Sessions 3-3, 3-4, and 3-5

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday, October 12</td>
<td>1:00 p.m. – 2:30 p.m.</td>
<td>Room 616A</td>
</tr>
<tr>
<td>Thursday, October 12</td>
<td>2:45 p.m. – 4:15 p.m.</td>
<td>Room 616A</td>
</tr>
<tr>
<td>Friday, October 13</td>
<td>8:30 a.m. – 10:00 a.m.</td>
<td>Room 616A</td>
</tr>
</tbody>
</table>

Sage 300 CRE:  
Cost-Based Billing Setup and Workflow
CN, BL

Presented By:  
Kyle Zeigler  
Ledgerwood Associates, Inc.

Credits/Revision History
- Original Author(s): Lenni Witt, Aronson LLC/Tanya Severns
- Revised Date: 2014, 2016, 2017
- Major Revisions Include: None
These sessions will address contract setup for Cost (T&M) based contracts and address workflow processing for Cost Based Contracts (T&M). Participants will learn:

- Setup option unique to Cost Based Contracts
- Setting up and utilizing Add-on tables
- Linking Contract Items to Cost Codes
- Setting up a contract using a standard contract
- Un-approving Contract Items
- Generate, modify, and print a T&M invoice.
- How transactions flow from the originating modules to Billing.
- Options and shortcuts for processing T&M invoices.
- The difference between Generate and Re-generate WIP
- Changes available to WIP, inserting WIP, and deleting WIP entries.

The main distinction between Contract Based and Cost Based contracts is the use of rate & markup tables to calculate markup on costs transactions for billing purposes. In the following section, we will discuss the setup and maintenance of these tables.

**Session 3-3**

**Cost Based Billing – Setup – Tables**

Tables are created in billing to establish the markups, rates and add-ons you use during invoicing. During Generate Work-In-Progress, records are created from the costs entered in Accounts Payable, Equipment Cost, Job Cost and Payroll. Billing tables are used to determine the rate or markup for each cost item. Generate Work-In-Progress looks at the contract item for the specified rate table.

You may have additional costs you want to bill at a flat amount, such as discounts or administrative fees, for both cost-based and contract-based invoices. Add-on tables are used to apply these additional fees during Generate Invoices.

**Add-on Table(s)** - An Add-on is a charge or deduction that modifies the invoice amounts based on a fixed amount or percentage. Add-ons can be specified for a section of the invoice (labor, material, subcontract, etc.) and/or the invoice total. For example, you can markup Labor by 10%, Materials by 5%, and subtract $200.00 from the total invoice amount. Add-ons are calculated during Generate Invoices. To use add-ons, you must
first create a standard add-on, then select it in an add-on table. The **Add-on table must be specified on the contract header record in the Contracts application.**

**Standard add-ons** - Are used to specify additional charges or deductions that you want to include on invoices. Charges and deductions can be percentages or flat amounts applied to the invoice total or to a specific section total (e.g., Labor, Materials, etc.). For example, you can markup Labor by 10%, Materials by 5%, and subtract $200.00 from the total invoice amount.

**Markup Tables** - Are used to calculate billing rates and amounts by applying percentage based markups to cost entries which are posted to Billing from other Sage 300 CRE applications. To use markups, you must first create a table which is used to calculate the billing rates and amounts during Generate Work-In-Progress. The **Markup table must also be specified on the contract item record in the Contracts application.**

**Rate Tables** - Are used to specify how individual cost items are priced. Rates are applied based on the cost type of the transaction posted to Billing from other Sage 300 CRE applications. The cost type is defined by the accumulate as value of the category or cost code of the item. To use rates, you must first create rate tables for each cost type for which you want to apply rates. The **rate table must be specified on the contract item record in the Contracts application.**

Note: A Rate or Markup Table must be present for all Cost Types if a Markup Table is present on the Contract. A Rate Table can be created that passes through the cost.

**Setting up Standard Add-ons**

From the Billing Module – Setup Standard Add-ons
Click the Add Record button.

Configure the Addon as shown. Let’s discuss options.

**Type** - Select the type of add-on this is. The options are:
- Charge - creates an invoice record which increases the amount of the invoice
- Deduction - creates an invoice record which decreases the amount of the invoice

**GL account** - Enter the GL credit account you want to use for this add-on. You can click the arrow on the right to select from a list of GL accounts. If you leave this blank, the account is retrieved from the contract item when an invoice using this add-on is posted. If you are using the Control Account Type feature in General Ledger, select a revenue control account, other control account or any non-control account from the list. This account stores the base and suffix account only.

**Exempt status** - Select the exempt status for this add-on. The status determines whether or not taxes are calculated for the add-on during Generate Invoices for both cost-based and contract-based billings. The exempt status is recognized only if the
Sessions 3-3, 3-4, and 3-5 Cost-Based Billing Setup and Workflow

below box titled "Exempt status to follow add-on" is marked. For Quick Bill invoicing, this exempt status always follows the add-on regardless of whether or not the Exempt status to follow add-on is marked. It is retrieved when a standard add-on is prefilled as a Quick Bill invoice item. You can modify or add items to this list in Custom Descriptions.

**Exempt status to follow add-on** - If you want the exempt status in the above field used to determine whether or not taxes are calculated for this add-on for cost-based or contract based billings, mark this box. If you want the exempt status from the contract item (Tax tab) in Contracts used instead, do not mark this box. For Quick Bill invoices, the exempt status from the standard add-on always follows the add-on regardless of whether or not the Exempt status to follow add-on is marked.

