, the system calculates the markups in the customer currency and restates the domestic amount based on the calculated foreign amounts. When you turn off this option, the domestic or company currency is fixed for the billing process. In this case, the system calculates the markups on the company currency and restates the foreign amount based on the calculated domestic amounts. This field also controls the supplied mode to the Workfile Revisions program (P4812).</td>
<td></td>
</tr>
</tbody>
</table>
Setup of Billing Rate and Markup Tables for Multi-currency

Verify that the following control is set correctly in the Billing Rate / Markup Table program (P48096):

<table>
<thead>
<tr>
<th>Curr Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The currency code controls the decimal display on the form and is used as part of the key when you run the Workfile Generation (P48120) and Workfile Re-extension (P481202) programs. The Curr Code field appears only when the Multi-Currency Conversion option on the General Account Constants form has a value of Y or Z.</td>
</tr>
</tbody>
</table>

The master files supply the currency code from for the following key types, based on the following tables, but you can override it when you add a new markup table:

1-Work Order
   Work Order Master File (F4801)

3-Contract
   Contract Master (F5201)

4-Parent Contract
   Contract Master (F5201)

5-Customer
   Customer Master (F0301)

6-Business Unit (Job)
   Business Unit Master (F0006)

8-Company
   Company Constants (F0010)

When the Multi-Currency Conversion option on the General Account Constants form has a value of Y or Z, you need to enter the currency code for the following key types:

- 2-Work Order Class (WR07)
- 7-Job Class (RP11)
- 9-Default

Example of Billing Rate and Markup Table Processing

The markup table that the system selects when you run the Workfile Generation (P48120) and Workfile Re-extension (P481202) programs is determined by the mode that you set up in the following programs, as well as by the key fields of the billing rate and markup table:

- System Constants (P48091)
- G/L Offset and Retainage Table (P48128) (for Service Billing)
- Contract Master Revisions (P5201) (for Contract Billing)

Since Currency is a key field, they system uses it to search for a match between the cost transaction and the billing rate and markup table. The following example demonstrates the process:

- Business unit 1234 belongs to company 00062 with a currency code of BEF
- Customer number 3333 is set up with a currency of FRF
- Customer number 3333 is properly attached to business unit 1234 as the owner
A transaction was posted to the billable account 1234.1350.02200 for 300 BEF
The following tables display the two billing rate and markup set up:

**Table 1**

<table>
<thead>
<tr>
<th>Generation Type</th>
<th>1 (invoice processing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Type</td>
<td>5 (customer)</td>
</tr>
<tr>
<td>Table Key</td>
<td>3333</td>
</tr>
<tr>
<td>Currency Code</td>
<td>FRF</td>
</tr>
<tr>
<td>Date Range</td>
<td>01Jan2017 – 31Dec2017</td>
</tr>
<tr>
<td>Object Account Range</td>
<td>1340 – 1399</td>
</tr>
<tr>
<td>Markup Percentage</td>
<td>150</td>
</tr>
</tbody>
</table>

**Table 2**

<table>
<thead>
<tr>
<th>Generation Type</th>
<th>1 (invoice processing)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Type</td>
<td>6 (job)</td>
</tr>
<tr>
<td>Table Key</td>
<td>1234</td>
</tr>
<tr>
<td>Currency Code</td>
<td>BEF</td>
</tr>
<tr>
<td>Date Range</td>
<td>01Jan2017 – 31Dec2017</td>
</tr>
<tr>
<td>Object Account Range</td>
<td>1340 – 1399</td>
</tr>
<tr>
<td>Markup Percentage</td>
<td>150</td>
</tr>
</tbody>
</table>

When the Multi-Currency Conversion option on the General Account Constants
form has a value of N and does not have currency codes entered, use Table 1 as the
markup because the currency code is not part of the search key. Therefore, key type
5 is found first in the hierarchical ordering of the remaining major keys.

When the Multi-Currency Conversion option on the General Account Constants
form has a value of Y or Z and the system constants are set to Foreign mode, then
the Workfile
Generation program calculates the billable amount of the transaction using Table 1,
which is set up in the foreign, or customer, currency.

When the system constants are set to domestic mode, the Workfile Generation
program calculates the billable amount of the transaction using Table 2, which is set
up in the domestic, or company, currency.

For Service Billing, when the currency for the table does not match the fixed
currency defined by the system constants or the currency mode is overridden in
G/L Offset and Retainage Table program, the system uses the default markup
percentage that you set up in the constants.
For Contract Billing, when the currency for the table does not match the fixed currency that you set up in the system constants or in the Contract Master Revisions program, the system uses the default markup percentage that you set up in the constants.

**Note:** When the Multi-Currency Conversion option on the General Account Constants form has a value of N, the Currency Code field does not appear on the Cost Plus Markup Table. If you add tables, they have blank values in the Currency Code field. If you subsequently change the Multi-Currency Conversion option to a value of Y or Z and enter a transaction that has a valid currency code attached to it, the Workfile Generation program does not find a valid match to a billing rate and markup table with a blank value. The opposite is also true. When you create a billing rate and markup table with a valid currency code while the Multi-Currency Conversion option is Y or Z and you change the option to N before entering your transactions, your Transaction Currency field is blank and your markup tables are not blank. Again, the system does not find a match. For this reason, you must not alternate Multi-Currency Conversion values.

### Setup of Components for Multi-currency

In the Component Table program (P4860), the currency code must match the currency code of the billing rate and markup table to which it is attached. The currency code on the component table controls the decimal display on this form and the system uses it as part of the key when the Workfile Generation (P48120) and Workfile Re-extension (P481202) programs process this table. The Currency Code field appears only when the Multi-Currency Conversion option on the General Account Constants form has a value of Y or Z.

### Contract Setup for Multi-currency

When you add a new contract, the base currency comes from the associated job. The billing currency comes from the customer record. The currency mode comes from the billing 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 retrieves the exchange rate for the Contract Master File table (F5201) based on the rate for the date associated with the original change order of the contract. The system uses the billing currency that you enter on the Contract Master Revisions form to calculate all of the foreign amounts of your workfile transactions.

After you set up the contract master record, 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 uses the derived exchange rate to calculate the alternate mode.
**Multi-Currency Setup**

**Note:** The system derives the exchange rate from the daily exchange rate tables based on 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.

---

**Multi-currency Processing of Workfile Generation**

The value in the Multi-Currency Conversion option on the General Account Constants form does not affect the Workfile Generation program (P48120). Likewise, when you choose G/L Select from the Workfile Revisions program (P4812), you do not have to make any setup or data selection changes for Multi-currency processing. Changes to the Multi-currency processing are determined by the Billing Constants program (P48091), the billing rate and markup tables, and the G/L Offset and Retainage Tables (Service Billing) or the Contract Master (Contract Billing).

**Multi-currency Processing of Workfile Revisions**

In the Workfile Revisions program (P4812), when the Multi-Currency Conversion option on the General Account Constants form has a value of Y or Z, you have both the domestic and foreign amounts available for inspection on the initial detail display, as shown in the following example:

When the Multi-Currency Conversion option on the General Account Constants form has a value of N, you see only the domestic amounts.

**Note:** When the job and customer have the same currency code, regardless of how you set up your mode in the billing constants, the mode is considered domestic throughout the billing process. On the Work With Workfile form, you see only the domestic values in the detail area; the foreign amounts are blank.

When you select a transaction from the Work With Workfile form, the Job/Amount Revisions form supplies the mode of the record that was updated, based on the billing constants, or the mode in a G/L offset and retainage table for Service Billing or in the Contract Master Revisions program (P5201) for Contract Billing. You can then turn on the Foreign option to see the alternate mode (foreign or domestic). Notice that you see only the markup amounts of the fixed currency in the Mark Up % 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 appear and the system disables all of the amount fields for any changes.

**Multi-currency Processing of Invoice Generation**

In the Invoice Generation program for Service Billing (R48121) or the Invoice Generation program for Contract Billing (R52121), ensure that the following processing option is set correctly:
Multi-Currency Setup

**Exchange Rate Date Basis**
This processing option specifies whether you want to find the exchange rate table based on the date of the invoice or on the G/L Date, as identified in the processing option. 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 calculated, based on the date that you post, you specify to retrieve the exchange rate based on G/L date. The Exchange Rate Date Basis processing option 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 the Invoice Generation program is updated in the Invoice Exchange Rate field of the Billing Detail Workfile table (F4812).

The report that the Invoice Generation program prints reflects the invoice amount in the currency of the company or in the domestic currency.

**Multi-currency Processing of Invoice Revisions**

The Gross amount that appears on Invoice Entry Review (P48222) is always in the domestic currency. However, you see both amounts in their respective currencies by changing the Mode.

**Invoice Revisions for Time and Material Billing Lines**

You access the billing details for time and material transactions included in the invoice on the Amount/Units Information window (P4812W1). Review the following fields:

- **Original Exchange Rate**
  The system uses this rate during workfile generation or the most recent re-extension, if applicable.

- **Invoice Exchange Rate**
  The system uses this rate for invoice generation.

During invoice generation, if the exchange rate has changed, the records included in the invoice first have their non-fixed amounts copied to historical amount fields. Then the system recalculates the non-fixed amounts using the new exchange rate selected during invoice generation. These non-fixed amounts are accumulated for the Invoice Entry Review form. When you access an invoice to audit the individual transactions, you see the recalculated amounts based on the invoice exchange rate. Original amounts are stored in historical amount fields of the workfile so that if you delete an invoice, the current non-fixed amounts are updated from the amounts 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.
Multi-currency Processing of Invoice Journal Generation

The reports generated (including the Invoice Register) when you run the Invoice Generation program (R48121) are printed in domestic amounts, regardless of the currency mode.

Multi-currency Processing of Create A/R and G/L Entries

For this process, you receive the same reports that you received when you ran the Invoice Journal Generation program (P48131). These reports are created in the domestic currency, regardless of the mode that you have set up for your currency processing. When you access the batch from the Invoice Journal Review program (P0011), the gross amounts in the domestic currency and the currency amount reflect the foreign currency of the invoice.

Multi-currency Processing of General Ledger Post Reports

When you post the transactions, the system posts the domestic amounts to the AA ledger, creates the foreign amounts, and then posts to the CA ledger. Both ledgers must balance before the batch posts.

Multi-currency Processing of Invoice Voids

After you create the invoice, you can void the invoice if it does not display recorded payments. When you void the invoice, the system retrieves the corresponding transactions in the Billing Detail Workfile table (F4812) 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.
## 5 Processing Options

### Contract Entry (P5201)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORMAT CONTROL:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enter a ‘1’ to suppress the Sales/Use Tax information fields.</td>
<td></td>
</tr>
<tr>
<td><strong>DEFAULT PROCESSING:</strong></td>
<td></td>
</tr>
<tr>
<td>2. Enter the default G/L offset for retainage.</td>
<td></td>
</tr>
<tr>
<td><strong>CURRENCY OPTIONAL EDIT:</strong></td>
<td></td>
</tr>
<tr>
<td>3. Enter a ‘1’ to issue a warning message when currency is on and an amount is entered or changed.</td>
<td>Leave blank (default) to prevent the warning message from being issued.</td>
</tr>
<tr>
<td><strong>VERSION LIST SELECTION:</strong></td>
<td></td>
</tr>
<tr>
<td>Enter the DREAM Writer version for each program. If left blank, ZJDE0001 will be used.</td>
<td></td>
</tr>
<tr>
<td>4. Owner Pay Item Details (P5202)</td>
<td></td>
</tr>
<tr>
<td>5. Copy Contracts (P52COPY)</td>
<td></td>
</tr>
</tbody>
</table>

### Owner Pay Item Details (P5202)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPTIONAL EDITS:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enter ‘1’ to prevent changes to the base contract (all changes must then be entered as change orders). Leave blank (default) to allow changes to the base contract.</td>
<td></td>
</tr>
</tbody>
</table>
### Processing Option

2. Select one of the following:
   - '1' = Issue a WARNING if Schedule of Values does not equal Budget.
   - '2' = Issue an ERROR if Schedule of Values does not equal Budget.
   - ' ' = No edit (default).

3. Enter the budget ledger type to use for the budget edits. Leave blank (default) to use the Revised Budget Ledger Types (User Defined Codes, System 51, Code RB).

**FORMAT CONTROL:**

4. Enter '1' to display the Unit Price on the main line and the Schedule of Values amount in the fold. Leave blank (default) to display the Unit Price in the fold.

5. Enter '1' to use the “Skip to” field to enter line numbers. Leave blank (default) to enter billing lines.

6. Enter '1' to suppress the Sales/Use tax information fields.

7. Enter '1' to not issue a warning message when no billing line cross reference information exists in the “Add” mode. Leave blank (default) to issue a warning.

8. Select the account search window:
   - '1' = Change Management (business unit, cost code, cost type).
     This window will allow multiple accounts to be selected at one time.
   - '2' = Contract Management (business unit, cost code, cost type).
   - ' ' = General Ledger (business unit, cost type, cost code) (default)
     NOTE: This account search window will also be used by the Cross Reference Table (P5212)

**ACCOUNT NUMBER DEFAULT:**

9. When inquiring on an existing change order to add a change order, or when using Copy Contracts functionality, enter '1' to derive the account(s) in the fold based on the appropriate AATs. Leave blank (default) to retain the original contract's billing line account number.
### Multi-Currency Setup

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CROSS REFERENCE AND TEXT CONTROLS:</strong></td>
<td></td>
</tr>
<tr>
<td>10. When adding a new Owner Pay Item, you may choose to automatically access the Cross Reference and/or the Text screen for the Owner Pay Item.</td>
<td></td>
</tr>
<tr>
<td>Blank - Do not automatically access the Cross Reference or Text screens.</td>
<td></td>
</tr>
<tr>
<td>1 - Automatically access the Cross Reference screen.</td>
<td></td>
</tr>
<tr>
<td>2 - Automatically access the Text screen.</td>
<td></td>
</tr>
<tr>
<td>3 - Automatically access the Cross Reference and Text screens.</td>
<td></td>
</tr>
</tbody>
</table>

### Service Billing Invoice Generation (P48121)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INVOICE DOCUMENT TYPE OVERRIDE:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enter the Invoice Document Type.</td>
<td></td>
</tr>
<tr>
<td>Leave blank (default) to use the Document Type specified in the Service Billing Constants.</td>
<td></td>
</tr>
</tbody>
</table>

### Unbilled Detail Revisions (P4812)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UPDATE OPTIONS:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enter a '1' to allow updating all work file record information (except G/L Date, Cost, and Units).</td>
<td></td>
</tr>
<tr>
<td>Leave blank (default) to secure certain fields from being updated except when adding improvised transactions.</td>
<td></td>
</tr>
<tr>
<td><strong>DISPLAY OPTIONS:</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Multi-Currency Setup

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>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).</td>
</tr>
<tr>
<td>3.</td>
<td>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</td>
</tr>
<tr>
<td>4.</td>
<td>Enter a '1' to display records that are included in a revenue batch. Leave blank to display only records which have not been included in a revenue batch.</td>
</tr>
</tbody>
</table>

### Service Billing Work File Listing (P48405)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRINT OPTION:</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Choose one of the following to print: '0' = All detail (default). '1' = Only one line of detail.</td>
</tr>
</tbody>
</table>

### Transaction History Inquiry (P4812H)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISPLAY OPTIONS:</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Enter a '1' to display all history records (default). Enter a '2' to display only the records that are eligible for re-activation.</td>
</tr>
</tbody>
</table>
### Multi-Currency Setup

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>

### Contract Billing Invoice Generation (P52800)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE SELECTION DEFAULT PROCESSING:</td>
<td></td>
</tr>
<tr>
<td>1. Enter the Bill From date to select the work file records for invoicing. Leave blank (default) to retrieve all workfile records for invoicing with a basis date less than the Bill Thru date entered below. (T/M only)</td>
<td></td>
</tr>
<tr>
<td>2. Enter the Bill Thru date to select the work file records for invoicing. Leave blank (default) to use the system date. (All pricing types)</td>
<td></td>
</tr>
<tr>
<td>DATE ASSIGNMENT DEFAULT PROCESSING:</td>
<td></td>
</tr>
<tr>
<td>3. Enter the G/L date to assign to the summary billing work file records. Leave blank (default) to use the system date.</td>
<td></td>
</tr>
<tr>
<td>4. Enter the Invoice date to assign to the summary billing work file records. Leave blank (default) to use the system date.</td>
<td></td>
</tr>
</tbody>
</table>

### Contract Billing Guide (Revised - June 6, 2011)
5. Enter up to five recurring billing frequency codes for lump sum pay item lines.

