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Selecting the correct union location in Job Set Up is very important because it drives pay scales, union benefit and deduction rates and union reporting.

Navigate to Customer Relationship Management > Opportunity Management > Union Location BI

- This dashboard displays several Bls.
 - Unions applied to Union Location Lists which Trade Classes and Unions are assigned to the Union Location codes.
 - Job Work Locations and Union Location Setup Lists jobs and the work & union locations assigned to them
 - Union Setup Shows union codes & descriptions
 - Union Location Setup Lists Union Location codes and descriptions
- Review the Union Setup BI to determine the correct union codes that will need to be assigned to the job.
- Union location code logic: Most union locations are set up by the county, unless there is a location with one specific union in which case the union would be in the union location code. Using the Unions applied to Union Location BI, search for the county in the Loc Code column. Ensure the correct class code (trade class) and code (union) are set up for that location. Keep in mind, some counties may have more than one location code set up. If it is a situation where only one union/class is on the job, search for the union in the Loc Code column.
- If there is not a union location set up that encompasses all the unions and trade classes needed, contact Payroll.

Verifying Union Setup

Selecting the correct union location in Job Set Up is very important because it drives pay scales, union benefit and deduction rates and union reporting.

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- o Union Setup Shows union codes & descriptions
- Union Location Setup Lists Union Location codes and descriptions
- Use the Job Work Location and Union Location Setup BI to search the job number needing verification. Take note of the Union Location Code.
- Find the code in the Unions applied to Union Location BI, under the Loc Code column.
 Verify the unions assigned to the location are correct, or find the correct one. (See union location code logic under Union Set Up)

Creating Jobs and Sub Jobs (Primarily coming from an Opportunity)

For the most part, controlling job creation will be done by an Opportunity Management Workflow. Refer to the Opportunity Management Training guide for more details.

Paving Work Orders will create subjobs in CMiC via the Fieldpoint/CMiC integration. The subjobs will be sequentially numbered based on the Work Orders main or controlling job. On the CMiC Job Entry screen there is a custom Fieldpoint WO# that the Fieldpoint integration will set. This will allow you to see or lookup work orders in CMiC and find the corresponding subjob.

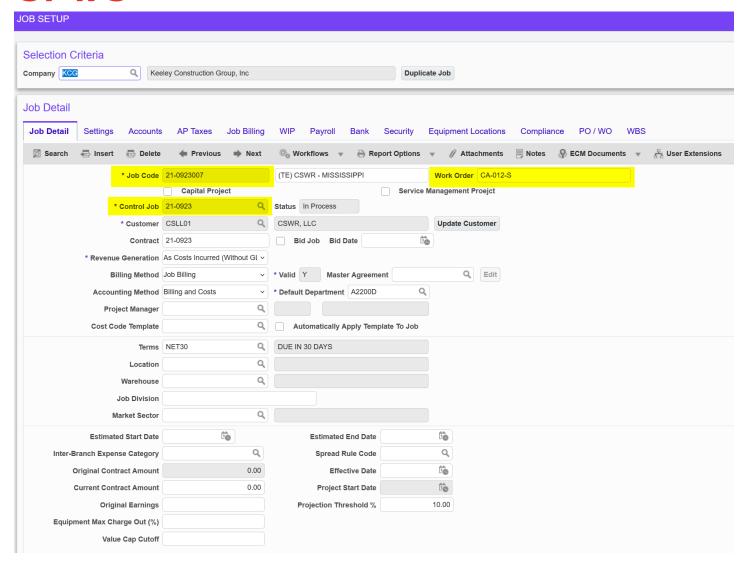












Manually Creating Job/Sub Jobs and Reviewing Integration created jobs

Job Creation

- Navigate to Enterprise, Project Controls, Job, Enter Job
- New Controlling Job
 - o Click the Add New button in the upper right corner of the screen.
 - o Fill out all required and option fields as detailed below.
 - o Click Save
- New Subjob of an existing Controlling job
 - Using the Query by Example or Search function location the controlling job for this subjob.











