

CONTROL USER GUIDE



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CHAPTER 1 – OVERVIEW

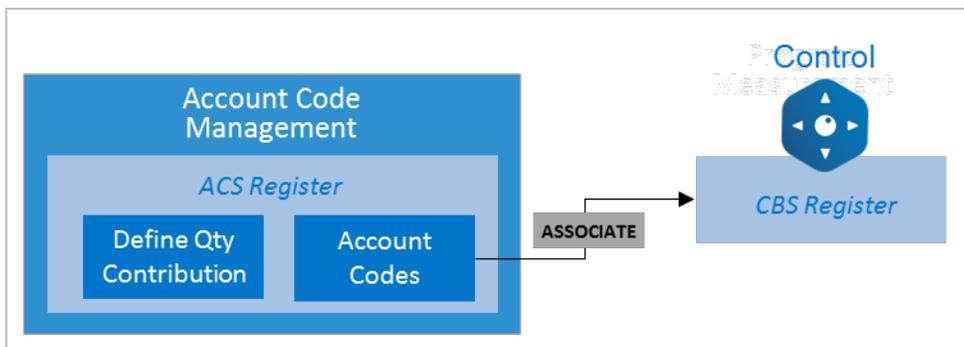
1.1 OVERVIEW

As one of the applications within the InEight portfolio of products, InEight Control is a project management tool used for:

- Managing account codes
- Measuring progress
- Forecasting final man-hours and costs
- Managing revenue
- Managing budget/contract changes

1.1.1 Account Code Management

Within InEight Control, you can define and assign account codes to your cost items. This association can be synced to your ERP, and can also be used to benchmark data with other projects.



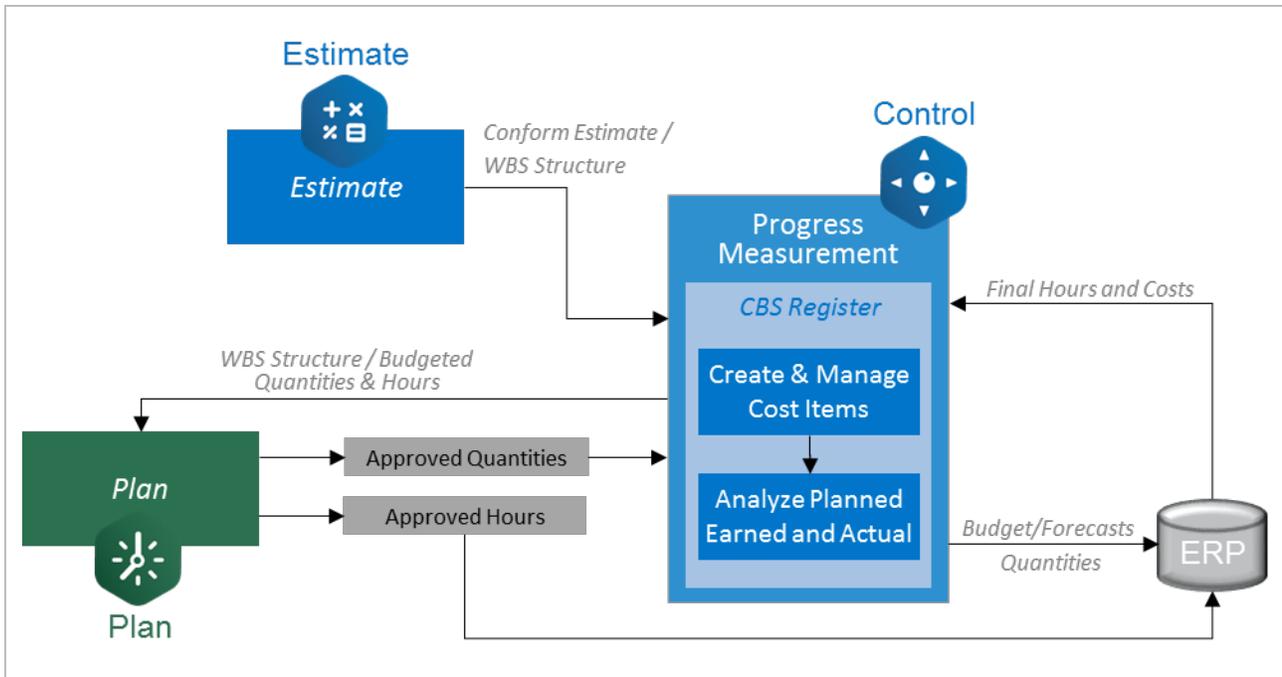
1.1.2 Progress Measurement

InEight Control is the application where your Cost Breakdown Structure and budget are established and where you can monitor project progress. You can:

- Import your conformed estimate and structure from InEight Estimate
- Create and manage cost items
- Import approved quantities from InEight Plan

- Import final hours and costs from your ERP system
- Track your actuals and compare them against your Current Budget and earned values

The following workflow illustrates how these functions relate and pass information between systems.