**ZERO INVOICE SUPPRESSION:**
6. Enter a '1' to suppress the creation of invoices with zero billing amounts.

**FIXED PRICE CALCULATION METHOD:**
7. Select the method for calculating lumpsum billing amounts:
   - '1' = Percent Complete method.
   - '2' = Markup Percent of Cost method.
   - blank = Use the greater of the two methods (default).

**INVOICE OVERRIDE OPTIONS:**
8. Enter the Invoice Document Type.
   Leave blank (default) to use the Invoice Document Type specified in the Service Billing Constants.

9. Enter values in the following to override the Contract/Billing Line defaults:
   a. Tax Rate/Area
   b. Tax Explanation Code
   c. Payment Terms Code
   NOTE: If any of the above are invalid or left blank, the values will default from the Contract Master for the Payment Terms Code, and the Contract Billing Line for the Tax Rate/Area and Explanation codes.

**CURRENCY PROCESSING:**
10. Select the date to use to retrieve the currency exchange rate:
    - '1' = Invoice date (default).
    - '2' = G/L date.

---

**Contract Billing Invoice Generation (P52800)**

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE SELECTION DEFAULT PROCESSING:</td>
<td></td>
</tr>
<tr>
<td>Processing Option</td>
<td>Processing Options Requiring Further Description</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>1. Enter the Bill From date to select the work file records for invoicing. Leave blank (default) to retrieve all workfile records for invoicing with a basis date less than the Bill Thru date entered below. (T/M only)</td>
<td></td>
</tr>
<tr>
<td>2. Enter the Bill Thru date to select the work file records for invoicing. Leave blank (default) to use the system date. (All pricing types)</td>
<td></td>
</tr>
<tr>
<td><strong>DATE ASSIGNMENT DEFAULT PROCESSING:</strong></td>
<td></td>
</tr>
<tr>
<td>3. Enter the G/L date to assign to the summary billing work file records. Leave blank (default) to use the system date.</td>
<td></td>
</tr>
<tr>
<td>4. Enter the Invoice date to assign to the summary billing work file records. Leave blank (default) to use the system date.</td>
<td></td>
</tr>
<tr>
<td><strong>RECURRING BILLING FREQUENCY:</strong></td>
<td></td>
</tr>
<tr>
<td>5. Enter up to five recurring &gt; billing frequency codes for &gt; lump sum pay item lines.</td>
<td></td>
</tr>
<tr>
<td><strong>ZERO INVOICE SUPPRESSION:</strong></td>
<td></td>
</tr>
<tr>
<td>6. Enter a '1' to suppress the creation of invoices with zero billing amounts.</td>
<td></td>
</tr>
<tr>
<td><strong>FIXED PRICE CALCULATION METHOD:</strong></td>
<td></td>
</tr>
<tr>
<td>7. Select the method for calculating lumpsum billing amounts:</td>
<td></td>
</tr>
<tr>
<td>'1' = Percent Complete method.</td>
<td></td>
</tr>
<tr>
<td>'2' = Markup Percent of Cost method. blank = Use the greater of the two methods (default).</td>
<td></td>
</tr>
<tr>
<td><strong>INVOICE OVERRIDE OPTIONS:</strong></td>
<td></td>
</tr>
<tr>
<td>8. Enter the Invoice Document Type. Leave blank (default) to use the Invoice Document Type specified in the Service Billing Constants.</td>
<td></td>
</tr>
</tbody>
</table>
Multi-Currency Setup

9. Enter values in the following to override the Contract/Billing Line defaults:
   a. Tax Rate/Area
   b. Tax Explanation Code
   c. Payment Terms Code
   NOTE: If any of the above are invalid or left blank, the values will default from the Contract Master for the Payment Terms Code, and the Contract Billing Line for the Tax Rate/Area and Explanation codes.

CURRENCY PROCESSING:

10. Select the date to use to retrieve the currency exchange rate:
    '1' = Invoice date (default).
    '2' = G/L date.

Invoice Print - Invoice Type "C" (P48504)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINT SELECTION:</td>
<td></td>
</tr>
<tr>
<td>1. Enter the Layout Type to print.</td>
<td></td>
</tr>
</tbody>
</table>

Invoice Journal Generation (P48131)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURNAL DESCRIPTION SELECTION:</td>
<td></td>
</tr>
<tr>
<td>1. Choose one of the following for the journal entry description:</td>
<td></td>
</tr>
<tr>
<td>'1' = Use the description from the Vocabulary Overrides based on the Table Type.</td>
<td></td>
</tr>
<tr>
<td>'2' = Use the description associated with the subledger value.</td>
<td></td>
</tr>
<tr>
<td>' ' = Use the description from the Account Master for the Account being used (default).</td>
<td></td>
</tr>
</tbody>
</table>
### Multi-Currency Setup

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINT REPORT SELECTION:</td>
<td></td>
</tr>
<tr>
<td>2. Enter a '1' to print the Billing Edit/Register (P48300).</td>
<td></td>
</tr>
</tbody>
</table>

| REVENUE JOURNAL VERSION SELECTION: | |
| 3. Enter the version number of the Revenue Journal Generation program (P48132) for processing any adjustments. | Leave blank (default) to use version 'XJDE0001'. |

| SUPPRESS WARNING MESSAGES: | |
| 4. Choose one of the following to control the printing of the exception report: | |
| ' ' = Print all records (default). | |
| '1' = Print warnings and errors. | |
| '2' = Print errors only. | |
| '3' = Do not print the report. | |

### Invoice Journal Generation (P48131)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JOURNAL DESCRIPTION SELECTION:</td>
<td></td>
</tr>
<tr>
<td>1. Choose one of the following for the journal entry description:</td>
<td></td>
</tr>
<tr>
<td>'1' = Use the description from the Vocabulary Overrides based on the Table Type.</td>
<td></td>
</tr>
<tr>
<td>'2' = Use the description associated with the subledger value.</td>
<td></td>
</tr>
<tr>
<td>' ' = Use the description from the Account Master for the Account being used (default).</td>
<td></td>
</tr>
</tbody>
</table>

| PRINT REPORT SELECTION: | |
| 2. Enter a '1' to print the Billing Edit/Register (P48300). | |

| REVENUE JOURNAL VERSION SELECTION: | |
### Multi-Currency Setup

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>Enter the version number of the Revenue Journal Generation program (P48132) for processing any adjustments. Leave blank (default) to use version 'XJDE0001'.</td>
</tr>
</tbody>
</table>

**SUPPRESS WARNING MESSAGES:**

4. Choose one of the following to control the printing of the exception report:
   - '=' Print all records (default).
   - '1' = Print warnings and errors.
   - '2' = Print errors only.
   - '3' = Do not print the report.

---

### Print Invoices from History (P48506H)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRINT SELECTION:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Enter the Layout Type to print.</td>
</tr>
</tbody>
</table>

---

### Contract Revenue Workfile Generation (P52801)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVENUE ON RECURRING BILLING PAY ITEMS:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Enter up to five recurring billing &gt; frequency codes for lump sum pay &gt; items. Workfile revenue records &gt; (F4812s) will be created for the &gt; lump sum pay item amount(s). &gt;</td>
</tr>
</tbody>
</table>
### Revenue Journal Generation - Contract (P48132)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DATE SELECTIONS:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enter the cut-off date for retrieving work file records. Records with a G/L date after this date will not be processed. Leave blank (default) to use the system date as the cut-off date.</td>
<td></td>
</tr>
<tr>
<td>2. Enter the G/L date to assign to the revenue journal entries created. Leave blank (default) to use the G/L date of the source transaction.</td>
<td></td>
</tr>
<tr>
<td><strong>PRINT OPTIONS:</strong></td>
<td></td>
</tr>
<tr>
<td>3. Choose one of the following to control the printing of the exception report: blank = Print all records (default). '3' = Do not print the report.</td>
<td></td>
</tr>
<tr>
<td>4. Enter a '1' to print the Billing Edit/Register report (P48300).</td>
<td></td>
</tr>
<tr>
<td><strong>JOURNAL DESCRIPTION SELECTION:</strong></td>
<td></td>
</tr>
<tr>
<td>5. Choose one of the following for the journal entry description: '1' = Use the description from the Vocabulary Overrides based on Table Type. '2' = Use the description associated with the subledger value. blank = Use the description from the Account Master (default).</td>
<td></td>
</tr>
<tr>
<td><strong>ERROR BATCH SEGREGATION:</strong></td>
<td></td>
</tr>
<tr>
<td>6. Enter '1' to perform the Error Batch Segregation function.</td>
<td></td>
</tr>
</tbody>
</table>

### Cost Plus Mark-Up (P48096)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>FORMAT CONTROL OPTIONS:</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Multi-Currency Setup**

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Select the account search window to use:</td>
<td></td>
</tr>
<tr>
<td>‘1’ = Contract Management (business unit, cost code, cost type).</td>
<td></td>
</tr>
<tr>
<td>‘ ’ = General Ledger (business unit, cost type, cost code)</td>
<td></td>
</tr>
<tr>
<td>2. Enter a ‘1’ to display the employee number and name on the main line.</td>
<td></td>
</tr>
<tr>
<td>Leave blank (default) to display the markup amount and percent on the main line.</td>
<td></td>
</tr>
</tbody>
</table>

**SECURITY OPTIONS:**

| Key Type 1 (Work Order No.): | |
| Key Type 2 (Work Order Class): | |
| Key Type 3 (Contract No.): | |
| Key Type 4 (Parent Contract No.): | |
| Key Type 5 (Customer No.): | |
| Key Type 6 (Job/Business Unit): | |
| Key Type 7 (Job Class): | |
| Key Type 8 (Company): | |
| Key Type 9 (Default for Account Derivation and Markup Tables): | |

| Generation Type 1 (invoice, revenue and component markups). | |
| Generation Type 2 (revenue markup override). | |
| Generation Type 3 (component markup override). | |

**Account Derivation Table (P48126)**

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SECURITY OPTION:</td>
<td></td>
</tr>
</tbody>
</table>
### Multi-Currency Setup

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. To prevent access to certain table key types, enter '1's below. Leave blank (default) to allow access. a. Key Type 1 (Work Order No.): b. Key Type 2 (Work Order Class): c. Key Type 3 (Contract No.): d. Key Type 4 (Parent Contract No.): e. Key Type 5 (Customer No.): f. Key Type 6 (Job/Business Unit): g. Key Type 7 (Job Class): h. Key Type 8 (Company): i. Key Type 9 (Default for Account Derivation and Markup Tables):</td>
<td>(More....)</td>
</tr>
</tbody>
</table>

**EDIT OPTION:**

2. Specify how to edit for blank values in the Resulting Account Business Unit or Object Account. blank = error, blanks not allowed 0 = warning only, blanks allowed 1 = blanks allowed (no warnings)

Note: If the Resulting Account business unit or object is blank, then the default revenue account in the customer master will be used.

---

### Copy Contracts (P52COPY)

<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COPY OPTIONS:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Enter a '1' to retain the same company number on the new contract.</td>
<td></td>
</tr>
</tbody>
</table>

Note: When using multicurrency and allowing a change to the company number, the currency code of the copied contract must match that of the contract being copied.
<table>
<thead>
<tr>
<th>Processing Option</th>
<th>Processing Options Requiring Further Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Enter a ‘1’ to copy the Project/Job (MCUS) from the original contract. If you do not copy the project/job, you will be prompted to enter it for the new contract.</td>
<td></td>
</tr>
<tr>
<td>3. Enter a ‘1’ to copy amounts to the new contract. This includes schedule of values, quantity, unit price, recurring billing code and amount, NTE, and minimum amounts (where applicable).</td>
<td></td>
</tr>
<tr>
<td>4. Enter a ‘1’ to copy all owner pay item (billing line) text.</td>
<td></td>
</tr>
<tr>
<td>5. Enter a ‘1’ to copy the contract logs.</td>
<td></td>
</tr>
<tr>
<td>6. Enter a ‘1’ to copy tax rate/area and tax explanation code values from the billing lines of the original contract to the billing lines of the new contract. Leave blank to use the tax rate/area and tax explanation code from the new contract master.</td>
<td></td>
</tr>
</tbody>
</table>

**DISPLAY OPTIONS:**

7. Enter a ‘1’ to bypass the Contract Master Additional Detail (P52011) video.

8. Enter a ‘1’ to bypass the Contract Master Category Codes (P52012) video.
6 Appendices
Appendix A - Data Models

The flowcharts on the following pages illustrate the relationships between the principal physical tables for the following aspects of the Contract Billing system:

- Contract billing setup
- Base
- Workfile generation
- Revenue recognition
- Invoice format definition

To present the information in an uncluttered format, the lesser control tables, worktables, and tables for seldom-used features have been omitted.

Contract Information Setup
Appendix A - Data Models

Contract Billing Base

Diagram showing relationships between various data models:
- Cost Plus Markup Information (F40996)
- Contract Billing Master (F5201)
- Owner Pay Item Detail (F5202)
- Invoice Summary Workfile (F4822)
- Service Billing Retention Release Cross-Reference (F48221)
- Invoice Summary Access (F48520)
- A/R Account Ledger (F0311)
- Account Ledger (F0311)

Key types, values, amounts, dates, and other attributes are shown in the diagram. The relationships are indicated with lines and labels, such as 1:M (one to many) and M:M (many to many).
Appendix A - Data Models

Contract Billing Workfile Generation

Table Relationships
1 = 1 record
M = many records
Contract Billing Revenue Recognition
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.