- o Click the Edit pencil to pull up the found job.
- o Click the Duplicate Job button in the Enter Job screen header.
- o In the popup enter fill out the New Job Code with the Subjob job number
- o Change the New Control Job to this Subjobs Controlling job
- o Click the Process Duplicate Job button.
- o When the job is created, click Yes to the confirming popup.
- o Search for the subjob and click the edit pencil
- Follow the details below

Job Entry Screen Details

Job Detail Tab

- Control Job Enter or Verify the Control Job (Controlling Job = ALL, Subjob = Controlling Job)
- Cost Code Template Add standard cost template If applicable
- Location Select the Location code that will be used for PO's if applicable. The Location code will have needed to be setup previously
- Billing Method Confirm or set to Job Billing
- Default Department Confirm or set the Default Department
- Effective Date Fill out the date of the earlies allowed activity for this job
- Project Threshold % Confirm the default percentage or change it to your liking. This
 controls, by Percent Complete, when CMiC's forecasting system will forecast something
 other than a cost code/category budget.

Setting Tab

- Allow Transactions Verify that the Allow Transactions checkbox is checked.
- Use Equipment Bill Rates Verify that the Use Equipment Bill Rates checkbox is checked.

Accounts Tab

 Dept - Departments will default in from the Default Department code on the General Tab or from the Controlling job. Verify and correct as needed.











- Confirm Accumulate Costs (DR) and Accumulate Billings (CR) Accounts The default is
 Blank. If blank the system will use the GL Account setup at the category level for these types
 of transactions.
- Confirm WIP Accounts Adjustment DR, Adjustment CR, WIP Revenue Adjustment

AP Taxes Tab

- Tax 1 Verify or correct Tax 1 code
- Tax 2 Verify or correct Tax 2 code
- Tax 3 Verify or correct Tax 3 code

Job Billing Tab

- Default Billing Type Verify or set to the value required. This controls the default Billing
 Type that will be setup on the Job Billing Contract for each SOV line.
- Default Invoice Format Verify or set to the value required. This controls the invoice output format that will be used for this jobs owner billing.
- Billing Rate Table Verify or set to the value required. This controls the table of rules that will
 calculate the billing rates for non-equipment transactions. For equipment, the billing
 calculation will come from the equipment module.
- JB Map Code Verify or set to the value required. This should always be 1-1.
- Retainage Code Verify or set to the value required. This controls the retainage rule that will
 be used to withhold Owner retainage on the owner billing. Please note these rules are not
 the percentage withheld, each rule can contain multiple percentage rules.

WIP Tab

- Confirm Roll-In Sub-Jobs for WIP Adjustment is checked.
- Confirm Exclude from WIP is checked.
- Confirm Margin Forward Loss and OH Forward Loss Accounts
- Confirm WIP Unposted Cost / Unposted Billings Accounts/Coding

Payroll Tab

 Work Location - To ensure accuracy, go to the Work Location BI (Customer Relationship Management > Opportunity Management > Work Location BI). Filter for the zip code the job will be in using the Zip Code field or the From/Through Zip Code fields if there are









several. If the Work Location code is only 9 numbers, rather than the State Abbreviation-City, please reach out to Payroll to set up a Smart Code (MO-BALLWIN).

- Work Comp Policy Set to ALL
- Prevailing Wage Rate code Set if necessary
- Allow E-Timesheet Entries Confirm this is checked.
- Certified Job Confirm this is checked.

Security Tab

Check the Included checkboxes for all job security groups that this job should be within.
 Note, you will only see security groups your user has access to. This makes it important that the person doing this have all job security groups needed for this job assignment.

Compliance Tab

This tab is used to override, by Job, the default behavior of the system level compliance codes. Here is the process.

- If some entries already exist, update as needed.
- For new entries, click Insert and then select the Code from the system list.
- The system values will pull in. Update these as needed.
- Click Save. They system will ask you if you want to apply these changes to all PO/SC's. You can answer yes or no as needed.