You can utilize this information to analyze trends, track productivity factors, and measure progress.

Tasks			Progress Overview			
CBS Pos...	Description	% Complete	C B-Total C...	C B-Earned Total ...	Total Cost (To Date)	C B-Total Cost G/L (T...
▼1	Infrastructure	0.01	\$14,193,548.20	\$80,054.65	\$3,000.00	\$77,051.61
1.1	Mobilization	0.00	\$10,794.00	\$0.00	\$0.00	\$0.00
▼1.2	West Screen Demolition	0.38	\$4,605.59	\$1,772.88	\$3,000.00	(\$1,227.13)
1.2.1	West - Removal-Conduit	0.34	\$3,448.93	\$1,172.88	\$3,000.00	(\$1,827.12)

1.1.3 Forecasting

InEight Control provides options for forecasting final costs, man-hours, and productivity for your project.

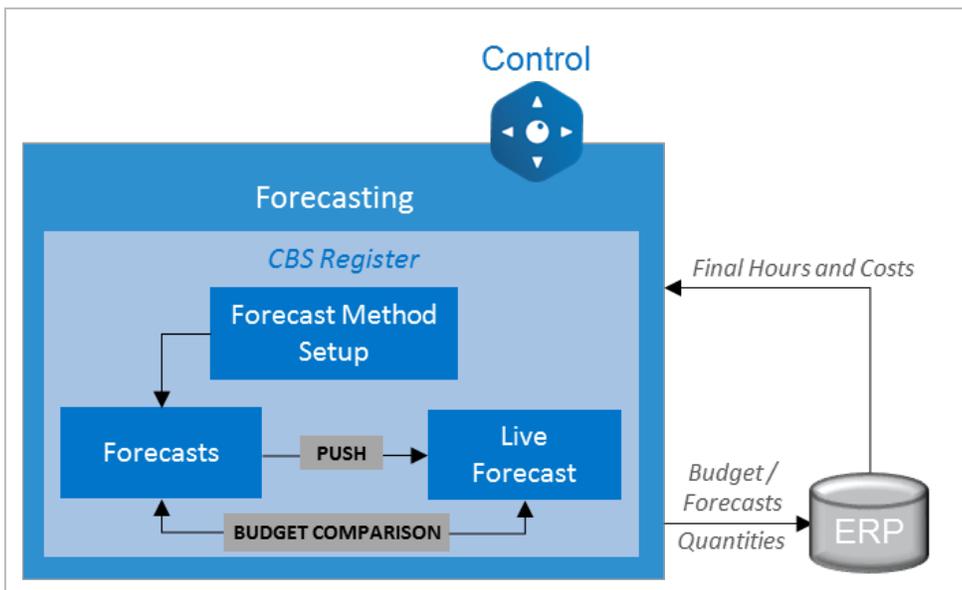
Tasks		Task details			Forecast Created from Live forec...			
CBS position	Description	Resource	Forecast (T/O) quantity	UoM	Forecast final cost	Forecast final Mhrs	Forecast final man hours/Unit	Forecast final productivity factor
2	Earthwork	5	10,000.00	CY	\$ 400,000.00	8,000.00	0.80	1.00
3	Concrete	6	10,000.00	CY	\$ 1,500,000.00	30,000.00	3.00	1.00
4	Structural Steel		1,000.00	Ton	\$ 1,000,035.71	20,000.71	20.00	1.00
4.1	Erect Steel - Heavy	5	800.00	Ton	\$ 800,000.00	16,000.00	20.00	1.00
4.2	Erect Steel - Light	5	200.00	Ton	\$ 200,000.00	4,000.00	20.00	1.00
4.3	Bolted Connections	8	2,000.00	Ea	\$ 35.71	0.71	0.00	1.00

You can forecast your remaining work based on any of the following Forecast Methods:

- Current Budget
- Current Estimate
- Average performance
- Committed Cost
- Manual Entry

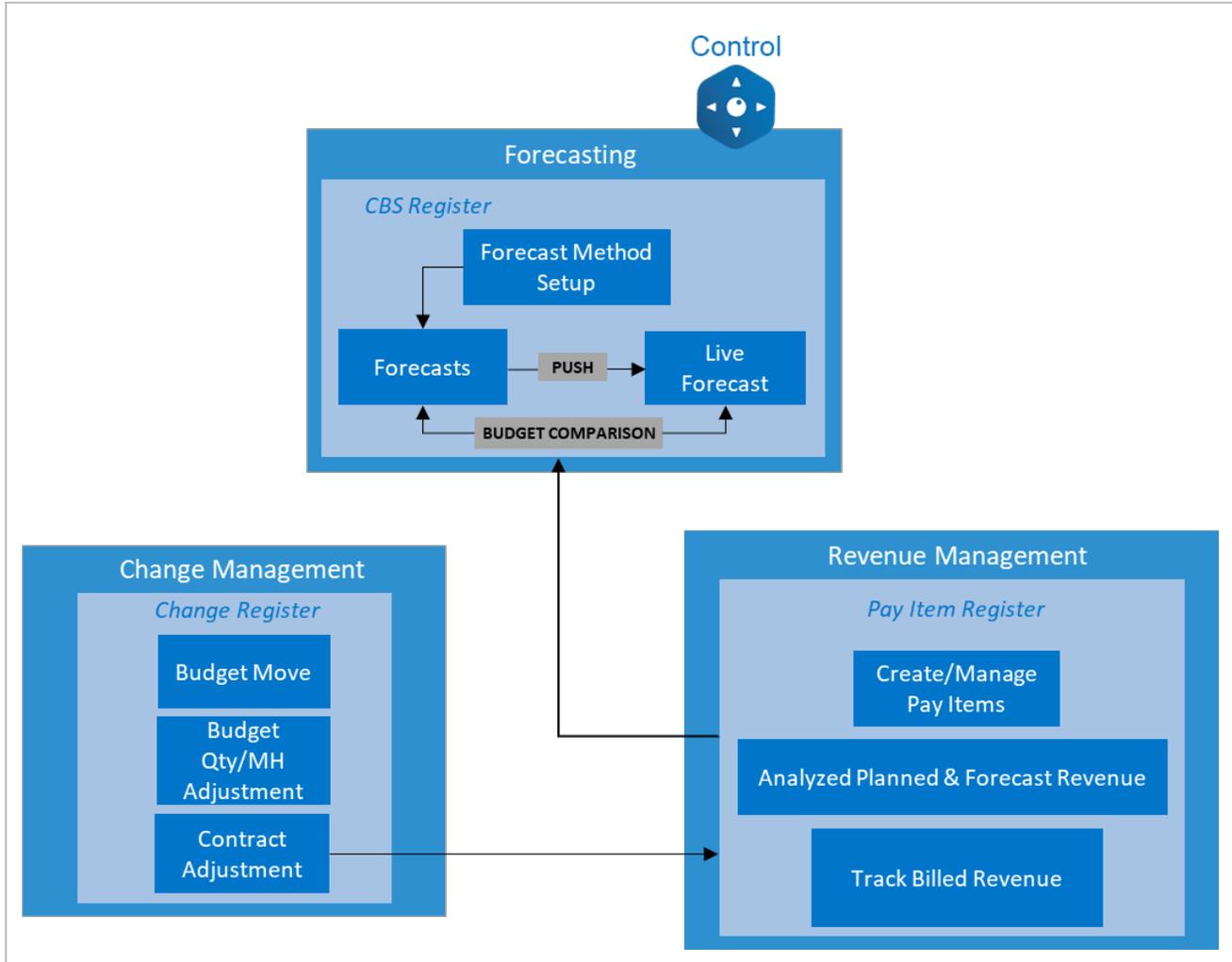
You can save private forecasts, share them with others, and push them to a “live” forecast which can be reviewed by all and used for official reporting. You can also compare the Live Forecast to other forecasts created, for example to compare to the previous month’s forecast.

The workflow diagram below illustrates how forecasting functions relate to the rest of InEight Control and other systems.



1.1.4 Revenue Management

Within InEight Control, you can create and manage pay items for tracking pay quantities, actual and forecasted revenue, and how much has been billed to the client.