<table>
<thead>
<tr>
<th>Search Level</th>
<th>Key Type</th>
<th>Searches for:</th>
<th>Validates against:</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>1</td>
<td>Work Orders</td>
<td>Work Order Master (F4801)</td>
</tr>
<tr>
<td>Second</td>
<td>2</td>
<td>Work Order Classes</td>
<td>User Defined Code (UDC 00/W7)</td>
</tr>
<tr>
<td>Third</td>
<td>3</td>
<td>Contract Numbers</td>
<td>Contract Billing Master (F5201)</td>
</tr>
<tr>
<td>Fourth</td>
<td>4</td>
<td>Parent Contract Numbers</td>
<td>Parent Contract Master (F5201)</td>
</tr>
<tr>
<td>Fifth</td>
<td>5</td>
<td>Customer Numbers</td>
<td>Address Book Master (F0101)</td>
</tr>
<tr>
<td>Sixth</td>
<td>6</td>
<td>Job/Business Units</td>
<td>Job (Business Unit) Master (F0006)</td>
</tr>
<tr>
<td>Seventh</td>
<td>7</td>
<td>Job Classes</td>
<td>User Defined Code (UDC 00/11)</td>
</tr>
<tr>
<td>Eighth</td>
<td>8</td>
<td>Company</td>
<td>Company Constants (F0010)</td>
</tr>
<tr>
<td>Ninth</td>
<td>9</td>
<td>System Default.</td>
<td>No validation</td>
</tr>
</tbody>
</table>
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 and T4 document type coding. Having identified a T2 or T4 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.

<table>
<thead>
<tr>
<th>Search Level</th>
<th>Searches for:</th>
<th>Searches for:</th>
<th>Searches for:</th>
<th>Searches for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JBCD (Job Type)</td>
<td>JBST (Job Step)</td>
<td>PDBA (Pay Type)</td>
<td>AN8 (Employee)</td>
</tr>
<tr>
<td>First</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>AND X</td>
</tr>
<tr>
<td>Second</td>
<td>X</td>
<td>X</td>
<td>AND X</td>
<td>X</td>
</tr>
<tr>
<td>Third</td>
<td>X</td>
<td>X</td>
<td>AND X</td>
<td>X</td>
</tr>
<tr>
<td>Fourth</td>
<td>X</td>
<td>AND X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fifth</td>
<td>X</td>
<td>X</td>
<td>AND X</td>
<td></td>
</tr>
<tr>
<td>Sixth</td>
<td>X</td>
<td>AND X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td>X</td>
<td>AND X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eighth</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Search Level</th>
<th>JBCD (Job Type)</th>
<th>JBST (Job Step)</th>
<th>PDBA (Pay Type)</th>
<th>HMCU (Home BU)</th>
<th>RP12 (Cost Pool)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B - Searches for Markup Rules

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Third</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Fourth</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fifth</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sixth</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Eighth</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Ninth</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eleventh</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Twelfth</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thirteenth</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fourteenth</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fifteenth</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixteenth</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Seventeenth</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eighteenth</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nineteenth</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Twentieth</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twenty-first</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twenty-second</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twenty-third</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Twenty-fourth</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-Payroll Transactions for Equipment

The system identifies non-payroll equipment transactions using the TE or T5 document type code. It applies the following search criteria to transactions with the TE or T5 document type.
### Appendix B - Searches for Markup Rules

#### Search Level Searches for: ACL0 (Rate Grp)  
Searches for: NUMB/EQCG (Equipment)  
Searches for: ERC (Rate Code)  
Searches for: HMCU (Home BU)  
Searches for: RP12 (Cost Pool)

<table>
<thead>
<tr>
<th>Search Level</th>
<th>ACL0 (Rate Grp)</th>
<th>NUMB/EQCG (Equipment)</th>
<th>ERC (Rate Code)</th>
<th>HMCU (Home BU)</th>
<th>RP12 (Cost Pool)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Third</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fifth</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixth</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eighth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ninth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Search Level</th>
<th>AN8 (Employee)</th>
<th>HMCU (Home BU)</th>
<th>RP12 (Cost Pool)</th>
<th>JBST (Job Step)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Second</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Third</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fourth</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fifth</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixth</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seventh</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Eighth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ninth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Search Level</th>
<th>Searches for: OBJ (Object)</th>
<th>Searches for: SUB(Subsidiary)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Second</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Third</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Fourth</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

T2 Payroll Transactions with Equipment Information

If a markup table rule contains information for a rate group (ACL0), equipment number (EQCG), or rate code (ERG), 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 - Accounting for the Billing Cycle

Accounting for the billing cycle is controlled by the account derivation 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 two types of account derivation rules:

**Base rules**

Base rules indicate which accounts you want the system to use when it creates journal entries for the billing and revenue recognition processes. The system uses base rules to create journals for the total of the base and component amounts.

**Reallocation rules**

Reallocation rules are used to move amounts from one account to another. A reallocation rule consists of two or more offsetting journal entries that must balance. The first offset journal entry represents the reduction to the base account. The second journal entry represents the increase to the new account.

The Journal Generation Control field in the system constants for Contract Billing controls the types of account derivation rules that you define for the following processes:

- Billing (Invoicing) only - Revenue reconciliation is not applicable.
- Revenue recognition only - Revenue reconciliation is not applicable.
- Revenue recognition and billing
  - 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 Account Derivation 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 account derivation rules.

<table>
<thead>
<tr>
<th>If you are processing</th>
<th>Set Journal Generation Control in system constants as:</th>
<th>Create Information for Account Derivation Table Types</th>
<th>Restricted Account Derivation Table Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invoices only</td>
<td>1</td>
<td>3</td>
<td>1 and 2</td>
</tr>
<tr>
<td>Revenue Recognition only</td>
<td>2</td>
<td>1 and 3</td>
<td>2</td>
</tr>
<tr>
<td>Invoices and Revenue Recognition without Revenue Reconciliation</td>
<td>3</td>
<td>1 and 3</td>
<td>2</td>
</tr>
<tr>
<td>Invoices and Revenue Recognition with Revenue Reconciliation</td>
<td>4</td>
<td>1, 2, and 3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Journal Generation Control</th>
<th>Table Types</th>
<th>Amount Basis</th>
<th>&quot;+&quot; Indicates</th>
<th>System Created Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Invoices</td>
<td>3 Invoice</td>
<td>Credit entry</td>
<td>Actual Revenue</td>
<td></td>
</tr>
<tr>
<td>RC AAI</td>
<td>Invoice</td>
<td>Debit entry</td>
<td>Accounts Receivable</td>
<td></td>
</tr>
<tr>
<td>2 Revenue Recognition</td>
<td>1 Revenue Recognition</td>
<td>Credit Entry</td>
<td>Actual Revenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Revenue Recognition</td>
<td>Debit Entry</td>
<td>Unbilled Accounts Receivable</td>
<td></td>
</tr>
</tbody>
</table>
### 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

<table>
<thead>
<tr>
<th>Journal Generation Control</th>
<th>Table Types</th>
<th>Amount Basis</th>
<th>&quot;+&quot; Indicates</th>
<th>System Created Entries</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Revenue Recognition</td>
<td>1</td>
<td>Credit Entry</td>
<td>Actual Revenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Debit Entry</td>
<td>Unbilled Accounts Receivable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Invoice</td>
<td>Credit Entry</td>
<td>Unbilled Accounts Receivable</td>
<td></td>
</tr>
<tr>
<td>RC AAI</td>
<td>Invoice</td>
<td>Debit Entry</td>
<td>Accounts Receivable</td>
<td></td>
</tr>
<tr>
<td>4 Revenue Recognition</td>
<td>1</td>
<td>Credit Entry</td>
<td>Unbilled Revenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Debit Entry</td>
<td>Unbilled Accounts Receivable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 Invoice</td>
<td>Credit Entry</td>
<td>Actual Revenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 Invoice</td>
<td>Debit Entry</td>
<td>Unbilled Revenue</td>
<td></td>
</tr>
<tr>
<td>RC AAIs</td>
<td>Invoice</td>
<td>Debit Entry</td>
<td>Accounts Receivable</td>
<td></td>
</tr>
</tbody>
</table>
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:

<table>
<thead>
<tr>
<th>Accounts receivable</th>
<th>115.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual revenue</td>
<td>(115.00)</td>
</tr>
</tbody>
</table>

The "T" account posting in the general ledger is:

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>115</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actual Revenue</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>115</td>
</tr>
</tbody>
</table>

The RC AAI directs the system to the accounts receivable and retainage account information. Account Derivation Table Type 3 directs the system to the base rules for the actual revenue account.

### Revenue Recognition Only

When you process revenue recognition only:

- The journal generation control is 2
- Invoicing does not apply
- The system calculates the same amount for actual revenue and unbilled accounts receivable
- The system calculates the amounts for revenue and unbilled accounts receivable simultaneously
- The RC AAI does not apply because no invoice exists

For example, if the cost for a workfile transaction is 100.00 and the markup is 25 percent, the amounts for the unbilled accounts receivable and actual revenue are 125.00. The system creates the following journal entry:

<table>
<thead>
<tr>
<th>Unbilled accounts receivable</th>
<th>125.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual revenue</td>
<td>(125.00)</td>
</tr>
</tbody>
</table>

The "T" account posting in the general ledger is:

<table>
<thead>
<tr>
<th>Unbilled Accounts Receivable</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>125</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actual Revenue</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>125</td>
</tr>
</tbody>
</table>
The system uses two different table types to direct the system to the base rules for the journal entries:

- Table type 1 directs the system to the rules for actual revenue
- Table type 3 directs the system to the rules for unbilled accounts receivable

**Revenue Recognition and Invoicing without Reconciliation**

At times, a company might find it advantageous to allow a variance between invoices and the recognized revenue. For example, if the company recognizes revenue monthly, but generates invoices only after the work is completed, the revenue, unbilled accounts receivable and invoice accounts will:

- Contain variances before the invoice journal is created
- Reconcile over time once all invoice journals for the completed project are generated and posted to the account ledger

When you process revenue recognition and generate invoices without reconciliation:

- The journal generation control is 3
- Invoicing does not apply when you process revenue recognition
- The system calculates the same amount for actual revenue and unbilled accounts receivable
- The system calculates the amounts for revenue and unbilled accounts receivable simultaneously

When the work is complete and you process invoices, the system:

- Calculates the same amount for unbilled accounts receivable and accounts receivable.
- Calculates the amounts for unbilled accounts receivable and accounts receivable simultaneously.
- Uses the RC AAI to designate the accounts receivable and retainage accounts

For example, your company began a project on June 15 and completed the project 90 days later. The total cost for the project was 1,000.00. Every week, the company generates the workfile transactions with a 15 percent markup added to the cost. Your company processes revenue recognition at the end of each month, beginning in June. They process the invoice on September 25.

The system creates the following journal entries for the project costs:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/28/98</td>
<td>Project cost</td>
<td>350.00</td>
</tr>
<tr>
<td></td>
<td>Accounts payable</td>
<td>(350.00)</td>
</tr>
<tr>
<td>07/25/98</td>
<td>Project cost</td>
<td>500.00</td>
</tr>
<tr>
<td></td>
<td>Accounts payable</td>
<td>(500.00)</td>
</tr>
<tr>
<td>09/10/98</td>
<td>Project cost</td>
<td>150.00</td>
</tr>
<tr>
<td></td>
<td>Accounts payable</td>
<td>(150.00)</td>
</tr>
</tbody>
</table>
The "T" account postings and balances in the general ledger are:

### PROJECT COSTS

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/28/98</td>
<td>350.00</td>
<td></td>
<td>350.00</td>
</tr>
<tr>
<td>07/25/98</td>
<td>500.00</td>
<td></td>
<td>850.00</td>
</tr>
<tr>
<td>08/31/98</td>
<td></td>
<td></td>
<td>850.00</td>
</tr>
<tr>
<td>09/10/98</td>
<td>150.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

The system uses two different table types to direct the system to the base rules for the journal entries:
- Table type 1 directs the system to the rules for actual revenue
- Table type 3 directs the system to the rules for unbilled accounts receivable

### Revenue Recognition for June

On June 30, your company processes revenue recognition. The workfile contains a new transaction for 402.50. The system uses the following calculation for the workfile transaction:
- 350.00 cost X 15 percent markup = 52.50
- 350.00 cost + 52.50 = 402.50

The system creates the following journal entry for revenue recognition:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>Unbilled accounts receivable</td>
<td>402.50</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Actual revenue</td>
<td></td>
<td>(402.50)</td>
</tr>
</tbody>
</table>

The "T" account postings and balances for June in the general ledger are:

### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to unbilled accounts receivable base rules. It creates a debit journal entry for the revenue recognition amount.

### ACTUAL REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>402.50</td>
<td>(402.50)</td>
</tr>
</tbody>
</table>
Accounts Derivation Table Type 1 directs the system to the base rules for actual revenue. It creates a credit journal entry for the revenue recognition amount.

**Revenue Recognition for July**

On July 31, your company processes revenue recognition. The workfile contains a new transaction for 575.00. The system uses the following calculation for the workfile transaction:

- 500.00 cost x 15 percent markup = 75.00
- 500.00 cost + 75.00 = 575.00

The system creates the following journal entry for revenue recognition:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>Unbilled accounts receivable</td>
<td>575.00</td>
</tr>
<tr>
<td></td>
<td>Actual revenue</td>
<td>(575.00)</td>
</tr>
</tbody>
</table>

The “T” account postings and balances for July in the general ledger are:

<table>
<thead>
<tr>
<th>UNBILLED ACCOUNTS RECEIVABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>06/30/98</td>
</tr>
<tr>
<td>07/31/98</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to unbilled accounts receivable base rules. It creates a debit journal entry for the revenue recognition amount.

<table>
<thead>
<tr>
<th>ACTUAL REVENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>06/30/98</td>
</tr>
<tr>
<td>07/31/98</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 1 directs the system to the base rules for actual revenue. It creates a credit journal entry for the revenue recognition amount.

**Revenue Recognition for August**

In August, your company does not have new costs for the project. No new workfile transactions exist for the project. The balances for August in the general ledger are:

<table>
<thead>
<tr>
<th>UNBILLED ACCOUNTS RECEIVABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>06/30/98</td>
</tr>
<tr>
<td>07/31/98</td>
</tr>
</tbody>
</table>
Invoicing for September

On September 25, your company processes the invoice. The workfile contains a new transaction for 172.50. The system uses the following calculation for the workfile transaction:

- 150.00 cost × 15 percent markup = 22.50
- 150.00 cost + 22.50 = 172.50

The system creates the following journal entry for the invoice:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/25/98</td>
<td>Accounts receivable</td>
<td>1,150.00</td>
<td>(1,150.00)</td>
</tr>
</tbody>
</table>

The workfile transactions for June, July, and September have not been invoiced up to now. The system sums the invoice amounts for the three months to create an invoice amount of 1,150.00.

The "T" account postings and balances for September in the general ledger for the invoice journals are:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
<tr>
<td>07/31/98</td>
<td>575.00</td>
<td></td>
<td>977.50</td>
</tr>
<tr>
<td>08/31/98</td>
<td></td>
<td></td>
<td>(977.50)</td>
</tr>
<tr>
<td>09/25/98</td>
<td>1,150.00</td>
<td></td>
<td>(172.50)</td>
</tr>
</tbody>
</table>

The system uses the Account Derivation Table Type 3 to determine the base rules for unbilled accounts receivable. When it creates the journal entry, it credits the invoice amount to unbilled accounts receivable. Unbilled Accounts Receivable contains an unreconciled balance of 172.50.
## Accounts Receivable

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>07/31/98</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>08/31/98</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>09/25/98</td>
<td>1,150.00</td>
<td>0</td>
<td>1,150.00</td>
</tr>
</tbody>
</table>

Accounts receivable contains the actual invoiced amount. The system uses the RC AAI to create the journal entry for Accounts Receivable.