**Hold retainage** - To hold retainage on this standard add-on, mark this box.

Click to the Amount/Percent Tab and configure the add-on as shown

![Standard Add-on Setup](image)

**Basis** - Select the basis for calculating this standard add-on. The options are:
- Amount - allows you to enter an amount for this add-on.
- Percent - allows you to enter a percentage for this add-on.

Click Close when finished.
Setting up Standard Add-on Table

From the Setup Menu – Add On Tables

The above table represents a cumulative add-on. The amount of the charge will be calculated on the invoice total (Amount type.) Since the Add-on is cumulative, the effective percentage charged will be 18.80%. A non-cumulative Add-on would charge 18.00%.

**Amount Type(s)** - Add-on tables can contain multiple amount types. Select the type, set up the add-ons for the selected type, then select the next type you want to include, and so on. The cost-based invoice options are:

- **Labor** - selected standard add-ons are applied to the Labor amount.
- **Material** - selected standard add-ons are applied to the Material amount.
- **Subcontract** - selected standard add-ons are applied to the Subcontract amount.
- **Equipment** - selected standard add-ons are applied to the Equipment amount.
- **Overhead** -- selected standard add-ons are applied to the Overhead amount.
- **Other** -- selected standard add-ons applied to the Other amount.
- **Invoice total** -- selected standard add-ons are applied to the Invoice Totals amount.
If we forget to create Add-ons, we can create them from within the Add-on Table screen. The screens can be somewhat disorienting. It may take some time and experimentation to achieve your results. We will start by creating one additional add-on item. Click the Standard Add-ons button.

Click the Standard Add-ons button. Enter data the following fields on the General Tab:

- **Add-on ID**
- **Description**
- **Type**
  - Deduction will subtract amounts from an invoice.
  - Charge will add amounts to an invoice.
- **GL Account**
- **Exempt Status**
Click the Amount/percent Tab, and complete the following fields.

- **Basis**
  - Amount is a flat amount
  - Percent is a percentage of the total
Once the add-on setup, it can be added to a new add-on table. Click the new record button.

Complete the following fields:
- Table ID
- Description

Change the amount type drop down to Labor. Highlight the desired add-on (LaborBurd) and move it to the right side of the screen by clicking the center arrow button. Click Close when finished.
Change the amount type drop down to Material. Highlight the desired add-on (ExpAllow) and move it to the right side of the screen by clicking the center arrow button. Click Close when finished.

Click Close when finished. That will act as the save button.
Setting up Markup Tables

Used to set up standard markups for each type of cost. Each markup table can have up to five markups per cost type; Labor, Materials, Subcontract, Equipment, Overhead and Other. During Generate Work-In-Progress, the billing rate is determined by looking for a matching markup table and cost type on the contract item.

**Effective date** - Enter the date on which this markup table becomes effective. Until the effective date is current or past, the Generate Work-In-Progress command does not use this markup table. This is determined by comparing the transaction date to the effective date. You can click the arrow on the right to select from a list of existing effective dates for this cost type and Table.

**Through date** - Enter the date on which this markup table is no longer valid. This date ensures that the Generate Work-In-Progress command does not use this markup table after this date has passed by comparing the transaction date to this date. If this table is always valid, leave the Through date blank.

**Available markups** - Displays the list of markups that are available to add to the markup table. To add a markup to the markup table, highlight your selection, then click on the right. You can add up to five markups per cost type to the markup table. You can add or changed items in this list in Custom Lists.
Markups selected for - Displays the markups you have selected for this cost type. To remove a markup, highlight it, then click the arrow on the left.

Edit - Use to add or change the Entry line percentage or cumulate status of the current markup. Highlight the Markup to be changed, then click the Edit button.

To setup a Markup Table – From the Setup Menu select Markup Tables. Click the New record button.

Enter the Table ID & Description
Highlight the desired markup and click the Right arrow button.

Enter the markup percentage. Click OK. Click Close to Save & Exit.
### Setting up Rate Tables

Another distinction between Cost based and Contract based contracts is the creation of Work in Progress (WIP) transactions from cost transactions. Rate tables govern the markup of cost transactions that become WIP transactions. Rate tables can be very powerful and very frustrating. Error messages generated during WIP generation can be cryptic and vague. The following tips can mitigate the number of WIP rejects, reduce the number of redundant or inefficiently used rate tables and eliminate general clutter in the Billing system.

- Create the rate tables with as few key fields as necessary to markup the billing transactions. This will reduce the risk of tightly defined markups and reduce WIP rejects.
- Use the layering feature of rate tables (begin and end dates) in order to avoid redundant rates and the need to change them on each contract when rates change.
- Utilize naming conventions that are generic in nature, so rate tables can be used on more than one contract and for different customers if possible.

There are twenty six key columns available to use when setting up rate tables. They are listed below. With number of key columns available, there are very few scenarios that will present themselves in which a rate table cannot be structured to match the needs of the contract.

### Available Key Columns are:

<table>
<thead>
<tr>
<th>Contract item</th>
<th>Union Local</th>
<th>Fringe ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job</td>
<td>Union Class</td>
<td>Vendor</td>
</tr>
<tr>
<td>Extra</td>
<td>PR Misc 1</td>
<td>Vendor Type</td>
</tr>
<tr>
<td>Cost Code</td>
<td>PR Misc 2</td>
<td>Equipment</td>
</tr>
<tr>
<td>Category</td>
<td>Pay ID</td>
<td>Equipment Type</td>
</tr>
<tr>
<td>Employee</td>
<td>Pay Type</td>
<td>Standard Item</td>
</tr>
<tr>
<td>Certified Class</td>
<td>Shift</td>
<td>Standard Item Type</td>
</tr>
<tr>
<td>Department (PR Employee setup)</td>
<td>Work Date</td>
<td></td>
</tr>
<tr>
<td>Union</td>
<td>Weekday</td>
<td>Tax ID</td>
</tr>
</tbody>
</table>
To setup a rate table, from Billing – Setup – Rate Tables

Click the Add a Record button.