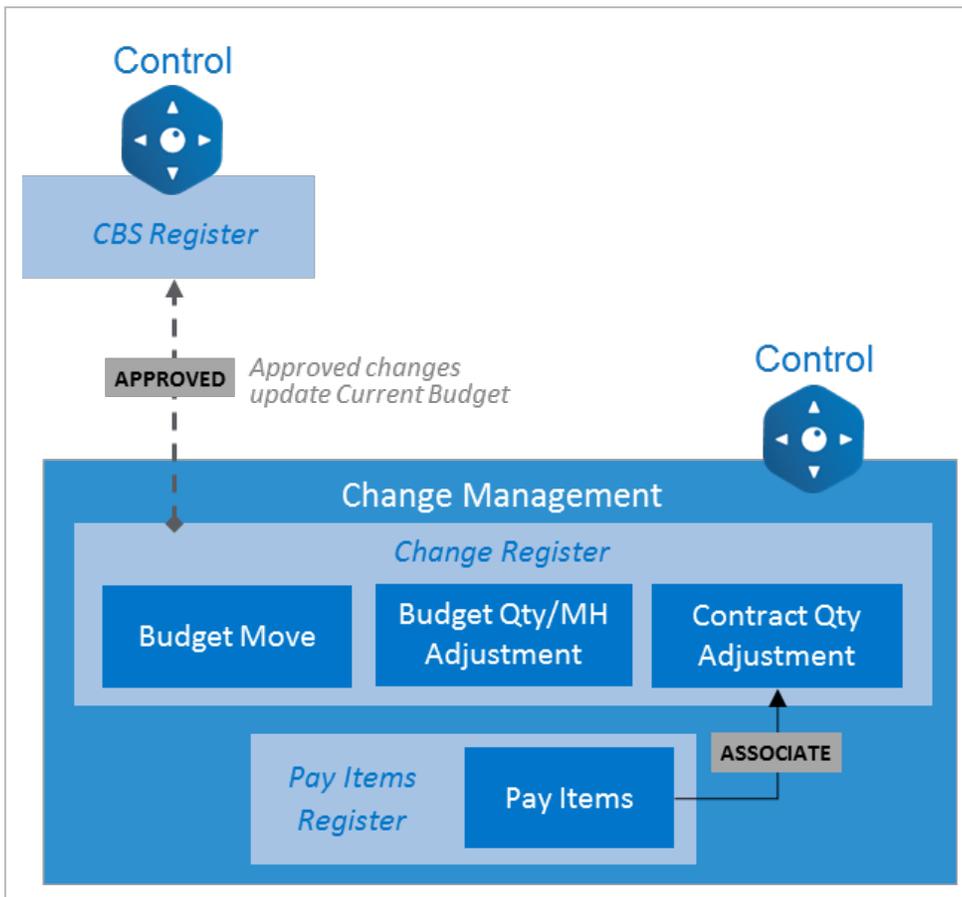
1.1.5 Change Management

InEight Control allows you to manage changes to quantities, man-hours, and costs in each cost item as needed during the execution of the project. You can make three different kinds of changes within the Change Management register:

- **Budget move** – Movement of costs between cost items where the total dollars moved must balance to zero. There is no revenue associated with this type of change
- **Budget quantity and man-hour adjustment** – change to quantities or man-hours within the project without changing costs
- **Contract adjustment** – both the budget and the revenue either increase or decrease and are not required to be a net zero transaction. You will associate pay items with the change order to reflect the revenue change

Approved changes update your Current Budget within the CBS register.

The below workflow shows the relationship of Change Management to the rest of InEight Control.