### Revenue Recognition Adjustments for September

When you generate the journals for invoices, the system also generates adjustment journals for revenue recognition. The system uses the workfile transactions in the invoice batch to determine if it must create any applicable adjustments to the prior journal entries for revenue recognition. Adjustments can occur for various reasons, such as:

- You have not included invoiced workfile transactions for the current batch in a prior revenue journal
- The information for the workfile transaction, such as the object account, cost amount, or eligibility code, has changed from when you originally included it in a revenue batch

The invoice was processed prior to the end of the month. Revenue has not been calculated for the 172.50 workfile transaction that was included in the invoiced amount. The system created the following adjustment journal entry for revenue recognition:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/25/98</td>
<td>172.50</td>
<td>172.50</td>
<td>(172.50)</td>
</tr>
</tbody>
</table>

After you post the adjustment, the amount for actual revenue equals the amount for accounts receivable, and the variance for unbilled accounts receivable self-corrects. The "T" account postings and balances for September in the general ledger are:

## Actual Revenue

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td>(402.50)</td>
<td></td>
</tr>
<tr>
<td>07/31/98</td>
<td>575.00</td>
<td>(977.50)</td>
<td></td>
</tr>
<tr>
<td>08/31/98</td>
<td>(977.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/25/98</td>
<td>172.50</td>
<td>(1,150.00)</td>
<td></td>
</tr>
</tbody>
</table>
Account Derivation Table Type 1 directs the system to the base rules for actual revenue. It creates a credit journal entry for the revenue recognition amount.

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
<tr>
<td>07/31/98</td>
<td>575.00</td>
<td></td>
<td>977.50</td>
</tr>
<tr>
<td>08/31/98</td>
<td></td>
<td></td>
<td>977.50</td>
</tr>
<tr>
<td>09/25/98</td>
<td></td>
<td>1,150.00</td>
<td>(172.50)</td>
</tr>
<tr>
<td>09/25/98</td>
<td>172.50</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to the base rules for unbilled accounts receivable. It creates a debit journal entry for the revenue recognition amount.

**Note:** Generally, during each month, a company processes multiple invoice batches. Depending upon company policy, revenue recognition might be processed more than once a month. Timing differences always occur between revenue recognition and invoice processing. Therefore, the account for unbilled accounts receivable would contain a variance amount and would not zero out each month.

**Revenue Recognition and Invoicing with Reconciliation**

Many companies do not want a variance between invoice and recognized revenue amounts. In this case, the revenue and receivable amounts are unbilled estimates. The actual revenue and receivable amounts always equal the invoiced amounts. When a company processes invoices, all the estimates are reconciled.

For example, if the company recognizes revenue monthly, but generates invoices only after the work is completed, the estimated revenue and receivable amounts are reconciled when the actual revenue and receivable amounts for the invoice are processed.

When you process invoices with revenue reconciliation, the journal generation control is 4.

When you process revenue recognition:

- Invoicing does not apply when you process revenue recognition at the end of each month
- The system calculates the same amount for unbilled revenue and unbilled accounts receivable
- The system calculates the amounts for unbilled revenue and unbilled accounts receivable simultaneously
- The system uses two different table types for the account derivation rules to create the journal entries:
- Table type 1 directs the system to the rules for unbilled revenue
- Table type 3 directs the system to the rules for unbilled accounts receivable

When the work is complete at a later time, and you process invoices:
- The system calculates the same amount for unbilled accounts receivable and accounts receivable
- The system calculates the amounts for unbilled accounts receivable and accounts receivable simultaneously
- The RC AAI designates the A/R account
- The system uses the account derivation rules and AAIs to create the journal entries. Table type 3 directs:
  - The system to the rules for unbilled accounts receivable
  - The RC AAI to the account information for accounts receivable

The system also:
- Processes the revenue reconciliation journals
- Reconciles the unbilled revenue and receivable amounts
- Creates the actual income amounts
- Uses three different table types for the account derivation rules to create journal entries:
  - Type 1 to reconcile the unbilled revenue amounts
  - Type 2 to credit the actual revenue amount
  - Type 3 to reconcile the unbilled accounts receivable amounts

For example, your company began a project on June 15 and completed the project 30 days later. The total cost for the project was 1,000.00. Every week, the company generates the workfile transactions with a 15 percent markup added to the cost. Your company processes revenue recognition at the end of each month, beginning in June. They process the invoice on July 25. The system creates the following journal entries for the project costs:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/28/98</td>
<td>Project cost</td>
<td>350.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts payable</td>
<td></td>
<td>(350.00)</td>
<td></td>
</tr>
<tr>
<td>07/25/98</td>
<td>Project cost</td>
<td>650.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts payable</td>
<td></td>
<td>(650.00)</td>
<td></td>
</tr>
</tbody>
</table>

The “T” account postings and balances for the cost in the general ledger are:

<table>
<thead>
<tr>
<th>PROJECT COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>06/28/98</td>
</tr>
</tbody>
</table>
Revenue Recognition for June

On June 30, your company processes revenue recognition. The workfile contains a new transaction for 402.50. The system uses the following calculation for the workfile transaction:

- 350.00 cost * 15% markup = 52.50
- 350.00 cost + 52.50 = 402.50

The system creates the following journal entry for revenue recognition for the unbilled revenue and unbilled accounts receivable:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>Unbilled accounts receivable</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
<tr>
<td></td>
<td>Unbilled revenue</td>
<td></td>
<td>(402.50)</td>
<td></td>
</tr>
</tbody>
</table>

The "T" account postings and balances for June in the general ledger are:

**UNBILLED ACCOUNTS RECEIVABLE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to unbilled accounts receivable base rules. It creates a debit journal entry for the revenue recognition amount.

**UNBILLED REVENUE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>(402.50)</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 1 directs the system to unbilled revenue base rules. It creates a credit journal entry for the revenue recognition amount.

Invoicing for July

On July 25, your company processes the invoice. The workfile contains a new transaction for 747.50. The system uses the following calculation for the workfile transaction:

- 650.00 cost * 15% markup = 97.50
- 650.00 cost + 97.50 = 747.50

The system creates the following journal entry for the June and July workfile transactions by adding the 402.50 and 747.50 that apply to the invoice:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/25/98</td>
<td>Accounts receivable</td>
<td>1,150.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Unbilled accounts receivable (1,150.00)

The "T" account postings and balances for July in the general ledger are:

### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
<tr>
<td>07/25/98</td>
<td></td>
<td>1,150.00</td>
<td>(747.50)</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to unbilled accounts receivable base rules. It creates a credit journal entry for the invoice amount.

### ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>07/25/98</td>
<td>1,150.00</td>
<td></td>
<td>1,150.00</td>
</tr>
</tbody>
</table>

The RC AAI directs the system to the accounts receivable and retainage account information. It uses the invoice amount to create the debit for the journal entry.

### Revenue Recognition and Reconciliation for July

#### Revenue Recognition

Unbilled accounts receivable and untilled revenue have not been calculated for the 747.50 workfile transaction that was included in the invoiced amount. The system creates the following journal entry for reconciliation of the revenue recognition amounts:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/25/98</td>
<td></td>
<td>Unbilled accounts receivable</td>
<td>747.50</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unbilled revenue</td>
<td>(747.50)</td>
</tr>
</tbody>
</table>

The account postings and the balances in the general ledger for the journals are:

### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
<tr>
<td>07/25/98</td>
<td></td>
<td>1,150.00</td>
<td>(747.50)</td>
</tr>
<tr>
<td>07/25/98</td>
<td>747.50</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>
Account Derivation Table Type 3 directs the system to the base rules for unbilled accounts receivable. It creates a debit journal entry for the revenue recognition amount.

<table>
<thead>
<tr>
<th>UNBILLED RECEIVABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>06/30/98</td>
</tr>
<tr>
<td>07/25/98</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 1 directs the system to the base rules for unbilled revenue. It creates a credit journal entry for the revenue recognition amount.

**Revenue Reconciliation of the Revenue Amounts**

The system uses Unbilled Accounts Receivable as the “clearing” account for the Revenue Recognition and Invoice amounts during the reconciliation of revenue. When the revenue and invoice amounts are the same, it appears as if the system has created unnecessary, duplicate entries. This occurs because the system uses gross amounts rather than net amounts to reconcile the unbilled accounts.

The system creates the following journal entries for the reconciliation of the revenue recognition amounts:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/25/98</td>
<td>Unbilled revenue</td>
<td>1,150.00</td>
</tr>
<tr>
<td></td>
<td>Unbilled accounts receivable</td>
<td>(1,150.00)</td>
</tr>
</tbody>
</table>

The account postings and the balances in the general ledger for the journals are:

<table>
<thead>
<tr>
<th>UNBILLED REVENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>06/30/98</td>
</tr>
<tr>
<td>07/25/98</td>
</tr>
<tr>
<td>07/25/98</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 1 directs the system to the base rules for unbilled revenue. It creates a debit journal entry for the revenue recognition amount.
Appendix C - Accounting for the Billing Cycle

<table>
<thead>
<tr>
<th>UNBILLED ACCOUNTS RECEIVABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>------</td>
</tr>
<tr>
<td>07/25/98</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to the base rules for unbilled accounts receivable. It creates a credit journal entry for the revenue recognition amount.

Revenue Reconciliation of the Invoice Amounts

The system also creates the following journal entries for the revenue reconciliation by using the invoice amount for actual revenue:

<table>
<thead>
<tr>
<th>Date</th>
<th>Unbilled accounts receivable</th>
<th>Revenue</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/25/98</td>
<td>1,150.00</td>
<td></td>
<td>(1,150.00)</td>
</tr>
</tbody>
</table>

UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>402.50</td>
<td></td>
<td>402.50</td>
</tr>
<tr>
<td>07/25/98</td>
<td></td>
<td>1,150.00</td>
<td>(747.50)</td>
</tr>
<tr>
<td>07/25/98</td>
<td>747.50</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>07/25/98</td>
<td></td>
<td>1,150.00</td>
<td>(1,150.00)</td>
</tr>
<tr>
<td>07/25/98</td>
<td>1,150.00</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 3 directs the system to the base rules for unbilled accounts receivable. It creates a debit journal entry for the invoice amount.

REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/25/98</td>
<td>1,150.00</td>
<td></td>
<td>(1,150.00)</td>
</tr>
</tbody>
</table>

Account Derivation Table Type 2 directs the system to the base rules for actual revenue. It creates a credit journal entry for the invoice amount.

After all the journals have been posted, the unbilled accounts are reconciled. Only the actual revenue and accounts receivable accounts contain balances for the invoiced workfile transactions.
Reallocation Rules

Companies define reallocation rules so that the system can redirect amounts. The amounts can include:

- Taxes
- Invoices
- Costs

To use reallocation rules, you must first define a base rule. Then, you can define reallocation rules to redirect up to 100% of an amounts from and to one or more alternate accounts.

For example, your company might charge a "trip" fee whenever they send a service person to the equipment location to perform repairs. If your company wants to direct trip fees to a separate business unit from repair fees, you can define a reallocation rule to redirect the trip fee.

Reallocation rules use any combination of the following files in the Account Derivation Table:

- Table Amount Basis
- Split Amount Basis
- Positive or Negative
- Component Code
- Condition Code
- Percent to Include
- Reverse Entry Control

When you define reallocation rules for table amounts, the system uses the billing detail transaction in the Billing Workfile (F4812). Table amounts can be defined as:

<table>
<thead>
<tr>
<th>Base</th>
<th>Either the revenue or invoice amount, depending on the type of processing and the stage of journal processing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>Actual amount of cost for workfile transaction</td>
</tr>
<tr>
<td>Invoice</td>
<td>Actual amount invoiced for workfile transaction</td>
</tr>
<tr>
<td>Revenue</td>
<td>Actual amount for revenue recognition for workfile transaction</td>
</tr>
<tr>
<td>Margin</td>
<td>Actual amount for revenue less the actual amount for cost</td>
</tr>
<tr>
<td>Net Margin</td>
<td>Actual amount for invoice less the actual amount for cost</td>
</tr>
</tbody>
</table>

Note: Depending on the value for the system constant for independent revenue and invoice amounts, and the type of markup tables, the revenue and invoice amounts are either the same or can differ. The Margin and the Net Margin amounts might not differ.
The Positive or Negative (+/-) field directs the system to increase or decrease the amount for the resulting account. Whether an account is increased or decreased depends on the type of journal processing and the stage of journal processing. For example, a + can increase the unbilled accounts receivable account during revenue recognition, and decrease the unbilled accounts receivable account during invoicing.

The Reverse Entry Control (REC) field is used to prevent the system from creating a reversing entry for rules on the Account Derivation Table. You can use this field with any entry other than the Base Entry rule for the table.

The Split Amount Basis field is related to the table amounts in the Amount Basis fields. When the Split Amount Basis field is blank, the reallocation can be used with the amounts for Cost, Margin, or Net Margin. (Taxable amounts and the tax amount cannot be split apart from the Cost, Margin, or Net Margin.) Other split amounts can be based on:

- B - Invoice amount plus tax or revenue amount
- A - Taxable invoice amount
- T - Tax amount

The system can execute reallocation rules depending on different circumstances, the system might execute a reallocation rule when there is a component name in the component field. In this case, a component amount is calculated for the named component code and the amount is attached to the workfile transaction.

Executing rules can also depend on the results of a conditional test. The condition code directs the system to the test the system must perform. Based on the results of the test, the system determines whether to execute the reallocation rule.

Companies can determine the need for reallocation rules by analyzing the account journal entries that are required when they post transactions that are processed by the Service and Contract Billing systems.

**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:

<table>
<thead>
<tr>
<th>Date</th>
<th>Account Description</th>
<th>Debit</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>Work in Process</td>
<td>1,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td></td>
<td>(1,000.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Accounts Receivable</td>
<td></td>
<td>1,200.00</td>
</tr>
<tr>
<td></td>
<td>Sales Revenue</td>
<td></td>
<td>(1,200.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Cost of Goods Sold</td>
<td></td>
<td>1,000.00</td>
</tr>
<tr>
<td></td>
<td>Work in Process</td>
<td></td>
<td>(1,000.00)</td>
</tr>
</tbody>
</table>

The Account Derivation 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 AAls
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**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

**ACCOUNTS PAYABLE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>1,000.00</td>
<td>(1,000.00)</td>
</tr>
</tbody>
</table>

The account postings and balances for July in the general ledger are:

**ACCOUNTS RECEIVABLE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>1,200.00</td>
<td></td>
<td>1,200.00</td>
</tr>
</tbody>
</table>

**SALES REVENUE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,200.00</td>
<td>(1,200.00)</td>
</tr>
</tbody>
</table>

**WORK IN PROCESS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,000.00</td>
<td>0</td>
</tr>
</tbody>
</table>

**COST OF GOODS SOLD**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

**Note:** In the example, the Journal Generation system constant is set to 1 because the company is creating invoices only without revenue recognition. Account Derivation Table Type 3 is the only table needed to create the revenue and reallocation journal entries.
Account Derivation Table Rules

You set up the Account Derivation Table rules for invoicing only as follows:

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for revenue amount from the invoice</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Revenue account</td>
</tr>
<tr>
<td>Remove cost from the Work in Process account</td>
<td>C (Cost)</td>
<td></td>
<td>+ creates a credit to the Work in Process account</td>
</tr>
<tr>
<td>Reallocate cost to Cost of Goods Sold account</td>
<td>C (Cost)</td>
<td></td>
<td>- creates a debit to Cost of Goods Sold account</td>
</tr>
</tbody>
</table>

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.