Select the Cost Type. This example will be a labor table. Assign a Table ID and Effective date.
Assign a description, select the key columns and field column to be used. In this example, we will use certified class and bill rate.

![Rate Table Setup](image)

Click the Table button. Enter the table of certified classes and related rates.

![Rate Table Detail](image)

The "***" is used a wildcard. In this scenario, any certified class not specified in the rate table will be generated into WIP with a rate of $1.00. In change WIP the rate can be manually adjusted, or the rate table can be updated with the missing certified class. A regeneration of WIP will correct the rate.
Another approach would be to let the non-conforming transaction reject in the new.blt file until such time the rate table is updated with the correct information. An exception report can detail the WIP rejects and keep users abreast of transactions that need attention.

Note: Entering a through date at this time is recommended. This assumes the contract rates have a through date. The reason for this is as follows. Sage 300 CRE will automatically begin rejecting transactions dated after the through date unless new rates are entered. If the effective date is left open ended, transactions will likely mark up with the old incorrect rates on transactions beyond the effective date. This will cause the user to have to perform labor corrections at a later date to resolve the situation.

Rate Table Scalability

When creating a rate table, the goal is to create it in such a manner so that it marks up the transactions in the manner that is required and rarely if ever requires modifications or changes to remain effective.

For example, if you include the employee ID in a rate table, then every time a new employee is hired, the rate table becomes out of date.

Conversely, if the rate table is setup using Certified Class, when the contract is setup, each rate specified in the contract, should be setup on the rate table. Unless the contract changes, the rate table should not become obsolete before the contract is completed.

Standard Items

Standard Items can be used in a variety of ways. They can be used as another layer of detail. For example: The contract may have cost code or contract item to capture travel. Standard Item can be used to provide granularity to the travel expenses. Stand Items can be setup for Hotel, Parking, Airfare, etc.

Another use for Standard Items can be used to charge billable items that are not triggered in the day to day transactional processing in Sage 300 CRE. Such items could include copies, blueprints, light inventory items, company owned equipment, etc.
Setting up a Standard Item

From Billing – Setup – Standard Items

Click the Add Record button to create a new Standard Item.

Assign an ID and click the Insert button.
Complete the fields as shown:

![Image of Standard Item Setup dialog box]

**Standard Item Type** – Can be customized in Custom Descriptions and used in Rate Tables

**Cost Type** – Will determine which cost type it is accumulated as and which rate table type will govern the markups.

**GL Account** – Used for revenue purposes

**Exempt Status** – Used for sales tax purposes

**Text** – Can be shown on invoice formats
Standard Item Setup

Unit Cost – used for costing in Job Cost only and will serve as the WIP cost.
Unit Price – will become the billing rate. Rate tables can override this amount.
Unit of Measure – Enter descriptive text for reporting and invoicing purposes.

Contracts – Linking Contract Items

View Job Links – Edit Link (Cost Code Linking)

Job Links (View menu) - Use this command to create and view links between contract items and associated jobs. The left window pane displays a tree diagram of each contract item and its links to a job, extra and/or cost code. Double click the contract item to display a job link. Double click the job to display the extra and/or cost code link.

Link (Edit menu) - Use to link a contract item to a job, extra, and/or cost code. The purpose of linking jobs to contract items is to send revenue information to the job or extra. Linking at the cost code level on a contract-based contract only establishes a relationship between Contracts and Job Cost for reporting purposes. Billing (invoice transactions) and schedule of value transactions are only sent to Job Cost at the Job & Extra level of detail. Therefore linking is required only if a reporting relationship is desired.
If you are processing cost-based invoices in Billing, it is important to link the contract item to a cost code(s) if the contract has more than one item. When costs are posted, the link ensures that costs are sent to the appropriate contract item for billing.

You may want to regularly review the Contract/Job Link report (Reports, List menu) after links are entered to check for any linking errors. Correcting linking errors before you start processing invoices and other transactions, prevents more difficult corrections later on.

Warning - If you are linking jobs to extras in Job Cost, include the extra in the link in Contracts as well. Otherwise, cost transactions from AP, EQ, PR, and JC will be sent to Billing without the correct contract and contract item.

An individual cost code cannot be linked to more than one contract item. A contract item, however, can be linked to more than one cost code (within the same job) by repeating the steps above for each additional cost code. You can unlink a cost code even after the contract item has been approved.

Linking can be accomplished at the rollup level of the cost code as an alternative to linking at the lowest level of detail. Once the rollup cost code is linked, any cost code rolling up to that cost code is automatically linked.

End of Session 3-3
Session 3-4
Setting up a Standard Contract (template)

Setting up a standard contract is done in the same manner as an active contract. The main difference is the level of detail assigned to a standard contract. Items such as location, customer billing references, and other items unique to a contract are generally not included.

From the Contracts Module – File – New Contract.

Set the type to Standard and assign a template ID. Click Ok when finished.

Complete as many fields on the each tab that will apply to each active contract setup using this template.
General Tab

- **Description** – Enter the contract description – 30 characters.
- **Contract Type** – Discussed in Appendix A
- **Custom key** - Discussed in Appendix A
- **Dates** – For references or billing purposes only. *(Not advised for Standard Contracts)*
  - Contract
  - Start Work
  - Complete Work
- **Project Location** – This text field can be used for invoicing or other reference purposes
- **Status** - Move the slider with the mouse to the appropriate status. After the contract has been Approved, it can be Billed. Proposed and Pending will allow WIP to be generated, but invoice can be generated. *(Leave at proposed for Standard Contract)*
Billing Tab

Billing frequency - Select the frequency with which this contract is billed. This setting can be used by Billing as a condition for automatic invoice creation. Side note – These are customizable and one Company changed the frequency to the Billing Clerks names. This will come in handy when processing WIP and printing invoices.