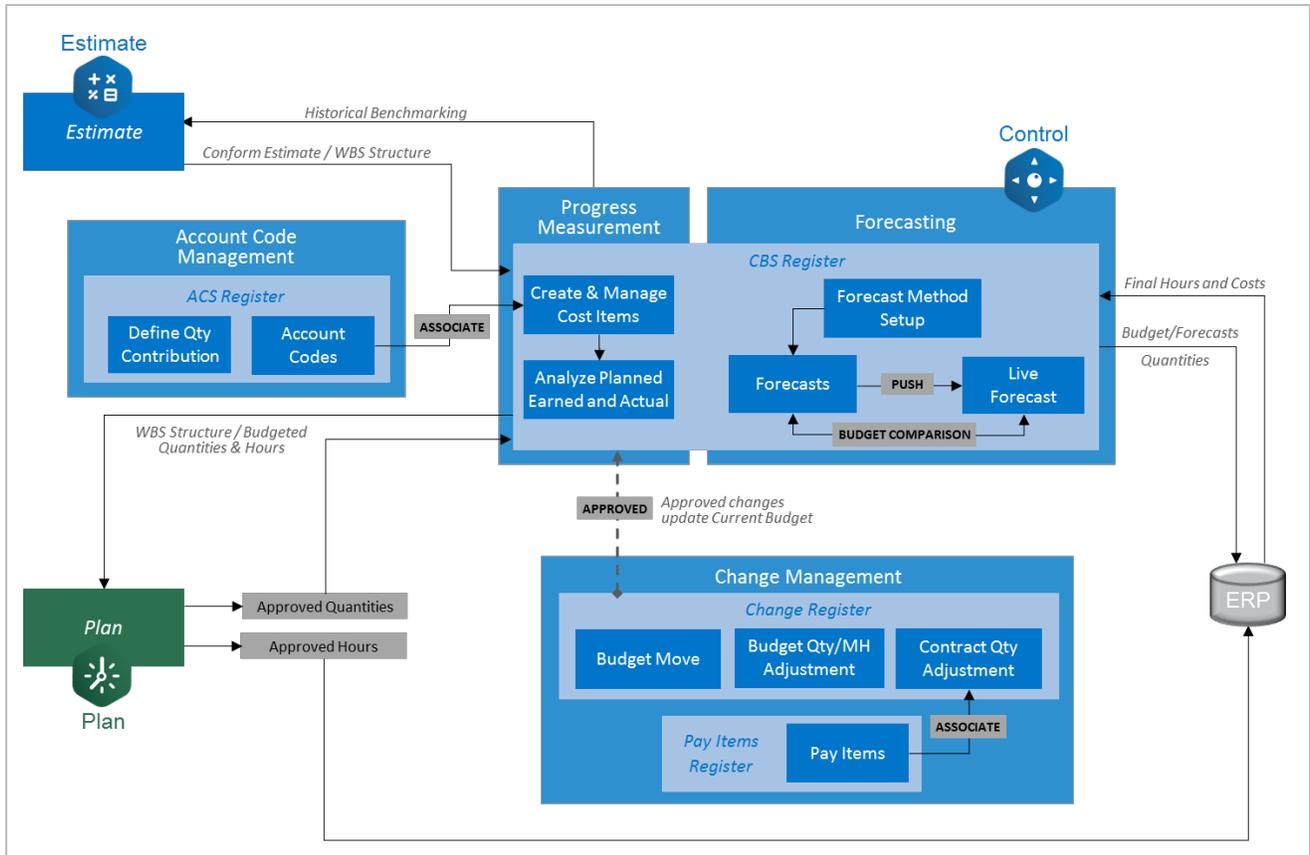


Below is an example of what the Change Register looks like in InEight Control.

Change Register						
ID	CCO	Issue #	Description	Type	Discipline	Total Budget \$ adjust
20.0	001	001	Increase budget in the code for Plan and Progress	Contract adjustment	1	\$4,800.00
21.0			Increase budget quantity for proper production factor	Budget Qty&MH adjustment	1	\$0.00

1.1.6 InEight Control Workflow

The following workflow illustrates how all the functions of InEight Control work together.



Review

1. Which InEight application do you use for capturing time and quantities in the field?
 - a. InEight Control
 - b. InEight Plan
 - c. InEight Progress
 - d. InEight Inspect

2. What key data is imported from the ERP system into InEight Control? (Select all that apply.)
 - a. Costs
 - b. Quantities
 - c. Hours
 - d. Notes

3. Which of the following is NOT a function of InEight Control?
 - a. Budget Management
 - b. Daily Planning
 - c. Change Management
 - d. Progress Measurement
 - e. Forecasting

Summary

As a result of this lesson, you can:

- Describe the InEight cloud platform and how it relates to your project management process
- Define InEight Control and its purpose