Revenue Recognition Only

A company recognizes revenue 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 revenue for the units is recognized, the cost is moved from the Work in Process account to the Cost of Goods Sold account. The revenue for each unit is recognized as 12.00 per unit.

The journal entries are:

<table>
<thead>
<tr>
<th>Date</th>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>Work in Process</td>
<td>1,000.00</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>(1,000.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Inter-Company Receivable</td>
<td>1,200.00</td>
</tr>
<tr>
<td></td>
<td>Reimbursed Expenses</td>
<td>(1,200.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Cost of Goods Sold</td>
<td>1,000.00</td>
</tr>
<tr>
<td></td>
<td>Work in Process</td>
<td>(1,000.00)</td>
</tr>
</tbody>
</table>

The Account Derivation Table rules for Table Type 1 - Actual Revenue first direct the 1,200.00 revenue amount to the Reimbursed Expense account. The Account
Derivation Table rules for Table Type 3 - Unbilled Receivables, direct the 1,200.00 reimbursable amount to the Inter-Company Receivable account. 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:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>1,000.00</td>
<td>(1,000.00)</td>
</tr>
</tbody>
</table>

The account postings and balances for July in the general ledger are:

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>1,200.00</td>
<td></td>
<td>1,200.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,200.00</td>
<td>(1,200.00)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,000.00</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

**Account Derivation Table Rules**

You can use either Method 1 or Method 2 to create the Account Derivation rules for revenue recognition only. Set up the rules as follows:
Method 1

### ACCOUNT DERIVATION TABLE TYPE 1 - ACTUAL REVENUE
Account Basis and Tax Basis Increase/Decrease Rules

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for revenue for reimbursed expenses</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Reimbursed Expense account</td>
</tr>
<tr>
<td>Define a reallocation rules for the Cost of Goods Sold account</td>
<td>R (Revenue)</td>
<td></td>
<td>- creates a debit to the Inter-Company Receivable account</td>
</tr>
<tr>
<td>Define a reallocation rule for the Work in Process account</td>
<td>R (Revenue)</td>
<td></td>
<td>+ creates a credit to the Work in Process account</td>
</tr>
</tbody>
</table>

### ACCOUNT DERIVATION TABLE TYPE 3 - UNBILLED ACCOUNTS RECEIVABLE
Account Basis and Tax Basis Increase/Decrease Rules

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Inter-Company Receivable account</td>
</tr>
</tbody>
</table>

Method 2

### ACCOUNT DERIVATION TABLE TYPE 1 - ACTUAL REVENUE
Account Basis and Tax Basis Increase/Decrease Rules

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for revenue for reimbursed expenses</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Reimbursed Expenses account</td>
</tr>
</tbody>
</table>
ACCOUNT DERIVATION TABLE TYPE 3 - UNBILLED ACCOUNTS RECEIVABLE

Account Basis and Tax Basis Increase/Decrease Rules

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Inter-Company Receivable account</td>
</tr>
<tr>
<td>Define a reallocation rule for cost of goods sold</td>
<td>R (Revenue)</td>
<td></td>
<td>+ creates a debit to the Cost of Goods Sold account</td>
</tr>
<tr>
<td>Define a reallocation rule for work in process</td>
<td>R (Revenue)</td>
<td></td>
<td>- creates a credit to the Work in Process account</td>
</tr>
</tbody>
</table>

Invoicing and Revenue Recognition without Reconciliation

A company recognizes revenue for 1,200.00 over a two-month period. The second month, the company processes 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 revenue is recognized for the units, the cost is moved from the Work in Process Account to the Cost of Goods Sold account. Revenue is recognized for each unit at 12.00 per unit.

The journal entries are:

<table>
<thead>
<tr>
<th>Date</th>
<th>Account</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>Work in Process</td>
<td>1,000.00</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>(1,000.00)</td>
</tr>
<tr>
<td>06/30/98</td>
<td>Unbilled Accounts Receivable</td>
<td>720.00</td>
</tr>
<tr>
<td></td>
<td>Revenue</td>
<td>(720.00)</td>
</tr>
<tr>
<td>06/30/98</td>
<td>Cost of Goods Sold</td>
<td>600.00</td>
</tr>
<tr>
<td></td>
<td>Work in Process</td>
<td>(600.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Work in Process</td>
<td>400.00</td>
</tr>
<tr>
<td></td>
<td>Accounts Payable</td>
<td>(400.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Accounts Receivable</td>
<td>1,200.00</td>
</tr>
<tr>
<td></td>
<td>Unbilled Account Receivable</td>
<td>(1,200.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Unbilled Accounts Receivable</td>
<td>480.00</td>
</tr>
<tr>
<td></td>
<td>Revenue</td>
<td>(480.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>Cost of Goods Sold</td>
<td>400.00</td>
</tr>
</tbody>
</table>
Appendix C - Accounting for the Billing Cycle

In June, the Account Derivation Table rules for Table Type 1 - Actual Revenue first direct the 720.00 revenue amount to the Revenue account. The Account Derivation Table rules for Table Type 3 - Unbilled Receivables directs the 720.00 for unbilled receivables to the Unbilled Accounts Receivable account.

In July, the system uses the RC AAI to debit the Accounts Receivable account for the amount of the invoice. Then, the system uses Table Type 3 - Unbilled Receivables to create a 1,200.00 credit.

The system also determines whether the workfile transactions that make up the 1,200.00 invoice require any revenue adjustments. In this example, a 420.00 workfile transaction was not included in the revenue batch prior to creating the invoice. The system creates two additional journal entries for the revenue adjustments applicable to the workfile transaction.

The system uses the Account Derivation Table rules for Table Type 1 - Actual Revenue to adjust the revenue amount by 420.00 and create a credit to the Revenue account. Then the system uses the Account Derivation Table rules for Table Type 3 - Unbilled Receivables to adjust unbilled receivables by 420.00 and create a debit to the Unbilled Accounts Receivable account.

Note: In this example, Unbilled Accounts Receivable reconciled to "zero" because of the timing difference between revenue recognition and invoicing. Typically, a variance would exist in the account each month because the system does not create reconciling entries to reconcile the unbilled balance.

Finally, the system reduces the Work in Process and increases the Cost of Goods Sold by the cost amount each month.

The account postings and balances for June in the general ledger are:

<table>
<thead>
<tr>
<th>WORK IN PROCESS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Debit</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>06/30/98</td>
<td>600.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACCOUNTS PAYABLE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Debit</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>06/30/98</td>
<td>600.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UNBILLED ACCOUNTS RECEIVABLE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Debit</td>
</tr>
<tr>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>06/30/98</td>
<td>720.00</td>
</tr>
</tbody>
</table>
### REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>720.00</td>
<td></td>
<td>(720.00)</td>
</tr>
</tbody>
</table>

### WORK IN PROCESS

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>600.00</td>
</tr>
<tr>
<td>06/30/98</td>
<td></td>
<td>600.00</td>
<td>0</td>
</tr>
</tbody>
</table>

### COST OF GOODS SOLD

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>600.00</td>
</tr>
</tbody>
</table>

The account postings and balances for July in the general ledger are:

### WORK IN PROCESS

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td></td>
<td>400.00</td>
</tr>
</tbody>
</table>

### ACCOUNTS PAYABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>600.00</td>
<td>(600.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td></td>
<td>(1,000.00)</td>
</tr>
</tbody>
</table>

### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>720.00</td>
<td></td>
<td>720.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,200.00</td>
<td>(480.00)</td>
</tr>
</tbody>
</table>

### ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,200.00</td>
<td></td>
<td>1,200.00</td>
</tr>
</tbody>
</table>
Appendix C - Accounting for the Billing Cycle

### REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>720.00</td>
<td>(720.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>480.00</td>
<td>(1,200.00)</td>
</tr>
</tbody>
</table>

### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>720.00</td>
<td></td>
<td>720.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,200.00</td>
<td>(480.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>480.00</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### WORK IN PROCESS

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td></td>
<td>400.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### COST OF GOODS SOLD

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>600.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

### Reverse Entry Control

The Reverse Entry Control (REC) field is used to prevent the system from creating a reversing entry for rules on the Account Derivation Table. You can use the Reverse Entry Control field with any entry other than the Base Entry rule for a table.

When the Journal Generation Control is 3, the system uses Table Type 3 - Unbilled Accounts Receivable to create both a journal entry for revenue recognition and invoices. The revenue recognition journal entry debits Unbilled Accounts Receivable. The invoice journal entry credits Unbilled Accounts Receivable.

If a reallocation rule is defined on Table Type 3 - Unbilled Accounts Receivable and is only applicable to revenue recognition, the Reverse Entry Control should be set to prevent the system from using the rule when it creates the invoice journal entries.

The reallocation rule for the Work in Process and Cost of Goods Sold accounts creates journal entries only when the system creates the revenue recognition journals. In this case, the value in the Reverse Entry Control field should be 0 to
prevent the system from creating additional journal entries, per Method 2 in the following account derivation rules.

**Account Derivation Table Rules**

You can use Method 1 or Method 2 to create the Account Derivation Table rules for revenue recognition and invoicing without revenue reconciliation. Set up the rules as follows:

### Method 1

**ACCOUNT DERIVATION TABLE TYPE 1 - ACTUAL REVENUE**

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for revenue</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Revenue account</td>
</tr>
<tr>
<td>Define a reallocation rule for the cost of goods sold</td>
<td>R (Revenue)</td>
<td>- creates a debit to the Cost of Goods Sold account</td>
<td></td>
</tr>
<tr>
<td>Define a reallocation rule for the work in process</td>
<td>R (Revenue)</td>
<td>+ creates a credit to the Work in Process account</td>
<td></td>
</tr>
</tbody>
</table>

**ACCOUNT DERIVATION TABLE TYPE 3 - UNBILLED ACCOUNTS RECEIVABLE**

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Inter-Company Receivable account</td>
</tr>
</tbody>
</table>

### Method 2

**ACCOUNT DERIVATION TABLE TYPE 1 - ACTUAL REVENUE**

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for revenue for reimbursed expenses</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Reimbursed Expenses account</td>
</tr>
</tbody>
</table>
ACCOUNT DERIVATION TABLE TYPE 3 - UNBILLED ACCOUNTS RECEIVABLE

Account Basis and Tax Basis Increase/Decrease Rules

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Inter-Company Receivable account</td>
</tr>
<tr>
<td>Define a reallocation rule for cost of goods sold</td>
<td>R (Revenue)</td>
<td></td>
<td>+ creates a debit to the Cost of Goods Sold account (REC is 0)</td>
</tr>
<tr>
<td>Define a reallocation rule for work in process</td>
<td>R (Revenue)</td>
<td></td>
<td>- creates a credit to the Work in Process account (REC is 0)</td>
</tr>
</tbody>
</table>

Invoicing and Revenue Recognition with Reconciliation

A company recognizes revenue for 1,200.00 over a two-month period. The second month, the company processes 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 revenue is recognized for the units, the cost is moved from the Work in Process Account to the Cost of Goods Sold account. Revenue is recognized for each unit at 12.00 per unit.

The journal entries for June are:

06/30/98  Work in Process  600.00
          Accounts Payable   (600.00)
06/30/98  Unbilled Accounts Receivable  720.00
          Unbilled Revenue   (720.00)

The account postings and balances for June in the general ledger are:

**WORK IN PROCESS**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>600.00</td>
</tr>
</tbody>
</table>

**ACCOUNTS PAYABLE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>(600.00)</td>
</tr>
</tbody>
</table>
### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>720.00</td>
<td></td>
<td>720.00</td>
</tr>
</tbody>
</table>

### UNBILLED REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>720.00</td>
<td>(720.00)</td>
</tr>
</tbody>
</table>

In June, the Account Derivation Table rules for Table Type 1 - Actual Revenue first direct the 720.00 revenue amount to the Revenue account. The Account Derivation Table rules for Table Type 3 - Unbilled Receivables direct the 720.00 for unbilled receivables to the Unbilled Accounts Receivable account.

The journal entries for July are:

- 07/31/98 Work in Process 400.00
- 07/31/98 Accounts Payable (400.00)
- 07/31/98 Unbilled Accounts Receivable 480.00
- 07/31/98 Unbilled Revenue (480.00)
- 07/31/98 Accounts Receivable 1,200.00
- 07/31/98 Unbilled Account Receivable (1,200.00)
- 07/31/98 Unbilled Revenue 1,200.00
- 07/31/98 Unbilled Accounts Receivable (1,200.00)
- 07/31/98 Unbilled Accounts Receivable 1,200.00
- 07/31/98 Revenue (1,200.00)
- 07/31/98 Cost of Goods Sold 1,000.00
- 07/31/98 Work in Process (1,000.00)

The account postings and balance for July in the general ledger are:

### WORK IN PROCESS

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>600.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td>1,000.00</td>
<td>0</td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,000.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### COST OF GOODS SOLD

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,000.00</td>
<td></td>
<td>1,000.00</td>
</tr>
</tbody>
</table>

### ACCOUNTS PAYABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>600.00</td>
<td></td>
<td>(600.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>400.00</td>
<td></td>
<td>(1,000.00)</td>
</tr>
</tbody>
</table>

### UNBILLED REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td>720.00</td>
<td>720.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>480.00</td>
<td>1,200.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,200.00</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### UNBILLED ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td>720.00</td>
<td></td>
<td>720.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td>480.00</td>
<td></td>
<td>1,200.00</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,200.00</td>
<td>0</td>
</tr>
<tr>
<td>07/31/98</td>
<td></td>
<td>1,200.00</td>
<td>(1,200.00)</td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,200.00</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

### ACCOUNTS RECEIVABLE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>07/31/98</td>
<td>1,200.00</td>
<td></td>
<td>(1,200.00)</td>
</tr>
</tbody>
</table>

### REVENUE

<table>
<thead>
<tr>
<th>Date</th>
<th>Debit</th>
<th>Credit</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>06/30/98</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Account Derivation Table Rules

When you set up the Account Derivation Tables rules for revenue recognition and invoicing with reconciliation, you must define all three table types. Set up the rules as follows:

#### ACCOUNT DERIVATION TABLE TYPE 1 - UNBILLED REVENUE

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define base rule for unbilled revenue</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Unbilled Revenue account using the revenue recognition amount when processing revenue recognition during invoicing</td>
</tr>
<tr>
<td>Define a base rule for unbilled revenue</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Unbilled Revenue account using the revenue recognition amount when processing revenue reconciliation during invoicing</td>
</tr>
</tbody>
</table>

#### ACCOUNT DERIVATION TABLE TYPE 2 - ACTUAL REVENUE

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a base rule for revenue amount from the invoice</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the revenue account using the invoice amount when processing revenue reconciliation during invoicing</td>
</tr>
</tbody>
</table>
### ACCOUNT DERIVATION TABLE TYPE 2 - ACTUAL REVENUE

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remove cost from Work in Process account</td>
<td>C (Cost)</td>
<td></td>
<td>+ creates a credit to the Work in Process account when processing revenue reconciliation during invoicing</td>
</tr>
<tr>
<td>Reallocate cost to Cost of Goods Sold account</td>
<td>creates a debit to the Cost of Goods Sold account when processing revenue reconciliation during invoicing</td>
<td>Reallocate cost to Cost of Goods Sold account</td>
<td>creates a debit to the Cost of Goods Sold account when processing revenue reconciliation during invoicing</td>
</tr>
</tbody>
</table>

**Note:** The Reverse Entry Control (REC) field does not apply because the reallocation rules for the Work in Process and Cost of Goods Sold accounts are defined on Table Type 2 - Actual Revenue. Table Type 2 - Actual Revenue is used only during invoice journaling when the system performs the revenue reconciliation.