Billing location - Your selection specifies the billing contact for items being billed. If "Customer" is selected, the billing contact is the ID entered on the customer's Billing tab in the Accounts Receivable Customer Setup window. If "Item" is selected, the contact is the Billing Contact ID entered on the References tab of the item being billed. The Billing contact is part of the criteria that determines how invoices are grouped during Generate Invoices in Billing when the Billing location is "Item."

Billing worksheet view - Enter the name of the worksheet that will be used when this contract is billed. This item is not required if there are no items to be set up in the contract that have contract-based billing types: Lump Sum, Unit Price, and Progress Billing. If there will be any contract items with these billing types, you must enter a valid worksheet view or the Billing application will not be able to access this contract for billing. (Typically Not Used for a Cost Based Template – Not Required for Workflow)
Billing on hold - Mark this box if the entire contract's billing is to be placed on hold. Even if this box is unmarked, you can still mark individual contract items as being on hold for billing purposes. Marking this box does not prevent costs from being sent to Billing, although it does prevent them from being invoiced to the customer. The Billing application uses this setting to help determine if the contract can be billed. *(Not Advised for a Cost Based Template)*

State of, County of, Distribute To – Used for AIA G702 invoice formats. “State of” and “County of” can print on format invoices as well.

**Invoice Tab**

![Invoice Tab Screenshot]

**Source** - Use this field to select the origin of the draw ID created by Accounts Receivable and Billing. The options are:

- **Company** - The draw fields (text and number) on the Billing Settings, General tab is used as the source of the numbering.
- **Customer** - The draw fields (text and number) in Accounts Receivable Customer Setup (Billing tab) is used as the source of the numbering.
- **Contract** - The draw numbering is entered on this contract (Invoice tab).

This field is used by both Accounts Receivable and Billing when determining the next draw ID. This is the only place Billing looks for the draw ID location, however, Accounts Receivable looks in multiple places depending upon your AR Settings.
Print WIP description - Mark the boxes to specify which sections of this contract's invoices are to show descriptive text specific to that section. *This prints the cost transaction description from the originating application.*

**Checklist Tab**

![Checklist Tab Image]

All fields on this Tab are for references purposes only. Use as needed.
References Tab

- **References** – Can print on invoices produced by billing. These fields are user definable. See Appendix E in General Setup for setup and maintenance.

- **Contacts** – Can print on invoices produced by billing. The billing contact entered here together with the “Billing Location” set on the “Billing” tab of the contract header can control the printing of the billing contact name and address. The billing contact information is setup in AR – Setup – Contact. See Appendix E in General Setup for setup and maintenance.
Text Tab

- **Scope** – Can print on invoices produced by billing.
- **Terms** – A poorly labeled field. The terms are user definable in custom descriptions. Terms should be created for “Invoice Notes” to clearly indicate what text should print on an invoice.
Accounts Tab

Prefix - Enter the General Ledger account prefix default for accounts receivable, Retainage receivable, and revenue transactions created for this contract. See Append B for GL retrieval hierarchy.

Setup up Contract Items on Standard Contracts

To add a contract item, select Edit – Add Contract Item. – Remember to use leading zeros if number 1,2,3 etc. so that they print in order rather than 1,11,12,2,3,4 etc. Another idea that I personally use it the item number matches my cost code numbers, just like my contract number matches my job number and extra when applicable.
### Contract Item – General

<table>
<thead>
<tr>
<th>Field</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
<td>Enter the contract description here.</td>
</tr>
<tr>
<td><strong>Customer</strong></td>
<td>Enter the ID of the customer or owner of this item. The customer is part of the criteria that</td>
</tr>
<tr>
<td></td>
<td>determines how invoices are grouped during Generate Invoices in Billing.</td>
</tr>
<tr>
<td><strong>Dates</strong></td>
<td>The date fields are for reference purposes only. Enter them per your own needs and requirements</td>
</tr>
<tr>
<td><strong>Job</strong></td>
<td>(Not available on Standard Contracts)</td>
</tr>
<tr>
<td><strong>Extra</strong></td>
<td>(Not available on Standard Contracts)</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td>(leave at proposed for Standard Contracts)</td>
</tr>
</tbody>
</table>
Contract Item – Billing

- **Billing Types** – Select Time & Material or Cost Plus to Maximum.
- **Format** - Enter the invoice format to be used when this contract item is billed. If you select a format different from the format selected for another item in this contract, the two items cannot be billed on the same invoice. (Invoice Formats may be previewed and created in Billing – Tools – Invoice Formats.)
- **Retainage percent** - Enter the percentage of the billed amounts associated with this contract item that can be retained by customer.
- **Misc 1 and Misc 2** – Used for reference purposes only. These fields can be easily added to invoice formats.
- **Billing on-hold** – (Leave Blank for Standard Contracts)
- **Send cost to Billing** - Mark this box to indicate that costs associated with this contract item are to be sent to Billing. Marking this box does not guarantee that all associated costs will be billed; it merely specifies that they are eligible for billing. Refer to the Concepts and terms topic Send cost to Billing rules for a detailed explanation of how costs are selected to be billed. This box is automatically marked if you select a cost-based Billing type (Time & Materials or Cost Plus to Maximum). You can always unmark the box if you don’t want these costs to be billed.
• **Type of salary cost** - This item is available only if the Send cost to Billing box is marked. Select how Payroll is to calculate and bill salary costs associated with this contract item. This only applies to salaried employees.
  o Example: Employee A earns $1,000 per week based on a 40 hours work week. Therefore, this employee’s hourly rate is $25. If the employee works 50 hours during the week, the effective hourly rate adjusts to $20 per hour.
    ▪ Actual = $20
    ▪ Normal = $25

• **Bill commitments** - This item is available only if the Send cost to Billing box is marked. Check this box if commitment items associated with this contract are to have their costs billed when they are committed. Marking this box does not guarantee that all associated costs will be billed; it merely specifies that they are eligible for billing. Leaving this box unmarked specifies that costs are to be examined for billing when the Accounts Payable invoice for the commitment is posted.