PO/WO Tab

Used to map a clients PO or Reference number to this jobs owner billing. The system supports more than one entry. The entry with the default checkbox checked will be the one that prints on any future owner billings.

- Click Insert to open a new line.
- Enter in the Owners PO or Reference number
- Enter in the description
- Adjust the Default checkbox for this and other entries
- Click Save.

Importing a Budget











Budget Import - Use Bid Items

Your job will need a project mapped to either itself or its controlling job to have access to this feature. If a project has subjobs you will be able to create budgets for not only the controlling job but any or all of the subjobs at once.

- Prepare your CSV budget import file per the template layout.
- Navigate to Field
- Select the Project you wish to import budgets for using the field in the top left corner.
- Navigate to Bid Management, Bid Items
- Click the Import button
 - o In the popup do the following
 - Make sure the "Delete existing imported records" is checked.
 - Using the browse button, select your budget import file.
 - Click the Upload button
 - You will be presented with the Bid Items Edit popup.
 - If this contains no rows or no rows with an orange callout, your import has passed and you can click the Accept button.
 - If you do have rows showing or rows with an orange callout, you have
 issues with your data. You can hover your mouse the orange callouts to
 see the errors. You can fix them within this screen or click cancel and fix
 them in your import file and start over.
 - If you fix them within the screen, click Re-Validate. If no rows are showing or none with an orange call out you are ready to import. Click the Accept button.
 - Once you have navigated the initial import the Bid Item Edit popup will go away and you will be presented with your imported "Bid Items"
 - Review the Bid Items, their totals. Make sure they are as you wish before continuing.
- On the Bid Import screen now filled with your budget items do the following.
- At the lower left portion of the screen, select the drop down beside the word Page and select 500. If your budget is longer than 500 rows you will need to do the budget push more than once.











- Now that your rows are showing, click the third checkbox to select the rows you want to import, or select the checkbox at the top to select all.
- Click the Update Budget button
- In the popup do the following
 - o Job Structure Update Type This controls the scope of the update. If this is the first time you are uploading the budget select "Replace Entire Structure" If this is not the first time you may want to select "Update existing rows only" or "Add New Rows Only"
 - Budget Amount Update Type If this is the first time uploading select "Replace
 existing budget". If this is not the first time, select "Replace only if the new budget is
 not null".
 - o Amounts to Calculate Budget This should be "Estimated"
 - Amounts to Calculate Revenue Budget This should be "Revenue" if you have included revenue budget numbers in your file, if not select "Not Applicable"
 - o Click the Proceed button. The system will setup the job(s) linked to this project.
 - o You can use any budget screen or report to verify your budget has been updated.

Budget Import - Use Foreign Job Budget Import

- Navigate to Enterprise, Project Controls, Job, Utilities, Import, Foreign Job Budget Import
- Click on the Import File Button
- Using the Browse button on the Popup, select your prepared CSV import file. The CSV file should not have column headers.
- Click the Import Button
- If you receive errors, click the Download Error Log Button to review. Correct the import file and redo from the beginning.
- Click Close when you are ready to proceed and have no Errors.
- Click the Refresh Button. Your import should show in the table.
- Select your import and click the proceed button.
- If the Build Job Budget button is greyed out you will need to click the Edit Imported Data
 Button
- Click Re-Validate. Notice any check marks that are showing in the Valid column and any errors reported below.











- Click the row of any non-valid entry and then click the Error Details button and review any issues.
- Fix the issues by either editing directly in the edit popup screen or if you want to back out of
 this import, delete the import file within CMiC and re-edit and fix your CSV file and start
 from the beginning.
- Once all editing has been done, click the Re-Validate button again. Repeat this process until all lines are valid.
- Click the Close Button.
- The Build Job Budget Button should now be clickable. Click it.
- Review the Import popup options. When ready click the Create Job Budget Button.
- Your cost code structure and budget will be created and the import file will be automatically deleted.