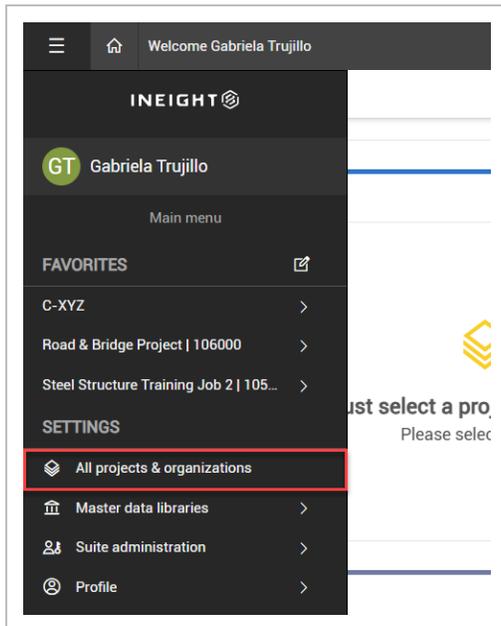
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CHAPTER 2 – GENERAL NAVIGATION

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2.1 PAGE NAVIGATION

You can access Control within the InEight Cloud Suite using the link provided by your manager or facilitator. To access Control, you must open a project by selecting Main menu > **All projects & organizations**.

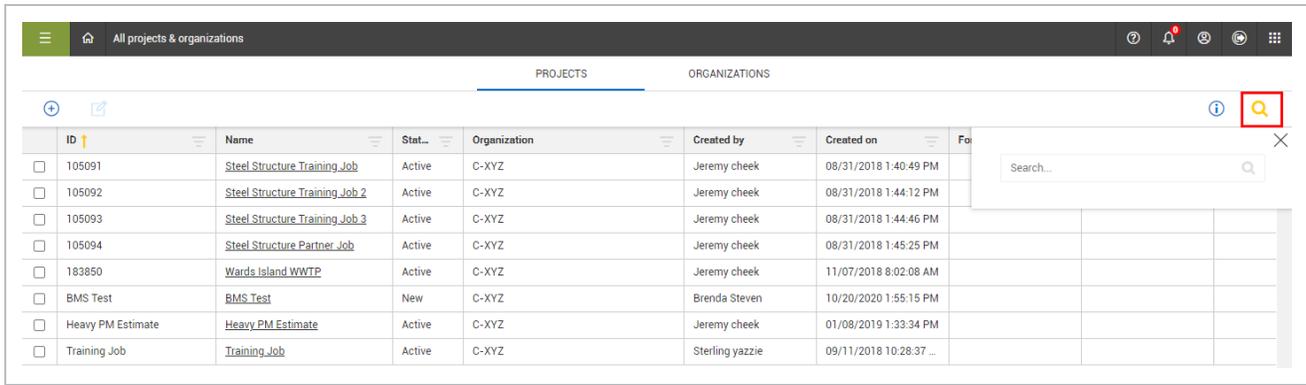


The All projects & organizations page opens to the Projects tab that shows all projects you are associated with.

The screenshot shows the 'All projects & organizations' page in the InEight mobile application. The page is divided into two tabs: 'PROJECTS' (selected) and 'ORGANIZATIONS'. A table of projects is displayed, with columns for ID, Name, Status, Organization, Created by, Created on, Forecast duration, Original contract, and Contract number. The table contains several rows of project data.