• **Markup table** - This item is available only if the Send cost to Billing box is marked. Enter the name of the appropriate markup table to be used when costs associated with this contract item are to be marked up by the Billing application. Keep in mind that only those costs with a cost type specified in the selected markup table will be included in the calculation.

• **Rate table** - This group of items is available only if the Send cost to Billing box is marked. Select the appropriate rate table for each applicable cost type in this group. The Billing application will then apply the selected rate to each cost transaction that is associated with this contract item and sent to Billing.

**Contract Item – Contract (Not advised for Standard Contracts)**

**Original contract** - This group of amounts determines and displays the contract item’s contract amounts by amount type and includes a total. The following options are available:
  • Enter each amount type amount (up to 10.2 digits). The Total line, then, is the total of the six amount types. Using this option disables the fields in the Units group at the right.
  • Enter the total for this item on the Total line. This disables the amount type lines and the Units group of fields.
  • Enter the Units contracted and Unit price in the Units group at the right. This will disable the amount type lines in this Original contract group. The Total line, then, is the product of units times price.
  • Set up a contract item with no contractual amount by leaving amount types and the total at zero.
Stored materials – Contract item - (Not advised for Standard Contracts)

**Contract Item - Checklist, References and Text** - tabs work in the same manner as their counterparts on the main Contract.

**Contract Item – Accounts**

**GL Prefix** - Enter the General Ledger account prefix default for accounts receivable, retainage receivable, and revenue transactions created for this contract item. When combined with the base accounts, they form the full accounts for accounts receivable, retainage receivable, and revenue transactions. These transactions are created when the Accounts Receivable application posts.

**AR Account** - Enter the default base account number for Accounts Receivable to be used when a General Ledger transaction associated with this contract item requires it. If left blank, the Accounts Receivable field from AR Settings, GL Settings, Balance Sheet Accounts is used.
Retainage AR Account - Enter the default base account number for Accounts Receivable Retainage.

Revenue Account - Enter the default base account number for revenue to be used when a General Ledger transaction associated with this contract item requires it. If left blank, the Revenue field from AR Settings, GL Settings, Revenue Accounts is used.

Revenue exceptions - If the default Revenue account is too broad for every type of contract revenue, you can further distribute the revenue among several accounts based upon the type of expense incurred. The types are: Labor, Material, Subcontract, Equipment, Overhead, and Other. Revenue exception accounts are used in the Accounts Receivable application for both cost-based and contract-based invoices. In the Billing application, they are used for cost-based invoicing, but not for contract-based invoicing (Enter Worksheets).

Contract Item – Tax

Tax exempt status - Enter the tax exempt status for each amount type for this contract item. You can select "Non-Taxable" to exempt the amount type from taxation. When you choose "Taxable", tax amounts are calculated.
In Accounts Receivable, this tax exempt status is retrieved when entering invoices.

In Billing, this tax exempt status is retrieved when generating cost-based invoices and when entering worksheets for contract-based invoices. For contract-based billing, the tax exempt status is retrieved from the Total billed amount type.

**Tax group** - Enter the tax group for each amount type for this contract item. Tax groups are set up in the Accounts Receivable application (Setup menu, Taxes).

If you have linked this contract item to a job before accessing the Tax tab, the tax group from the job will_prefill_for the Total billed tax group, and can be changed. This tax group is retrieved and used for calculating taxes when entering invoices in Accounts Receivable.

In Billing, this tax group is retrieved when generating cost-based invoices and when entering worksheets for contract-based invoices. For contract-based billing, the tax group is retrieved from the Total billed amount type.

**Setting up a Cost Based Contract (T&M) Using a Standard Contract**

From the Contracts Module – File – New Contract.

Change the Type to Active, enter the new contract number, and highlight the template (standard contract) to use as the basis of the new contract.

Click Ok when finished.
The template will serve as the basis for many of the fields that are needed to setup the contract for billing and tracking purposes.

The highlighted fields are typically the only fields that will require attention or updating. Update the information as necessary.
After completing the setup of the Contract level, select a Contract item for updating.
Adjust pricing if necessary.
When you are done you can Approve either by item or at the contract level.

This will release the item (or contract) to billing for processing.
Contracts – Unapproving Contract Items

Use the Unapprove Contract Items command (Tasks menu) to change the status of a contract item(s) from Approved, Closed, or Paid in full back to Proposed. During this process, a reversing entry for the Original Contract amount is created for Job Cost. Unapproving a contract item allows you to access the contract item's job links and original contract amount fields to make changes. This may be helpful when:

• A job or extra is not linked to a contract item.
• The wrong job or extra is linked to a contract item.
• An original contract item amount is not entered.
• The wrong original contract item amount is entered.
• Allows you to delete contract items.

Notes: Approved contract items can be unapproved only if they meet specific conditions.

You must process any unposted transactions in Accounts Receivable, Billing, Contracts and Job Cost before unapproving. Check for unposted transactions using inquiries.

If you are unapproving a contract item(s) for the purpose of relinking to another job, you must check for accuracy of cost-based invoicing in Billing before unapproving.