Budget Creation (Cost vs Revenue)

CMiC supports two budgets: Cost and Revenue. It tracks change orders or PCI's to both budgets. This results in the ability to have three versions of both budgets at the same time.

- Original Budget This is the budget before any normal change order types (Internal, Transfer or External). It is the starting budget. It never changes unless you use the 4th PCI type of Original.
- Current Budget This is the Original Budget plus all normal typed posted change orders.
 For normal type PCI's (I,E,T) the system will do Original Budget + Change Order = NEW
 Current Budget.
 - For non-normal (O) the system will do Original Budget + Change Order = NEW
 Original Budget. The current budget will still reflect any normal types and do NEW
 Original Budget + Normal Typed PCI's = NEW Current Budget.
- Projected Budget This is available for cost or revenue budgets. It is Current Budget +
 Unposted PCI's. This allows you to see the effect of your change orders, on your budgets,
 before you post them. It enables you to edit or fix them before posting.

There are two queries within the field side that are valuable screens for reviewing Cost and Revenue related amounts.

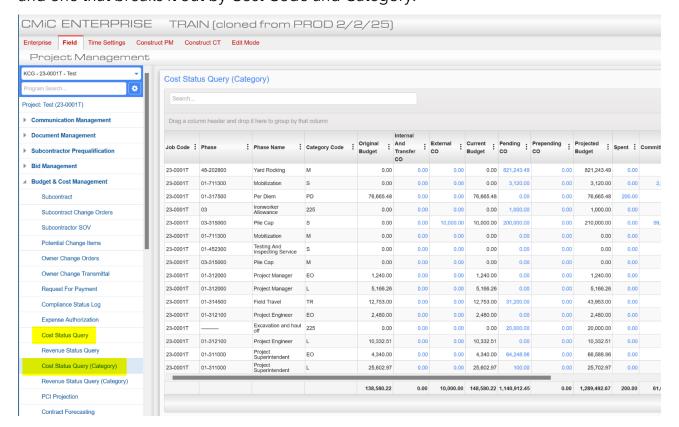








 The Cost Status Query will show items such as Original Budgets/Changes/Projections for the Cost Budget. There are two different options, one that shows Cost Code level summaries and one that breaks it out by Cost Code and Category.



 The Revenue Status Query will show items such as Original Budgets/Changes/Projects for the Revenue Budget. There are two different options, one that shows Cost Code level summaries and one that breaks it out by Cost Code and Category.

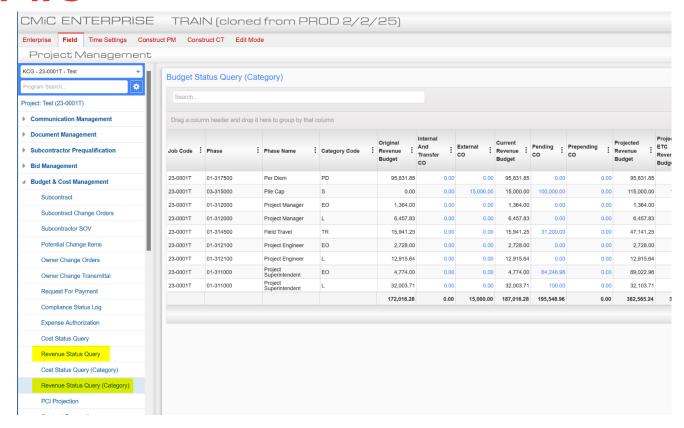












Below is a breakdown of the change order classes:

- Internal This can only update the cost budget, never the revenue budget. It can increase
 or decrease the cost budget. It is used to track construction cost changes that you can not
 recover or bill for.
- Transfer This can update the cost and revenue budgets. It is set to balance, meaning you
 can't increase or decrease the budgets, only move money around. The changes you make
 to the cost budget do not have to be the same as to the revenue budget but each budget
 must not increase or decrease its totals.
- External This can update the cost and revenue budgets. Unlike the Transfer type this is not set to balance. You can increase or decrease your budgets. Similar to Transfers, you can make independent changes to the cost and revenue budgets.
- Original This can update the cost and revenue budgets. Unlike the other three the system
 will add these PCI's to the Original Budget and not the Current Budget. There are two
 common ways of using Original PCI Types. Both methods can be done using the normal
 Import methods, the common thread is having an audit track within CMiC.