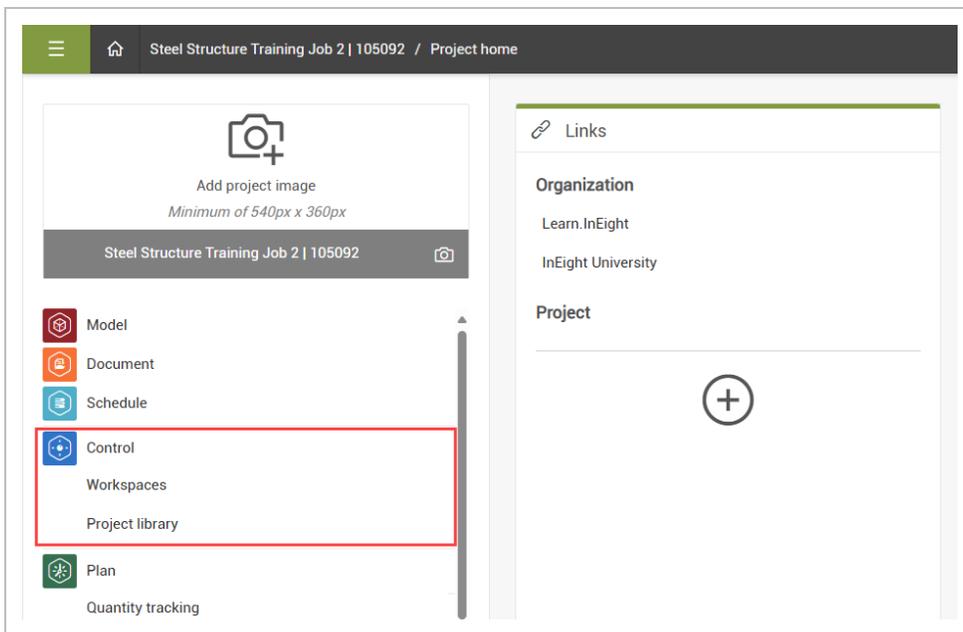
ID	Name	Stat...	Organization	Created by	Created on	Forecast duration	Original contract ...	Contract nu
105091	Steel Structure Training Job	Active	C-XYZ	Jeremy cheek	08/31/2018 1:40:49 PM			
105092	Steel Structure Training Job 2	Active	C-XYZ	Jeremy cheek	08/31/2018 1:44:12 PM			
105093	Steel Structure Training Job 3	Active	C-XYZ	Jeremy cheek	08/31/2018 1:44:46 PM			
105094	Steel Structure Partner Job	Active	C-XYZ	Jeremy cheek	08/31/2018 1:45:25 PM			
183850	Wards Island WWTP	Active	C-XYZ	Jeremy cheek	11/07/2018 8:02:08 AM			
BMS Test	BMS Test	New	C-XYZ	Brenda Steven	10/20/2020 1:55:15 PM			
Heavy PM Estimate	Heavy PM Estimate	Active	C-XYZ	Jeremy cheek	01/08/2019 1:33:34 PM			
Training Job	Training Job	Active	C-XYZ	Sterling yazzie	09/11/2018 10:28:37 ...			

You can search projects by clicking the Search icon at the top right of the page. This search function searches all columns in the page.



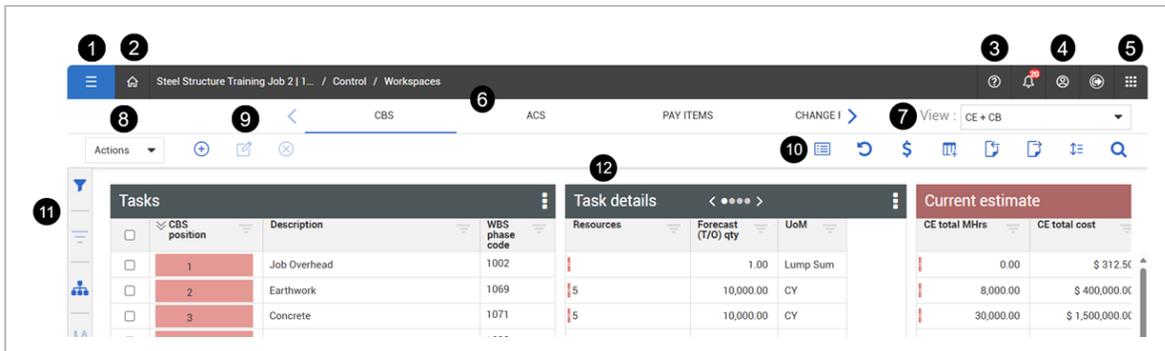
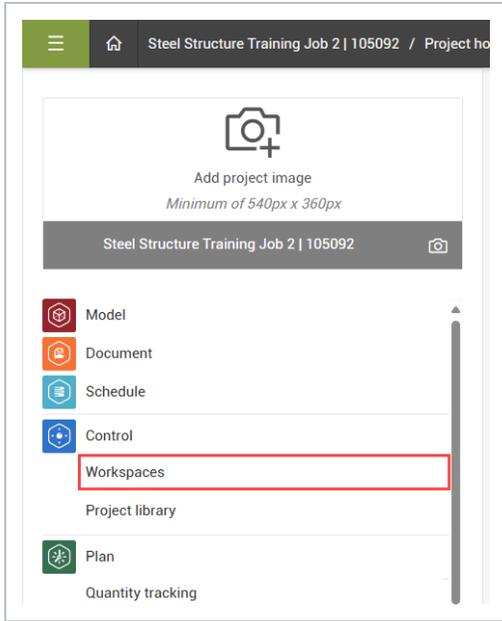
ID	Name	Stat...	Organization	Created by	Created on	For
105091	Steel Structure Training Job	Active	C-XYZ	Jeremy cheek	08/31/2018 1:40:49 PM	
105092	Steel Structure Training Job 2	Active	C-XYZ	Jeremy cheek	08/31/2018 1:44:12 PM	
105093	Steel Structure Training Job 3	Active	C-XYZ	Jeremy cheek	08/31/2018 1:44:46 PM	
105094	Steel Structure Partner Job	Active	C-XYZ	Jeremy cheek	08/31/2018 1:45:25 PM	
183850	Wards Island WWTP	Active	C-XYZ	Jeremy cheek	11/07/2018 8:02:08 AM	
BMS Test	BMS Test	New	C-XYZ	Brenda Steven	10/20/2020 1:55:15 PM	
Heavy PM Estimate	Heavy PM Estimate	Active	C-XYZ	Jeremy cheek	01/08/2019 1:33:34 PM	
Training Job	Training Job	Active	C-XYZ	Sterling yazzie	09/11/2018 10:28:37 ...	