Conditions for Unapproving Contract Items

The following conditions must be met before a contract item can be unapproved.

The original contract amount on the linked job (Job Cost Setup menu - Jobs, Contract Totals tab) must be the same as the original contract amount on the contract (Contracts Inquiry menu, Contract/Item Inquiries menu - Contract Amount). For these amounts to be the same, the job must be linked only to that contract and the contract must be linked only to that job. Users with security privileges are exempt from this restriction.

Both the Total Billed and Cash Receipt amounts on the contract item must be zero. These amounts can be viewed in the Derived Totals inquiry (Contracts Inquiry menu, Contract/Item Inquiries menu). To unapprove a contract item that has a billing or cash receipt amount, reverse the entries in Accounts Receivable, so the Total Billed and Cash Receipt amounts net to zero in Contracts. Billings, retainage billings and cash receipts can be reversed in Accounts Receivable by voiding them.
The contract item cannot have an Approved Contract Changes balance. The balance of all change orders entered for that contract item must be zero. View the balance in the Derived Totals inquiry (Contracts Inquiry menu, Contract/Item Inquiries menu). To unapprove a contract item with an Approved Contract Changes balance, reverse the Approved Contract Changes balance amount by entering a negative change order.

The contract item must not have any unapproved change orders. You can check for unapproved change orders by opening the contract and selecting the Change Order view (View menu). Change orders listed on the left side of the window are displayed in bold if they are approved.

To unapprove a contract item with an unapproved change order, you can delete the change order by highlighting it and selecting Delete from the Edit menu.

Note: When you unapprove a contract item that has a change order item with an Estimate amount, a warning displays, however, you can continue. The Estimate amount is not automatically reversed in Job Cost by the Unapprove Contract Items process. Use Enter Estimates in Job Cost (Tasks menu) to manually reverse the estimate amount.

End Session 3-4
Session 3-5
Understanding the Flow of Transactions that Affect Cost Based Billing and the WIP Generation Process

Diagram:

- AP
- PR
- EQ
- JC
- PO/IV

Flow:

1. Posting
2. Send to Billing?
   - Yes: New.Blt
      - Generate WIP
      - Cost Based or Contract Based
         - Cost
            - Proper Setup
               - Yes: Unbilled WIP
               - No: Billed WIP
      - No: Billed WIP
   - No: Billing Transaction deleted

Other:

- Unbilled WIP
- Billed WIP
- History WIP
Cost Based Billing – Generate Work-in-Progress

This will generate work in progress entries for unposted entries and list issues for records that still cannot be generated.

Click Start to continue.

Review the WIP generation journal for rejects and take appropriate action to correct them.

Generate Work-In-Progress (Tasks menu) is used to apply rates and markup calculations to cost transactions received from Accounts Payable, Equipment Cost, Job Cost, PO & IV, and Payroll for billing purposes. Work-In-Progress (WIP) records created for cost-based billings are stored in the Unbilled.BLW file. When interfacing applications send entries to Billing, each transaction is assigned a WIP ID and sequence number. This allows the system to correlate the WIP record in Billing to the transaction in other applications. When transactions cannot be processed into Work-In-Progress records, they are rejected and remain in the New.blt file.
Where “Send to Billing” Instructions are Stored:

- Phase 1 – During the posting of the feeding sub-module.
  - Billing standard item
  - Standard category
  - Individual cost code
  - Cost code hierarchy
  - Job Type (Contract vs Quick Bill)
- Phase 2 – During WIP generation
  - Contract Item

If at any point in the chain, the send to billing box is unchecked the billing transactions will either not be created or deleted.

If automatic posting is turned on to BL the system will attempt to post the entries as you post from the interfacing applications such as post checks in payroll, post invoices in accounts payable, etc. Even if you have automatic posting turned on you should always check to see if there are any unbilled transactions that need posted. You can do this through Inquiry – Transactions.
Cost Based Billing – Regenerate Work-in-Progress

To regenerate work in progress, From Billing – Tasks – Regenerate Work in Progress

Click Start to continue.

If you have changed a rate table, markup table, or job link on a contract in Contracts, you can use the Regenerate Work-In-Progress command to recalculate and revise existing Work-In-Progress entries. Regenerate retrieves the new changes from the rate and markup tables and recalculates the billed amount. Work-In-Progress entries with a status of Billed or Rejected are reprocessed during Regenerate Work-In-Progress.

- New Work-In-Progress entries that you manually add using the Change Work-In-Progress command cannot be regenerated.
- If Billed Units have been modified using Change Work-In-Progress, the regenerating process uses the new Billed Units to recalculate the Billed Amount but does not change the Cost Units. If you regenerate a Work-In-Progress entry that has had a Billed Unit Price or Billed Amount modified using Change Work-In-Progress, the regenerate process ignores the changes made in Change Work-In-Progress and recalculates the Billed Amount based on the Billed Units and new Unit price on the rate or markup table.
• Work-In-Progress entries that cannot be regenerated are assigned a status of Rejected and are listed on the Regenerate Work-In-Progress journal.
• If the Send cost to Billing settings associated with an existing Work-In-Progress entry have been changed and instructions for sending costs to Billing for that entry no longer exist, the Work-In-Progress entry is deleted during Regenerate.
• The only items recalculated during Regenerate Work-In-Progress are Work-In-Progress Unit Price, Work-In-Progress Units (if Billed Units changed), Work-In-Progress Amount, Billed Unit Price, and Billed Amount.
• Regenerate Work-In-Progress does not reprocess contract-based billing entries.
• If the Send cost to Billing settings associated with an existing Work-In-Progress entry have been changed and instructions for sending costs to Billing for that entry no longer exist, the Work-In-Progress entry is deleted during Regenerate.
• The only items recalculated during Regenerate Work-In-Progress are Work-In-Progress Unit Price, Work-In-Progress Units (if Billed Units changed), Work-In-Progress Amount, Billed Unit Price, and Billed Amount.