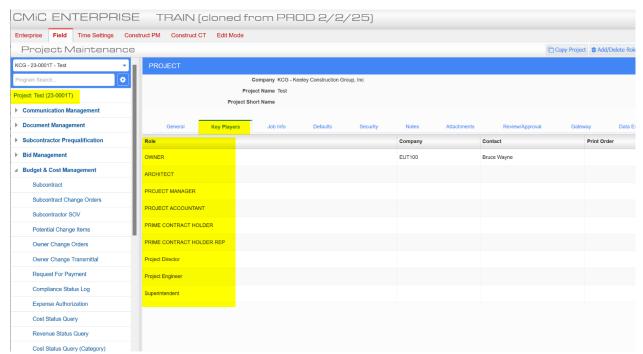




- o Instead of entering or uploading your original budget, you may import your job structure with no budgets, then do an Original Type PCI (which can be imported) to fill out the budget amounts. This gives a tracking mechanism inside of CMiC for how the original budgets were created. It also allows you to leave this PCI unposted while others verify the budget is correct and enables making changes without re-importing.
 - If you have multiple phases on a project, you may decide not to include any cost code structure for phases 2, 3, etc. at the beginning. When Phase 2 starts you create the new job structure for phase 2, then do an Original Type PCI (which can be imported) to load the Phase 2 Original Budgets. This allows for the different phases to be setup closer to when each phase will be done and you won't have the extra job structure until you need it. It also allows you to leave this PCI unposted while others verify the budget is correct and allows for making changes without re-importing.

Assigning Project Roles

Assigning project roles is done within Field. There is a related feature called Key Players. Key Players are Project Roles that allow for a quicker easier to see method of assignment. There are several purposes for Project Roles (Key Players)













- 1. Used to assign the principal roles to a project such as Owner, Architect, PM, PE, etc.
- 2. Can be used as the workflow approvers throughout the system.
- 3. Grant a specific set of abilities to the user assigned to a given Project Role.

Assigning Project Roles via Key Players

- Navigate to Field
- Select the correct project you wish to work with
- Click the Project Name at the top of the Field Menu. This will open the Project Maintenance screen for your project
- Click the Key Players tab
- The system will show you all of the Project Roles that have been designated as Key Players.
- Click the Edit Button in the top right corner.
- Modify the Key Player assignments by selecting a company first, then a contact for every Key Player you wish to modify.
- Click Save.

Assign Project Roles to Contacts sans Key Player

- Navigate to Field
- Select the correct project you wish to work with
- Navigate to Communication Management, Project Contact Directory. The system will show
 you the assigned contacts to this project. If a contact is not present and you need to add
 them, you can do this one of two ways.
 - If you have access to the Security, Contacts menu item, you can Assign an existing contact to your project.
 - If you do not have access to the Security, Contacts screen then Navigate to the Communications, Project Partners screen and add the Vendor if not present and the contact for the vendor.
- Click on the contact you need to assign a project role to.
- Click the Edit button
- Update the Project Role field within the Project Info section of the contact record. You can
 assign more than one Project Role to a contact per project. For the most part the security
 tied will be additive. There are several security features that if selected take away abilities. If











a role has one of these selected, it will override any other roles selection for this ability and the user will not have that ability.

• Click Save.

Providing Owner Contract Mapping

Keeley Construction will map the Revenue Budget according to the owner's billing requirements. The project team will need to coordinate with Project Accounting and the Project Controls team to align the schedule of values for billing.