### ACCOUNT DERIVATION TABLE TYPE 3 - UNBILLED ACCOUNTS RECEIVABLE

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Unbilled Accounts Receivable account when processing the revenue recognition amount during revenue recognition processing</td>
</tr>
<tr>
<td>Define a base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Unbilled Accounts Receivable account when processing the invoice amount during invoice processing</td>
</tr>
</tbody>
</table>
### ACCOUNT DERIVATION TABLE TYPE 3 - UNBILLED ACCOUNTS RECEIVABLE

**Account Basis and Tax Basis Increase/Decrease Rules**

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Account Basis</th>
<th>Tax Basis</th>
<th>+/-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define a base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a credit to the Unbilled Accounts Receivable account when processing the revenue recognition amount for revenue reconciliation during invoice processing</td>
</tr>
<tr>
<td>Define a base rule for unbilled accounts receivable</td>
<td>B (Base)</td>
<td>B (Base)</td>
<td>+ creates a debit to the Unbilled Accounts Receivable account when processing the invoice amount for revenue reconciliation during the invoice processing</td>
</tr>
</tbody>
</table>

### Component Reallocations

A component is a markup that can be associated with a workfile transaction’s cost, revenue, and invoice amount, or any combination of these three. If a component amount exists, an account derivation rule can reclassify the amount.
For example, a company might add 7 cents per hour onto all hourly employees' wages for the cost of benefits. When this amount is included in an invoice, the company wants the revenue amount for the benefits recovery separated from the sales revenue amount. If the current invoice included a 7 dollar billing for 100 hours, the reclassification journal entry would be:

\[
\begin{array}{ccc}
\text{Sales Revenue} & 7.00 \\
\text{Benefits Recovery} & (7.00) \\
\end{array}
\]

To create this journal entry, you can use the account derivation rules to create a reallocation rule that reduces the sales revenue by the component amount and increases the benefits recovery. Both reallocation rules include the component name associated with the 7 cents per hour cost of benefits so that the system can determine the recovery amount.

### Defining Component Reallocation Rules

You can define component reallocation rules on any of the three types of account derivation tables. To reallocate components, you must determine the following:

- Appropriate journal processing stage for the reallocation
- Base rule associated with the component reallocation
- Object account range for the workfile transaction associated with the component
- Resulting accounts for the reallocation amount
- Amount Basis for the component amount, such as cost, invoice, or revenue
- Component code
- Percentage to reallocate
To define the component reallocation rule, access the appropriate account derivation table and define the base rule. Then, define the appropriate reallocation rule to reduce the component amount from the original resulting account. Last, define the appropriate reallocation rule to increase the component amount for the new resulting account.

**See Also**

- Assigning Component Codes to Account Derivation Rules

**Conditional Reallocation Rules**

Reallocation rules can be dependent on the results of a conditional test. When you specify a test for a conditional reallocation rule, the system must test each condition before it can execute each account derivation rule. This additional processing increases the time it takes for the system to create the resulting journal entries.

Each conditional test can include one or more types of tests the system must execute for the Condition Code before it applies the reallocation rule. To assign a condition code to a reallocation rule, you must determine the following:

- Appropriate journal processing stage for the conditional reallocation
- Base rule associated with the conditional reallocation rule
- Object account range for the workfile transactions associated with the conditional reallocation rule
- Resulting accounts for the conditional reallocation amount
- Applicable amount basis and tax basis for the conditional reallocation rule
- Condition code tests
See Also

- Setting Up Condition Codes

Independent Revenue/Invoice Amount Basis

When the invoice and revenue amounts are marked up independent of each other, the Journal Generation Control for revenue recognition with or without reconciliation affects the variance balance the system maintains in the Unbilled Accounts Receivable and Unbilled Revenue accounts.

The Independent Revenue/Invoice constant determines if the markup amounts calculated for the workfile transactions must use the same rules for the invoice and revenue amounts. If the constant is set to allow different markup rules for the invoice and revenue amounts, processing invoices and revenue recognition without reconciliation creates a permanent variance between unbilled accounts receivable and actual accounts receivable amounts. Invoice and revenue amounts are always different.

If the Independent Revenue/Invoice constant is set to allow different markup rules for the invoice and revenue amounts, processing invoices and revenue recognition with reconciliation forces the unbilled accounts to reconcile, but allows the invoice and revenue amounts to be different.

The following results occur based on the relationships between the system constants and the revenue recognition process:

<table>
<thead>
<tr>
<th>System Constants</th>
<th>Revenue Recognition Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journal Generation Control</td>
<td>Independent Revenue/Invoice Flag</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: If the Journal Generation Control is:

3 - process revenue recognition without reconciliation
4 - process revenue recognition with reconciliation

If the Independent Revenue Invoice Control is:

0 - the invoice amount always equals the revenue amount
1 - the invoice and revenue amounts can differ
See Also

- Setting Up System Constants
Appendix D - Retrieval Reference Codes

You set up the retrieval reference codes with the Retrieval Reference (P4856) window. This window is accessed from the Layout Definition (P4855) screen. The following table describes the parameters that relate to retrieval codes. Be aware of the following:

- Only the applicable parameters are listed for each retrieval code.
- To display more information about each parameter, use function keys F1 (field help) and F8 (table field descriptions).

Caution: The Display Size field is a required field for the setup of all the retrieval reference codes. If a display size is not specified, the related information is not printed on the invoice.

<table>
<thead>
<tr>
<th>RETRIEVAL CODE and SOURCE TABLE</th>
<th>PARAMETER</th>
<th>EXPLANATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD No source table</td>
<td>1-4</td>
<td>A mathematical function performed over retrieved information. For that information, specify the numbers of the retrieval reference codes in the parameter fields. For example, if the calculation relates to retrieval reference code numbers 7 and 10, you would specify &amp;7 in parameter 1 and &amp;10 in parameter 2. You can also specify other numeric values involved in the calculation, such as -1, .10, or 100.</td>
</tr>
<tr>
<td>ADDRESS Address by Date (F0116)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0116 table.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>The date on which a change of address takes place. It is compared with the effective date for the address number. This parameter applies only if the Addresses by Effective Date field on the Address Book Constants form is set to 1.</td>
</tr>
<tr>
<td>ADDRESS2 Account Master</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0101 table.</td>
</tr>
<tr>
<td>RETRIEVAL CODE and SOURCE TABLE</td>
<td>PARAMETER</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>(F0101)</td>
<td>2</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td>ACCOUNT</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0901 table.</td>
</tr>
<tr>
<td>Address Book Master (F0901)</td>
<td>2</td>
<td>Determines whether the account information is related to the original (posting) cost account or the closest previous non-posting account. For example, Professional could be the description for a posting cost account or Labor for a non-posting account.</td>
</tr>
<tr>
<td>AMOUNT</td>
<td>1</td>
<td>Determines the type of amount you want printed, such as a cost amount or a unit quantity. An amount can be included on any detail or total format.</td>
</tr>
<tr>
<td>No source table</td>
<td>2</td>
<td>This parameter applies to payroll labor and its related burden costs. It determines whether the system prints the total billing amount, only the labor costs, or only the burden costs.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>This parameter applies only to a workfile record with associated components. It determines whether the system prints amounts related to the base transactions or to the specified component code.</td>
</tr>
<tr>
<td>CC</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0006 table.</td>
</tr>
<tr>
<td>Business Unit (Job) Master (F0006)</td>
<td>2</td>
<td>Determines whether the business unit is related to a job, home business unit, or project number.</td>
</tr>
<tr>
<td>CC SUPP 1</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0692 table.</td>
</tr>
<tr>
<td>Business Unit (Job) Supplemental Data Codes (F00692)</td>
<td>2</td>
<td>Determines whether the business unit is related to a job, home business unit, or project number.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>The data type for the supplemental data that is defined for the code format (C). This data type is non-narrative. If daily job logs are required on the invoice, for example, you specify DL.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>A code related to the data type you specified for parameter 3- Such a code is displayed in the first column on the Supplemental Code Entry form. For example, the first column for daily job logs (data type DL) is Log Type.</td>
</tr>
<tr>
<td>CC SUPP 2</td>
<td>1</td>
<td>Determines whether the business unit is related to a job, home business unit, or project number.</td>
</tr>
<tr>
<td>RETRIEVAL CODE and SOURCE TABLE</td>
<td>PARAMETER</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>Supplemental Data Text (F00693)</td>
<td>2</td>
<td>The data type for the supplemental data that contains free-form text. In this case, the data type can be defined for either the code format (C) or the narrative format (N). If a legal description is required on the invoice, for example, you specify LG.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>This parameter is similar to parameter 4 for the retrieval code CC SUPP 1. Therefore, if the data type in parameter 2 is defined for the code format, you must use parameter 3 to specify a code related to the data type. However, if the data type in parameter 2 is defined for the narrative format, you must leave parameter 3 blank.</td>
</tr>
<tr>
<td>CL TEXT Contract Billing Line Text (F52024)</td>
<td>N/A</td>
<td>This retrieval code lets you print on the invoice the text related to contract billing lines. This is typically used at either the transaction or the transaction summary level of the invoice. These two levels relate to the Billing Workfile (F4812) and Invoice Summary Workfile (F4822), respectively. No parameters are applicable to this code.</td>
</tr>
<tr>
<td>CONTRACT Contract Billing Master (F5201)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F5201 table.</td>
</tr>
<tr>
<td>CUMULATIVE (This retrieval code applies only to contracts.) Invoice Summary Access (F48520)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F48520 table. Be aware that the F48520 table must be built and maintained, which is controlled by the Invoice Summary Access Control field on the System Constants form.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Determines the summary level of the billed-to-date total amount in relationship to the contract information. For example, it can be summarized by contract billing line.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Determines the summary level of the billed-to-date total amount in relationship to the G/L account number. For example, it can be summarized by business unit and subsidiary.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Determines whether the summary level of the billed-to-date total is by employee and supplier.</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>This parameter applies only to pay items for time and materials (T and M) with components. It determines whether the system prints amounts related to the base transactions or to the specified component code.</td>
</tr>
<tr>
<td>CUSTOMER Customer Master</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0301 table.</td>
</tr>
<tr>
<td>RETRIEVAL CODE and SOURCE TABLE</td>
<td>PARAMETER</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>(F0301)</td>
<td>2</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td>DATE</td>
<td>N/A</td>
<td>This retrieval code lets you print the system date on the invoice. No parameters are applicable to this code.</td>
</tr>
<tr>
<td>DIVIDE</td>
<td>1-4</td>
<td>A mathematical function performed over retrieved information. For that information, specify the numbers of the retrieval reference codes in the parameter fields. For example, if the calculation relates to retrieval reference code numbers 7 and 10, you would specify &amp;7 in parameter 1 and &amp;10 in parameter 2. You can also specify other numeric values involved in the calculation, such as -1, .10, or 100.</td>
</tr>
<tr>
<td>EQUIPMENT</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F1201 table.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Determines whether the information relates to equipment involved in the work (equipment worked) or equipment on which work is performed (equipment worked on). If you operate a crane, for example, the crane is the equipment worked. If you use a timing machine to fix the crane’s motor, the crane then becomes the equipment worked on and the timing machine is the equipment worked.</td>
</tr>
<tr>
<td>INV TEXT</td>
<td>1</td>
<td>Determines the level within a batch from which the free-form text for the invoices is retrieved. The levels are batch, invoice, pay item, and transaction.</td>
</tr>
<tr>
<td>MILE/PROG</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from either the F5216 table or F52161 table. Note: To display progress billing information from the Table Field Description window, you must enter F2161.</td>
</tr>
<tr>
<td>MULTIPLY</td>
<td>1-4</td>
<td>A mathematical function performed over retrieved information. For that information, specify the numbers of the retrieval reference codes in the parameter fields. For example, if the calculation relates to retrieval reference code numbers 7 and 10, you would specify &amp;7 in parameter 1 and &amp;10 in parameter 2. You can also specify other numeric values involved in the calculation, such as -1, .10, or 100.</td>
</tr>
<tr>
<td>RETRIEVAL CODE and SOURCE TABLE</td>
<td>PARAMETER</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>NOTES</td>
<td>1</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer. Do not specify data items for this parameter because only the text can be retrieved.</td>
</tr>
<tr>
<td>Generic Text (F0016)</td>
<td>2</td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td>PAGE</td>
<td>N/A</td>
<td>This retrieval code lets you print the page number on the invoice. No parameters are applicable to this code.</td>
</tr>
<tr>
<td>PAGE OF</td>
<td>N/A</td>
<td>This retrieval code lets you print the page number and the total page count, such as page 3 of 4 pages. No parameters are applicable to this code.</td>
</tr>
<tr>
<td>PAY ITEM</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F5202 table.</td>
</tr>
<tr>
<td>Contract Billing Line Detail (F5202)</td>
<td></td>
<td>The data item related to the information you want to retrieve from the F069116 table.</td>
</tr>
<tr>
<td>PHONE NO</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0115 table.</td>
</tr>
<tr>
<td>Address Book - Contact Phone Number (F0115)</td>
<td>2</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer.</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td>SUBTRACT</td>
<td>1-4</td>
<td>A mathematical function performed over retrieved information. For that information, specify the numbers of the retrieval reference codes in the parameter fields. For example, if the calculation relates to retrieval reference code numbers 7 and 10, you would specify &amp;7 in parameter 1 and &amp;10 in parameter 2. You can also specify other numeric values involved in the calculation, such as -1, .10, or 100.</td>
</tr>
<tr>
<td>SUMMARY</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F4822 workfile.</td>
</tr>
<tr>
<td>Invoice Summary Workfile (F4822)</td>
<td></td>
<td>The data item related to the information you want to retrieve from the F0401 table.</td>
</tr>
<tr>
<td>RETRIEVAL CODE and SOURCE TABLE</td>
<td>PARAMETER</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>(F0401)</td>
<td>2</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td>TERMS Payment Terms (F0014)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0014 table.</td>
</tr>
<tr>
<td>TIME No source table</td>
<td>N/A</td>
<td>This retrieval code lets you print the system time on the invoice. No parameters are applicable to this code.</td>
</tr>
<tr>
<td>TOTAL No source table</td>
<td>1</td>
<td>A register number related to a rolling total amount from any format definition connected to the format layout.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Determines whether the register in parameter 1 is reset to zero after it has been totaled. When the register is reset, the subsequent total does not include the prior total.</td>
</tr>
<tr>
<td>WHOS WHO Address Book - Who's Who (F0111)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F0111 table.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Determines the address number for the information to be printed. For example, you could specify the address number for the company or job customer.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Determines the address number for the alternate address information, such as the alternate billing number or parent number.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>The line number related to the information you want to retrieve. The number, which is automatically assigned by the system, is not displayed on any form, but is kept in the Who's Who Line field of the F0111 table. The primary mailing name is line number 0, and other names related to an address are greater than zero. These numbers begin with 1 and are incremental. Caution: If you delete a name on the Who's Who form, the remaining names keep the original line numbers. The line numbers, therefore, would not correlate with the new sequence of names as it appears on the Who's Who form.</td>
</tr>
<tr>
<td>WO Work Order Master (F4801)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F4801 table.</td>
</tr>
<tr>
<td>RETRIEVAL CODE and SOURCE TABLE</td>
<td>PARAMETER</td>
<td>EXPLANATION</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>WO TEXT Work Order Instructions (F4802)</td>
<td>1</td>
<td>The record type for work orders related to the text you want to retrieve from the F4802 table.</td>
</tr>
<tr>
<td>WORKFILE Billing Workfile (F4812)</td>
<td>1</td>
<td>The data item related to the information you want to retrieve from the F4812 workfile.</td>
</tr>
</tbody>
</table>
Appendix E - Field Derivations for the 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.