Review the WIP re-generation journal for rejects and take appropriate action to correct them.
Cost Based Billing – Change Work-in-Progress

You can use Change Work-In-Progress to make changes to, put records on hold, or delete existing Work-In-Progress records. You can also create new records prior to generating invoices.
**Status** - Displays the current status of this Work-In-Progress record. To change the status, select the status you want for this Work-In-Progress record. The options are:

- **Bill** - allows an invoice to be generated for this record.
- **Hold** - places this record on Hold.
- **Voided** - voids this record.

**Date** - Displays the date for this Work-In-Progress record. To change the date, enter the date you want for this Work-In-Progress record.

**Unit of measure** - Displays the unit of measure associated with this Work-In-Progress record. To change the unit of measure, enter the unit of measure for this Work-In-Progress record.

**Billed units** - Displays the billed units for this Work-In-Progress record. To change the units, enter the units for this Work-In-Progress record.

**Billed unit price** - Displays the billed unit price for this Work-In-Progress record. To change the billed unit price, enter the price for this Work-In-Progress record. If you are adding a new Work-In-Progress record, the Billed unit price prefills from the Standard Item when basis equals units.

**Billed amount** - Displays the billed amount for this Work-In-Progress record. To change the billed amount, enter the amount for this Work-In-Progress record. If you are adding a new Work-In-Progress record, the Billed amount prefills from the Standard Item when basis equals units.
**Exempt status** - Displays the exempt status for this Work-In-Progress record. To change the tax exempt status, select the tax exempt status for this Work-In-Progress record. If you are adding a new Work-In-Progress record, the Exempt status prefills from the Standard Item.

**Work-In-Progress description** - Displays the Work-In-Progress description for this record.

To delete WIP, Right click the grey left column and select Delete Row.

```
<table>
<thead>
<tr>
<th>Contract Item</th>
<th>Status</th>
<th>Job</th>
<th>Extra</th>
<th>Cost type</th>
<th>Date</th>
<th>Unit of Measure</th>
<th>Billed Units</th>
<th>Billed Unit Price</th>
<th>Billed Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bil</td>
<td>03-006</td>
<td>Labor</td>
<td>5-25-2001</td>
<td>15.000</td>
<td>23.000</td>
<td>345.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bil</td>
<td>03-006</td>
<td>Labor</td>
<td>5-25-2001</td>
<td>1.000</td>
<td>23.000</td>
<td>23.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delete Row</td>
<td>Bil</td>
<td>03-006</td>
<td>Labor</td>
<td>5-25-2001</td>
<td>20.000</td>
<td>23.000</td>
<td>463.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

The following message will appear. Select yes to confirm, No to cancel.

![Change Work-In-Progress](image.png)

To insert WIP, begin entering data in the bottom most row. It will have an * (new record) in the grey left column. In addition to the contract item, which will assign the job and extra, all the changeable fields will accept data for manual WIP. Tab through the last column to accept the entry.

```
<table>
<thead>
<tr>
<th>Contract Item</th>
<th>Status</th>
<th>Job</th>
<th>Extra</th>
<th>Cost type</th>
<th>Date</th>
<th>Unit of Measure</th>
<th>Billed Units</th>
<th>Billed Unit Price</th>
<th>Billed Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bill</td>
<td>03-006</td>
<td>Equipment</td>
<td>5-31-2001</td>
<td>2.0000</td>
<td>50.000</td>
<td>100.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

As soon as our Work-in-Progress records are ready we can complete the invoicing cycle we have already reviewed. Just remember the importance of the cut-off date in Cost Based billing. Also remember the functionality of the Change Invoice task and the flexibility of the Print invoices task.
Generating Invoices
From Billing – Tasks – Generate Cost Based Invoices

The following screen will appear. (This function is only for Cost based Invoices)

Enter a WIP cut-off date or an accounting date.
Mark the checkbox to Include WIP records with no accounting date to make sure that all records are selected.
Enter your customer and contract number.
Your list button should now be black so you can open it and choose the invoice you want to process.
(In my experience we use it this way to make sure we do not process an invoice that someone else is working on)

Click Start to continue.

After the invoices have been generated, they can be printed or changed.

**Billing frequency** - Select the billing frequency for which you want to generate invoices. If you want to include all billing frequencies, select All from the list. (Billing frequencies are created in Custom Descriptions. CN Billing Freq.)

**Cut-off date** - Whether an approved change order amount belongs in the "Total changes approved in previous months by Owner" or "Total approved this Month" row on the AIA document G702, is determined in the following way: The Cut-off date entered during Generate Invoices is compared to the Date of Revision on the Change Order. If the Date of Revision is less-than or equal-to the Cut-off date and in the same month, the amount is added to this month's row. If the Date of Revision is less than the Cut-off date and in the previous month, the amount is added to the previous month's row.

**The cut-off date is also used to print the period ending date on some invoice formats.**

**Cut-off date** - Enter the cut-off date for Work-In-Progress records you want to bill. The cut-off date is required entry for cost-based invoices. The Generate Invoices command selects all Work-In-Progress records with a date equal-to or less-than the date you enter. Both Accounting date and WIP Date are available for this purpose.

**Customer** - To generate invoices for one customer only, enter the customer ID. You can click [List] to select from a list of customers. To generate invoices for all customers that meet the criteria selected, leave this blank.
**Contract** - To generate invoices for one contract only, enter the contract ID. You can click [List] to select from a list of contracts. To generate invoices for all contracts that meet the criteria selected, leave this blank.