Setting up an Owner Contract

Initial Job Billing Contract Setup

Once the Budgets and SOV are finalized you can create the Job Billing Contract

- Navigate to Enterprise, Project Controls, Job Billing, Enter Contract
- Select the correct company
- Click the Add New button
- Fill out the Job field, the system will find the default information from the Job Setup, Job Billing tab and other areas. If anything looks incorrect, stop without saving and go fix the underlying information. If everything in the header looks good, click Save and continue.
- Click the Add New Bill Codes button in the middle of the screen. A popup will be presented
 - If your Job Mapping code creates the group codes select "Add New Bill Codes and Reset All Groups.
 - If your job Mapping code doesn't not create group codes the default selection of "Add New Bill Codes Only" is correct.
- Click the Ok button
- The system will create your SOV in the Billing Items area.
- Click Save.
- Verify your SOV contract total is correct by looking at the total for Budg. Billing Amt. If your contract amount is wrong, your Job Cost Revenue Budget is wrong. You should stop and fix this now and then follow the steps below.
 - Once you fix your Job Cost Revenue budget, come back to the Enter Contract Screen.











- The easiest and least amount of steps would be to delete your contract and recreate it. This will fix extra bill codes, missing bill codes and wrong amounts all by recreating the contract. If you only added new SOV lines or only the contract amount is wrong you can utilize these two buttons
 - Add New Bill Codes This will find any missing mappings from the Job Cost structure and add them. It will not remove lines that no longer exist within the Job Cost structure. The system will leave them there but disconnect them from the Job Cost side.
 - Reset All Bill Code Budgets This will not add any new SOV lines but will go and pull the amounts from the Job Cost Revenue budget.
- Once your SOV is correct you can continue the rest of the Contract setup.

Group Codes

Groups are used to organize the SOV into a summary or format that your client requires. It consists of creating the group codes first and then assigning them to each of the SOV lines.

- Creating the Group Codes
 - From the Enter Contract screen click on the Group tab that you want to setup. You will most likely see NOGROUP as a group code with the total contract value assigned to it. This is a system group that will disappear once you assign all SOV lines to your custom groups.
 - Click Insert or Insert Multiple
 - Enter in all of you Group Codes and Group Descriptions.

Assigning Group Codes to SOV Lines

Once you have your group codes created you are ready to assign them to individual SOV lines. There are three methods for doing this. The selection of which method you use is largely a matter of understanding the advantages of each one and using the one that fits your situation.

- From any Group Tab Select SOV Lines
 - o Select one of your created group codes
 - o Click the Add Group to Bill Code button
 - o Select the SOV lines that you wish to assign this group code to.
 - o Click Accept
 - Click Save











- From the Billing Codes Tab Individual assignment
 - For any given SOV line, in the Group column you desire, enter or select from your created Group codes.
 - Continue assigning all SOV lines that require group codes.
 - o Click Save.
- From the Billing Codes Tab Utilizing Mass Update
 - o Filter the Billing Items detail section to SOV lines that you wish to assign the same Group code to.
 - o Click the Mass Update Button in the grey button bar.
 - Make sure you don't have any values in the Mass Update popup that you don't want to assign to this filtered list of SOV items.
 - In the Group code field that you wish to assign, enter in your Group code.
 Unfortunately, this is not a lookup and you will need to know the correct code to enter.
 - o Click Apply. The system will assign the values to all of the currently filtered SOV lines.
 - o Click Close. The Mass Update popup will close.
 - o Review the Group assignments for accuracy
 - o Clear your filtering
 - o If you need more group codes assigned, repeat this process.

Setup Retainage on Job Billing Contract

When you create a Billing Contract the retainage code from the Job Enter Screen, Job Billing Tab will default into the header. When you create the SOV lines this default will be assigned to each line of your SOV. You can change this default before you create the SOV lines and/or you can individually change each SOV lines retainage code to allow for different calculations by SOV line.

- Header Default Tab Find the Retainage Code field and set it as needed
- Billing Items, Billing Codes Tab For each row you can change the column labeled Ret.
 Code.