- 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 Item Master
- F4111 Item Ledger
- F4311 Purchase Order Detail
- F4801 Work Order Master
- F48091 Billing System Constants
- F48096 Cost Plus Markup Information
- F4812 Billing Workfile
- F48127 Tax Derivation Information
- F5201 Contract Billing Master
- F5202 Contract Billing Line Detail
- F5212 T&M Cross-Reference Accounts
<table>
<thead>
<tr>
<th>F4812 DATA ITEM</th>
<th>CONDITIONS and RETRIEVAL INFORMATION</th>
<th>DATA ITEM / SOURCE TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDAA (Amount)</td>
<td>Default</td>
<td>GLAA / F0911</td>
</tr>
<tr>
<td></td>
<td>GLDCT (Document Type) field in the F0911 record contains T2.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GLDCT field in the F0911 record contains T2. The transaction relates to a burden reconciliation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GLDCT field in the F0911 record contains T4.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GLDCT field in the F0911 record contains T5.</td>
<td></td>
</tr>
<tr>
<td>WDAA2 (Amount)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDACL0 (Rate Group)</td>
<td>GLASID (Serial Number) field in the F0911 record is not blank.</td>
<td>FAACL0 / F1201</td>
</tr>
<tr>
<td>WDADCI (Invoice Markup Amount)</td>
<td>WQGTYP (Generation Type) field in the F48096 record contains 1.</td>
<td>WQAA (Amount) / F48096</td>
</tr>
<tr>
<td>WDADCR (Revenue Markup)</td>
<td>WQGTYP (Generation Type) field in the F48096 record contains 2.</td>
<td>WQAA (Amount) / F48096</td>
</tr>
<tr>
<td>WDAGS (Suspend Aging)</td>
<td></td>
<td>WDAGS</td>
</tr>
<tr>
<td>WDAID (Account ID)</td>
<td>Default. The billing transaction is for burden.</td>
<td>GLAID / F0911</td>
</tr>
<tr>
<td>WDAID5 (Account ID)</td>
<td>Contract Billing. G6ACC (Account Override Flag) field in the F5202 record is blank.</td>
<td>G6MCU, G6OBJ, and G6SUB (Business Unit, Object, and Subsidiary) / F5202</td>
</tr>
<tr>
<td>WDAID6 (Account ID)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDAN8 (Address Number)</td>
<td>Default. GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.</td>
<td>YTAN8 / F0618 or F06116</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>WDAN80</td>
<td>Default GLMCU (Business Unit) field in the F0911 record.</td>
<td>MCAN80 for the related business unit / F0006</td>
</tr>
<tr>
<td></td>
<td>GLSBL (Subledger) field in the F0911 record is not blank.</td>
<td>WAAN8 (Address Number) for the related subledger / F4801</td>
</tr>
<tr>
<td></td>
<td>GLSBLT (Subledger Type) field in the F0911 record contains W.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WZCNBS (Customer Number Basis) field in the F48091 record contains 1.</td>
<td></td>
</tr>
<tr>
<td>WDAREX</td>
<td>Contract Billing.</td>
<td>G4AN80 / F5201</td>
</tr>
<tr>
<td>WDARC</td>
<td></td>
<td>WDAREX / F4812</td>
</tr>
<tr>
<td>WDBCI</td>
<td></td>
<td>Automatically assigned with the Next Numbers facility (system 48. index 02)</td>
</tr>
<tr>
<td>WDBDPN</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDBLK</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDBRT</td>
<td></td>
<td>Automatically calculated</td>
</tr>
<tr>
<td>WDBRTI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDBTOL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCAP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCAPI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCBLC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCCOD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCCR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Appendix E - Field Derivations for the F4812
<table>
<thead>
<tr>
<th>F4812 DATA ITEM</th>
<th>CONDITIONS and RETRIEVAL INFORMATION</th>
<th>DATA ITEM / SOURCE TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDCIDS</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>(Foreign Invoice Discount)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCINR</td>
<td>WQCINR field in the F48096 record is not blank.</td>
<td>WQCINR / F48096</td>
</tr>
<tr>
<td>(Component Invoice Rate Table)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCITA</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>(Foreign Invoice Taxable Amount)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCITL</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>(Foreign Invoice Amount)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCITX</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>(Foreign Invoice Tax)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCCLNK</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Component Link)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCO</td>
<td>GLCO / F0911</td>
<td></td>
</tr>
<tr>
<td>(Company)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCOCH</td>
<td>Contract Billing.</td>
<td>G5COCH / F5212</td>
</tr>
<tr>
<td>(Contract Change Order Number)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCRCRD</td>
<td>GLCO (Company) field in the F0911 record.</td>
<td>CCRCD related to the company / F0010</td>
</tr>
<tr>
<td>(Currency Code)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCRCF</td>
<td>This field is currently not active.</td>
<td>Billing Currency</td>
</tr>
<tr>
<td>(Currency Code)</td>
<td></td>
<td>CRCD/F0301, CRCF/F5202</td>
</tr>
<tr>
<td>WDCRRC</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Exchange Rate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCRRD</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Exchange Rate - Divisor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCRRM</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Mode F)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCRVR</td>
<td>WQGTY (Generation Type) field in the F48096 record contains 2.</td>
<td>WQCRVR / F48096</td>
</tr>
<tr>
<td>(Component Revenue Rate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDCTRY</td>
<td>GLCTRY / F0911</td>
<td></td>
</tr>
<tr>
<td>(Century)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>F4812 DATA ITEM</strong></td>
<td><strong>CONDITIONS and RETRIEVAL INFORMATION</strong></td>
<td><strong>DATA ITEM / SOURCE TABLE</strong></td>
</tr>
<tr>
<td>-------------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>WDDAGO</td>
<td>(Age Override Date - B)</td>
<td>WDDAGO</td>
</tr>
<tr>
<td>WDDC</td>
<td>(Description -Compr)</td>
<td>ABDC / F0101</td>
</tr>
<tr>
<td>WDDCP</td>
<td>(Discount Percent)</td>
<td>PMDCP / F0014</td>
</tr>
<tr>
<td>WDDCT</td>
<td>(Document Type)</td>
<td>GLDCT / F0911</td>
</tr>
<tr>
<td>WDDCTI</td>
<td>(Document Type)</td>
<td>Processing option for the Invoice Generation program (P52800)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Processing option for the Invoice Generation program (P48121)</td>
</tr>
<tr>
<td>WDDCTO</td>
<td>(Order Type)</td>
<td>G5DCTO / F5212</td>
</tr>
<tr>
<td>WDDEJ</td>
<td>(Date Entered)</td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDDGJ</td>
<td>(G/L Date)</td>
<td>GLDGJ (G/L Date) / F0911</td>
</tr>
<tr>
<td>WDDGL</td>
<td>(G/L Date)</td>
<td>GLDOC / F0911</td>
</tr>
<tr>
<td>WDDI</td>
<td>(Invoice Date)</td>
<td>RPDGJ (G/L Date) / F0411 or RPDIVJ (Invoice Date) / F0411</td>
</tr>
<tr>
<td>WDDOC</td>
<td>(Document Number)</td>
<td>GLDOC / F0911</td>
</tr>
<tr>
<td>WDDOCM</td>
<td>(Payment/ Item Number)</td>
<td>This field is currently not active.</td>
</tr>
<tr>
<td>WDDOCO</td>
<td>(Order Number)</td>
<td>G5DOCO / F5212</td>
</tr>
<tr>
<td>WDDOCZ</td>
<td>(Order Number)</td>
<td>Automatically assigned with the Next Numbers facility (system 03- index 01)</td>
</tr>
<tr>
<td>Field Derivations for the F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>--------------------------------------</td>
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</tr>
<tr>
<td><strong>F4812 DATA ITEM</strong></td>
<td><strong>CONDITIONS and RETRIEVAL INFORMATION</strong></td>
<td><strong>DATA ITEM / SOURCE TABLE</strong></td>
</tr>
<tr>
<td>GLICUT field contains V.</td>
<td>RPDSVJ / F0411</td>
<td></td>
</tr>
<tr>
<td>GLDSVJ and RPDSVJ fields are blank.</td>
<td>ILTRDJ (Order Date) / F4111</td>
<td></td>
</tr>
<tr>
<td>GLICUT field contains O.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The F4111LC file exists.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDDWNL (Download Flag)</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>WZEBAS field in the F48091 record contains 1.</td>
<td>GLDGL (G/L Date) / F0911</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>WZEBAS field contains 2.</td>
<td>GLDSVJ (Service/Tax Date) / F0911</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>Default.</td>
<td>GMBILL (Billable - Y/N) / F0901</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>GLMCU, GLOBJ, and GLSUB (Business Unit, Object Account, and Subsidiary) fields in the F0911 record.</td>
<td>GMBILL / F0901</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>Burden.</td>
<td>GMBILL / F0901</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>J#MCU, J#OBJ, and J#SUB (Business Unit, Object Account, and Subsidiary) fields in the F0624 record.</td>
<td>GMBILL / F0901</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>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.</td>
<td>GMBILL / F0901</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>WZPRRR field contains 3 or 4.</td>
<td>GMBILL / F0901</td>
</tr>
<tr>
<td>WDEBAS (Date -Effectivity Basis)</td>
<td>WZPRRR field in the F48091 record does not contain 3 or 4.</td>
<td>WZPRRR / F48091</td>
</tr>
<tr>
<td>WDEQCG (Equipment Worked)</td>
<td>GLDCT (Document Type) field in the F0911 record contains TE.</td>
<td>GLASID (Serial Number) / F0911</td>
</tr>
<tr>
<td>WDEQCG (Equipment Worked)</td>
<td>GLDCT field contains T5.</td>
<td>YTEQCG / F0618 or F06116</td>
</tr>
<tr>
<td>WDEQCG (Equipment Worked)</td>
<td>GLDCT field does not contain TE, T2, T4, or T5.</td>
<td>Blank</td>
</tr>
<tr>
<td>WDEQCG (Equipment Worked)</td>
<td>GLDCT field contains TE.</td>
<td>Blank</td>
</tr>
<tr>
<td>WDEQCG (Equipment Worked)</td>
<td>GLDCT field contains T5.</td>
<td>YTEQWO / F0618 or F06116</td>
</tr>
<tr>
<td>WDEQCG (Equipment Worked)</td>
<td>GLDCT field does not contain TE, T2, T4, or T5.</td>
<td>GLASID (Serial Number) / F0911</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>WDERC (Equipment Rate Code)</td>
<td>GLDCT field contains TE. GLDCT field contains T5. GLDCT field does not contain TE, T2, T4, or T5.</td>
<td>GLALTY (ID Type) / F0911 YTERC / F0618 or F06116 Blank</td>
</tr>
<tr>
<td>WDEXA (Explanation - Name A)</td>
<td>Default. GLDCT field contains T2, T4, or T5. YTAN8 (Address Number) field in either the F0618 or F06116 record.</td>
<td>ABALPH (Alpha Name) / F0101</td>
</tr>
<tr>
<td>WDEXR (Explanation - Remark)</td>
<td>WQEXR field in the F48096 record is blank. GLDCT field does not contain T2, T4, or T5. WQEXR field in the F48096 record is blank. GLDCT field contains T2, T4, or T5. WQEXR field in the F48096 record is not blank.</td>
<td>GLEXR / F0911 YTEXR / F0618 or F06116 WQEXR / F48096</td>
</tr>
<tr>
<td>WDFRTN (Foreign Retainage)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDFTOTL (Foreign Total Billed)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDFY (Fiscal Year)</td>
<td></td>
<td>GLFY / F0911</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>WDGLC (G/L Offset)</td>
<td>GLHMCU is blank. GLDCT (Document Type) field in the F0911 record does not contain T2, T4, or T5.</td>
<td>GLHMCU / F0911</td>
</tr>
<tr>
<td>WDHDCB (Hold Contract Billing)</td>
<td>GLMCU field is blank. GLASID (Serial Number) field in the F0911 record.</td>
<td>FAMCU (Business Unit) related to the serial number / F1201</td>
</tr>
<tr>
<td>WDHLD (Hold Code)</td>
<td>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.</td>
<td>ILMCU / F4111</td>
</tr>
<tr>
<td>WDHMCU (Home Business Unit)</td>
<td>GLHMCU is blank. GLICUT field contains either V or W. GLDOC, GLDCT, and GLKCO fields.</td>
<td>RPMCU / F0411</td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td>PDMCU / F4311</td>
</tr>
<tr>
<td></td>
<td>GLHMCU is blank. GLICUT field contains G. GLMCU in the F0911 record.</td>
<td>MCMCUS (Project Number) / F0006</td>
</tr>
<tr>
<td></td>
<td>GLDCT contains T2, T4, or T5.</td>
<td>YTHMCU / F0618 or F06116</td>
</tr>
</tbody>
</table>
## Appendix E - Field Derivations for the F4812

### F4812 DATA ITEM CONDITIONS and RETRIEVAL INFORMATION

<table>
<thead>
<tr>
<th>F4812 DATA ITEM</th>
<th>CONDITIONS and RETRIEVAL INFORMATION</th>
<th>DATA ITEM / SOURCE TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDICU</td>
<td>Automatically assigned with the Next Numbers facility (system 00. index 01)</td>
<td></td>
</tr>
<tr>
<td>(Batch Number)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDICUA</td>
<td>Automatically assigned with the Next Numbers facility (system 00. index 01)</td>
<td></td>
</tr>
<tr>
<td>(Active Batch Number)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDICUJ</td>
<td>Automatically assigned with the Next Numbers facility (system 00. index 01)</td>
<td></td>
</tr>
<tr>
<td>(Revenue Batch Number)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDIDSC</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Invoice Discount Amt)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDIJST</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Invoice Journal Status)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDITAM</td>
<td>Automatically calculated</td>
<td></td>
</tr>
<tr>
<td>(Invoice Tax)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDITOL</td>
<td>Automatically calculated</td>
<td></td>
</tr>
<tr>
<td>(Total Invoiced Amount)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDITXA</td>
<td>Automatically calculated</td>
<td></td>
</tr>
<tr>
<td>(Invoice Taxable Amount)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDIVD</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>(Invoice Date)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDJBCD</td>
<td>GLDCT (Document Type) field in the F0911 record does not contain T2, T4, or T5.</td>
<td>GLJBCD / F0911</td>
</tr>
<tr>
<td>(Job Type)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDJBST</td>
<td>GLDCT field contains T2, T4, or T5.</td>
<td>YTJBCD / F0618 or F06116</td>
</tr>
<tr>
<td>(Job Step)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDJELN</td>
<td>GLDCT field does not contain T2, T4, or T5.</td>
<td>GLJELN / F0911</td>
</tr>
<tr>
<td>(Journal Entry Line Number)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WDJMCU</td>
<td>Default.</td>
<td>MCMCUS (Project Number) / F0006</td>
</tr>
<tr>
<td>(Host Business Unit)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Appendix E - Field Derivations for the F4812