**Change Invoices**

**To Change an Invoice,** from Billing – Tasks – Change Cost Based Invoices
Side Note – You may not need to use Change Cost-Based Invoices task if in your settings you have a check mark to Allow final printing of cost-based invoices with status:

Status - Displays the status of this invoice. To change the status, click the arrow on the right and select the status you want to assign this invoice. The statuses are:

- **Pending** - indicates that the invoice is not approved and cannot be final printed unless the Allow final print with a status: Pending box is marked in BL Settings.
- **Approved** - indicates that the invoice has been approved and is available for final printing.
- **Hold** - indicates that the invoice is on hold and cannot be final printed.
- **Voided** - indicates that the invoice has been voided. When changing an invoice to this status, the invoice records are removed. You can reinstate the Work-In-Progress or worksheet records and processing can continue. Once you change an invoice to Voided, it no longer displays in the grid.
- **Written-off** - indicates that the invoice is no longer available for processing. When changing an invoice to this status, all invoice amounts and associated Work-In-Progress amounts are changed to zero. Once you change an invoice to Written-off, it no longer displays in the grid and cannot be changed again. This option is available for cost-based invoices only.
- **Printed** - indicates that the invoice has been final printed but has not been posted. Only invoices with this status can be posted.
- **Maximum exceeded** - indicates that one or more Contract items on the invoice have exceeded the maximum amount to be billed and cannot be final printed unless the Allow final print with status: Maximum exceeded box is marked in BL Settings.

**Bill Retainage** - Opens the Bill Retainage window where you can bill the outstanding retainage on the current invoice. This option is only available for cost based invoices.
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Side Note - For retention we do not bill here due to we create separate invoices and do not combine progress and retention. I do however run a report in CN to see if there is any negative retention prior to billing through AR.

Filters – Use to select specific contract types, customers, contracts, statuses, billing frequencies, and cut-off dates. Conditions can also be used to filter invoices.
Printing Invoices

Following invoice generation and Change Invoice you can print all generated invoices or select specific invoices. The following options are available.

- **Preview** – View invoices on the screen before actually printing. Billing does not process the invoice at this stage. No invoice ID’s, dates, or updating occurs. You can preview an invoice as many times as necessary.
- **Draft** – Print draft invoices for review and approval prior to final printing. Like preview, no processing occurs and you may print a draft invoice as often as required. Just remember you can’t print a draft invoice after the invoice is final printed.
- **Final** – The final invoice triggers Billing to assign invoice ID’s, draw ID’s, invoice dates, accounting dates, and due dates. Billing changes the status of the invoice to printed. Once an invoice is printed it may be posted to Accounts Receivable.
- **Reprint** – You may reprint contract based or cost based invoices that have a status of printed. No processing occurs. Invoices can be reprinted before or after posting to Accounts Receivable.

**Reprinting - Cost-based AIA-type billings** - When you reprint a Cost-based AIA-type invoice that has been posted in Contracts, the detail page prints incorrect amounts in all billing columns. However, the summary page will print correct amounts. To avoid reprinting these invoices using the Reprint command, keep hard copies of the original invoice.
Starting invoice # - Accept the prefilled starting invoice number or enter the starting invoice number. This number is prefilled from AR Settings. If AR Settings is currently in use, this field cannot prefill. When this happens, you can enter a starting number or close this command and restart it when AR Settings is no longer in use.

Invoice date - If you are printing final invoices, enter the invoice date. This date is printed on the invoice and stored on the invoice record. If you are reprinting invoices, enter the invoice date for the invoice or range of invoices you want to reprint.

Cut-off date - Enter the cut-off date that was entered in Generate Invoices for the invoice(s) you want to print. The cut-off date entered here must match the cut-off date entered when you generated the invoice using the Generate Invoice command. If you want to print all invoices regardless of the Generate Invoices cut-off date, leave this field blank.

Sort order - Select the order in which you want to print invoices. For improved speed, Sage 300 CRE recommends sorting by Format. The options are:
- Customer - prints invoices in customer ID order
- Contract - prints invoices in contract ID order
- Billing contact - prints invoices in billing contact ID order
- Format - prints invoices in invoice format order
Billing frequency - Select the billing frequency for the invoices you want to print. You can click the arrow on the right to select from a list. To include all billing frequencies, Select All.

Header text - Displays the text to print in the invoice header. This is optional. To add or modify this text, click [ . . ].

Footer text - Displays the text to print in the invoice footer. This is optional. To add or modify this text, click [ . . ].

Status - Select the status of invoices you want to print. You can click the arrow on the right to select from a list of statuses. Invoices matching this value only will be printed.

Customer - To limit the invoices that are printed to a single customer, enter the customer ID. You can click [List] to select from a list of customers.

Contract - To limit the invoices that are printed to a single contract, enter the contract ID. You can click [List] to select from a list of contracts.

Billing contact - To limit the invoices that are printed to a single billing contact, enter the billing contact ID. You can click [List] to select from a list of billing contacts.

Invoice format - To limit the invoices that are printed to a single invoice format, select the invoice format you want to use. You can click [List] to select from a list of formats.

Invoice type - Select the type of invoices you want to print. The options are:
- Cost-based - prints cost-based invoices only (Time & Material and Cost Plus to a Maximum)
- Contract-based - print contract-based invoices only (Progress Billing, Lump Sum, and Unit Price)
- Both - prints both cost-based and contract-based invoices

Quick Bill invoices may be modified with Sage 300 CRE’s Report Designer application. Contract and Cost Based invoice formats require Crystal Reports for Sage Version 13 SP2 for all modifications.