#### F4812 DATA ITEM | CONDITIONS and RETRIEVAL INFORMATION | DATA ITEM / SOURCE TABLE
--- | --- | ---
**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.  
A contract does not exist.  
WDJOBN  
(Workstation ID)  
**Job name from the program status data structure**
WDJRSP  
(Journal Status Code)  
**Automatically assigned**
WDJRST  
(Journal Status Code)  
**Automatically assigned**
WDJTXF  
(Journaled Tax)  
**This field is currently not active.**
WDKCO  
(Document Company)  
GLKCO / F0911
WDKCOI  
(Document Company)  
Contract Billing.  
G5KCOO / F5212
WDKCOO  
(Order Number Document Company)  
Contract Billing.  
Service Billing.  
G5KCOO / F5212  
GLCO / F0911
WDLBAS  
(Date - Labor Effectivity Basis)  
WZLBAS field in the F48091 record contains 1.  
YTDGL (G/L Date) / F0618 or F06116
GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.  
WZLBAS field contains either 2 or 3.  
GLDCT field contains T2, T4, or T5.  
YTDWK (Work Date) / F0618 or F06116
WZLBAS field contains 4.  
GLDCT field contains T2, T4, or T5.  
YTPPED (Pay Period Ending Date) / F0618 or F061l6
WDLNID  
(Line Number)  
Contract Billing.  
G5LNID / F5212
### F4812 DATA ITEM CONDITIONS and RETRIEVAL INFORMATION

<table>
<thead>
<tr>
<th>F4812 DATA ITEM</th>
<th>CONDITIONS and RETRIEVAL INFORMATION</th>
<th>DATA ITEM / SOURCE TABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WDLSPM (Pament Completed)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDLSSQ (Last Sequence)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDLT (Ledger Type)</td>
<td></td>
<td>GLLT / F0911</td>
</tr>
<tr>
<td>WDMCU (Business Unit)</td>
<td>Default.</td>
<td>GLMCU / F0911</td>
</tr>
<tr>
<td>WDOBJ (Object Account)</td>
<td>Burden.</td>
<td>J#MCU / F0624</td>
</tr>
<tr>
<td>WDODCT (Original Document Type)</td>
<td></td>
<td>GLODCT / F0911</td>
</tr>
<tr>
<td>WDODOC (Original Document Number)</td>
<td></td>
<td>GLODOC / F0911</td>
</tr>
<tr>
<td>WDOGNO (Original Line Number)</td>
<td></td>
<td>GLLNID (Line Number) / F0911</td>
</tr>
<tr>
<td>WDOKCO (Original Order Document)</td>
<td></td>
<td>GLOKCO / F0911</td>
</tr>
<tr>
<td>WDOPSQ (Operations Sequence)</td>
<td></td>
<td>GLOPSQ / F0911</td>
</tr>
<tr>
<td>WDOFSX (Original Pay Item)</td>
<td></td>
<td>GLOSFX / F0911</td>
</tr>
<tr>
<td>WDPCFG (Burden Flag)</td>
<td>Default.</td>
<td>Blank</td>
</tr>
<tr>
<td></td>
<td>Burden records exist in F0624 table.</td>
<td>Automatically assigned 1</td>
</tr>
<tr>
<td>WDPCIM (Percentage)</td>
<td>Generation type is 1.</td>
<td>WQPERT (Percentage) / F48096</td>
</tr>
<tr>
<td>WDPCKO (Document Company)</td>
<td></td>
<td>GLPKCO (Purchase Order Document Company) / F0911</td>
</tr>
<tr>
<td>WDPCTN (Parent Contract Number)</td>
<td></td>
<td>G4PCTN / F5201</td>
</tr>
<tr>
<td><strong>F4812 DATA ITEM</strong></td>
<td><strong>CONDITIONS and RETRIEVAL INFORMATION</strong></td>
<td><strong>DATA ITEM / SOURCE TABLE</strong></td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>WDPCTT (Parent Contract Type)</td>
<td></td>
<td>G4PCTT / F5201</td>
</tr>
<tr>
<td>WDPDBA (PDBA Code)</td>
<td>Default. Blank</td>
<td>YTPDBA / F0618 or F06116</td>
</tr>
<tr>
<td>WDPDCT (Purchase Order Document)</td>
<td>GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5. Burden.</td>
<td>J#PDBA / F0624</td>
</tr>
<tr>
<td>WDPERT (Percentage)</td>
<td>Generation type is 2.</td>
<td>WQPERT (Percentage) / F48096</td>
</tr>
<tr>
<td>WDPID (Program ID)</td>
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<td>Program name from the program status data structure</td>
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<tr>
<td>WDPKCO (Purchase Order Document Company)</td>
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<td>GLPKCO / F0911</td>
</tr>
<tr>
<td>WDPMSQ (Payment Sequence Number)</td>
<td>This field is currently not active.</td>
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</tr>
<tr>
<td>WDPN (G/L Period Number)</td>
<td></td>
<td>GLPN / F0911</td>
</tr>
<tr>
<td>WDPO (P.O. Number)</td>
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<td>GLPO / F0911</td>
</tr>
<tr>
<td>WDPRET (Percent Retainage)</td>
<td>This field is currently not active.</td>
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</tr>
<tr>
<td>WDPRIC (Unit Price)</td>
<td></td>
<td>Automatically calculated</td>
</tr>
<tr>
<td>WDPRSQ (Parent Sequence Number)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDPRTF (Printed Flag)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDPRTF (Transaction Number)</td>
<td>GLDCT (Document Type) field in the F0911 record contains T2, T4, or T5.</td>
<td>YTPRTR / F0618 or F06116</td>
</tr>
<tr>
<td>WDPSFX (Purchase Order Suffix)</td>
<td></td>
<td>GLPSFX / F0911</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>WDPTAX (Tax Type)</td>
<td>Default. Blank</td>
<td>J#PTAX / F0624</td>
</tr>
<tr>
<td>WDPTFG (Pass-Through Invoicing)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDRDJ (Release Date)</td>
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<td>WDRDJ</td>
</tr>
<tr>
<td>WDRGLC (Retention G/L Offset)</td>
<td></td>
<td>WIRGLC / F48128</td>
</tr>
<tr>
<td>WDRP11 (Category Code Oil)</td>
<td>WDHMCU (Home Business Unit) field in the F4812 record. MCRP11 / F0006</td>
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</tr>
<tr>
<td>WDRP12 (Category Code 012)</td>
<td>WDHMCU (Home Business Unit) field in the F4812 record. MCRP12 / F0006</td>
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</tr>
<tr>
<td>WDRTNG (Retainage)</td>
<td>Automatically calculated</td>
<td></td>
</tr>
<tr>
<td>WDRTPS (Retainage -Prior -)</td>
<td>Automatically calculated</td>
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</tr>
<tr>
<td>WDR001 (Bill Item Code)</td>
<td>Default. GMR001 for the account number in the source transaction / F0901 Burden. GMR001 for the burden account number / F0901</td>
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</tr>
<tr>
<td>WDR002 (Category Code 002)</td>
<td>Default. GMR002 for the account number in the source transaction / F0901 Burden. GMR002 for the burden account number / F0901</td>
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</tr>
<tr>
<td>WDR003 (Location)</td>
<td>Default. GMR003 for the account number in the source transaction / F0901 Burden. GMR003 for the burden account number / F0901</td>
<td></td>
</tr>
<tr>
<td>WDSBAR (Reason Code)</td>
<td></td>
<td>WDSBAR</td>
</tr>
<tr>
<td>WDSBL (Subledger)</td>
<td></td>
<td>GLSBL / F0911</td>
</tr>
<tr>
<td>WDSBLT (Subledger Type)</td>
<td></td>
<td>GLSBLT / F0911</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>WDSBL5 (Subledger)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDSBL6 (Subledger)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDSBSK (Summarization Key)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDSBSQ (Sequence Number)</td>
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<td>Automatically assigned</td>
</tr>
<tr>
<td>WDSBT5 (Subledger Type)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDSBT6 (Subledger Type)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDSCSQ (Secondary Sequence Number)</td>
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</tr>
<tr>
<td>WDSFX (Pay Item)</td>
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<td>Automatically assigned</td>
</tr>
<tr>
<td>WDSLNK (Split Link)</td>
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<td>Automatically assigned</td>
</tr>
<tr>
<td>WDSTA1-WDSTA5 (Tax Authority Amount)</td>
<td>These fields are currently not active.</td>
<td>GLSUB / F0911</td>
</tr>
<tr>
<td>WDSUB (Subsidiary)</td>
<td>Default.</td>
<td>J#SUB / F0624</td>
</tr>
<tr>
<td>WDTBBDT (Table Basis Date)</td>
<td>WZEBAS (Date - Effectivity Basis) field in the F48091 record contains 1.</td>
<td>GLDGL (G/L Date) / F0911</td>
</tr>
<tr>
<td></td>
<td>WZEBAS field contains 2.</td>
<td>GLDSVJ (Service/Tax Date) / F0911</td>
</tr>
<tr>
<td>WDTCLS (Classification)</td>
<td>Components (provisional burdens)</td>
<td>Value is 0.</td>
</tr>
<tr>
<td></td>
<td>GLDCT (Document Type) field in the F0911 record contains either T2 or T4.</td>
<td>Value is 1.</td>
</tr>
<tr>
<td></td>
<td>Burden</td>
<td>Value is 2.</td>
</tr>
<tr>
<td></td>
<td>GLDCT field contains TE.</td>
<td>Value is 3.</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>GLDCT field does not contain T2, T4, or T5.</td>
<td>A) Related records exist in both F0911 and F1201 tables. Both records have the same serial number (GLASID and FAASID, respectively).</td>
<td>Value is 3.</td>
</tr>
<tr>
<td></td>
<td>B) 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.</td>
<td>Value is 4.</td>
</tr>
<tr>
<td></td>
<td>C) GLICUT field contains either V or W. GLDOC, GLDCT, and GLKCO fields in the F0911 record.</td>
<td>Value is 5.</td>
</tr>
<tr>
<td></td>
<td>D) GLICUT field contains G. A related record exists in F0006 table.</td>
<td>Value is 6.</td>
</tr>
<tr>
<td>None of the previous conditions are satisfied, and the GLPO (P.O. Number) field in the F0911 record is not blank.</td>
<td></td>
<td>Value is 5.</td>
</tr>
<tr>
<td>WDTOG (Taxable or Gross)</td>
<td>Contract Billing. F4812 record contains tax rate/area and explanation codes.</td>
<td>Value is 1.</td>
</tr>
<tr>
<td></td>
<td>Service Billing. F48127 record contains tax rate/area and explanation codes.</td>
<td>Value is 1.</td>
</tr>
<tr>
<td></td>
<td>Neither of the previous conditions exist.</td>
<td>Blank</td>
</tr>
<tr>
<td>WDTORG (Transaction Originator)</td>
<td>Automatically assigned</td>
<td></td>
</tr>
<tr>
<td>WDTX (Purchasing Taxable)</td>
<td>Contract Billing. F4812 record contains tax rate/area and explanation codes.</td>
<td>Value is Y.</td>
</tr>
<tr>
<td>F4812 DATA ITEM</td>
<td>CONDITIONS and RETRIEVAL INFORMATION</td>
<td>DATA ITEM / SOURCE TABLE</td>
</tr>
<tr>
<td>----------------</td>
<td>--------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td></td>
<td>Service Billing.</td>
<td>Value is Y.</td>
</tr>
<tr>
<td></td>
<td>F48127 record contains tax rate/area and explanation codes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Neither of the previous conditions exist.</td>
<td>Value is N.</td>
</tr>
<tr>
<td>WDTXA1 (Tax Rate/ Areas)</td>
<td>Contract Billing.</td>
<td>G4TXA1 / F5201</td>
</tr>
<tr>
<td>WDTYKY (Key Type)</td>
<td>Service Billing.</td>
<td>WOTXA1 / F48127</td>
</tr>
<tr>
<td>WDU (Units)</td>
<td>This field is currently not active.</td>
<td></td>
</tr>
<tr>
<td>WDUUM (Unit of Measure)</td>
<td>Default.</td>
<td>GLU / F0911</td>
</tr>
<tr>
<td></td>
<td>GLDCT (Document Type) field in the F0911 record contains either T2 or T4.</td>
<td>YTPHRW (Hours Worked) / F0618 or F06116</td>
</tr>
<tr>
<td></td>
<td>GLDCT field contains T5.</td>
<td>YTEQHR (Equipment Hours) / F0618orF06116</td>
</tr>
<tr>
<td>WDUUM (Unit of Measure)</td>
<td>Default.</td>
<td>GLUM / F0911</td>
</tr>
<tr>
<td></td>
<td>GLDCT field contains T2, T4, or T5.</td>
<td>Automatically assigned HR</td>
</tr>
<tr>
<td>WDUUPMJ (Date Updated)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDUUPMT (Time Last Updated)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDUUSER (User ID)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDVINV (Invoice Number)</td>
<td></td>
<td>GLVINV / F0911</td>
</tr>
<tr>
<td>WVOID (Void - V)</td>
<td></td>
<td>Automatically assigned</td>
</tr>
<tr>
<td>WDWR01 (Phase)</td>
<td></td>
<td>GLWR01 / F0911</td>
</tr>
<tr>
<td>WDWR07 (Service Type)</td>
<td>GLSBL (Subledger) field in the F0911 record is blank. GLSBLT (Subledger type) field contains W.</td>
<td>WAWR07 / F4801</td>
</tr>
</tbody>
</table>
Appendix F — Functional Servers

Several JD Edwards World programs access functional servers. The purpose of functional servers is to provide a central location for standard business rules about entering documents, such as vouchers, invoices, and journal entries. These business rules establish the following:

- Data dictionary default values
- Field edits and valid values
- Error processing
- Relationships between fields or applications

The advantages of a functional server are:

- It reduces maintenance of entry programs because edit rules reside in one central location.
- You can standardize documents across all applications because you create them using the same business rules.
- Generally, the user interface (appearance and interaction) of a form is now separate from how a program works.

The steps for setting up business rules for an entry program are:

1. Create a DREAM Writer version for a specific functional server program (for example, XT0411Z1 for voucher entry).
2. Set the processing options within the version according to your company requirements.
3. Specify the version you want the entry program to use in the processing options for that entry program.

You can have all your entry programs use the same DREAM Writer version (and thus, use the same rules) or you can set up different DREAM Writer versions. JD Edwards World provides DREAM Writer version ZJDE0001 as the default functional server version for your entry programs.

Caution: Only the person responsible for system-wide setup should make changes to the functional server version. For more information about how to set up DREAM Writer versions, see the Technical Foundation Guide.