Click a project name to open it. The project opens to the **Project home** landing page. In the Project home landing page, you can access Control from the left menu.



2.1.1 Navigate the InEight Control Workspaces Page

In the Project home landing page, under Control, click Workspaces to open the **Workspaces** module.



Overview - Control Workspaces Page

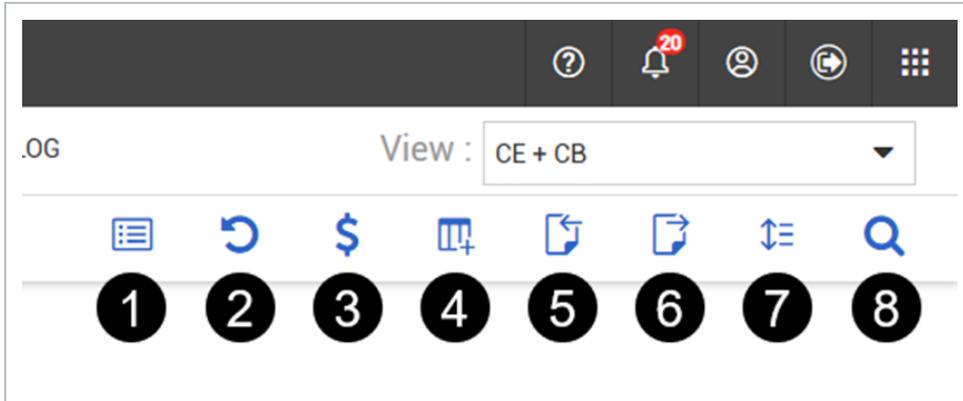
Title		Description
1	Left Navigation Menu	Opens a side panel where you can quickly access pages across the InEight Suite, such as settings, favorite projects, and other InEight applications.
2	Home Menu	Returns to the Organization or Project home landing page.
3	Help Menu	Opens a window where you can quickly access eLearning courses, Knowledge Library topics, and training videos.
4	User Profile	Access your User Profile and update preferences such as language and number formats.

Overview - Control Workspaces Page (continued)

	Title	Description
5	Right Navigation Menu	Opens a side panel where you can quickly access project-specific pages and applications.
6	Tabs	Navigate to the CBS (Cost Breakdown Structure), ACS (Account Code Structure), Pay items, Change Register and Audit Log pages.
7	Viewset Menu	Display different preset views and manage custom viewsets.
8	Actions Menu	Select available actions for the current register tab you are viewing.
9	Left Toolbar	Contains commonly-used buttons to make changes in the register. In this case, Add is used to add cost items, Edit to edit cost items, and Delete to remove a cost item from the project.
10	Right Toolbar	Contains functions for the register page you are currently viewing. (Additional information shown below).
11	Side Toolbar	Contains options for filtering the register and indicators for filtering and sorting.
12	Register content	Displays page content in rows and columns, grouped together in customizable data blocks.

2.1.2 Right Toolbar Overview

The right toolbar allows you to use functions for the register page. The toolbar options change depending on which tab you select (CBS, ACS, Pay Items, Change Register, or Audit Log). The right toolbar is commonly used for the CBS register page. The following image and table show the right toolbar functions:



Overview - Workspaces Page CBS Tab - Right Toolbar

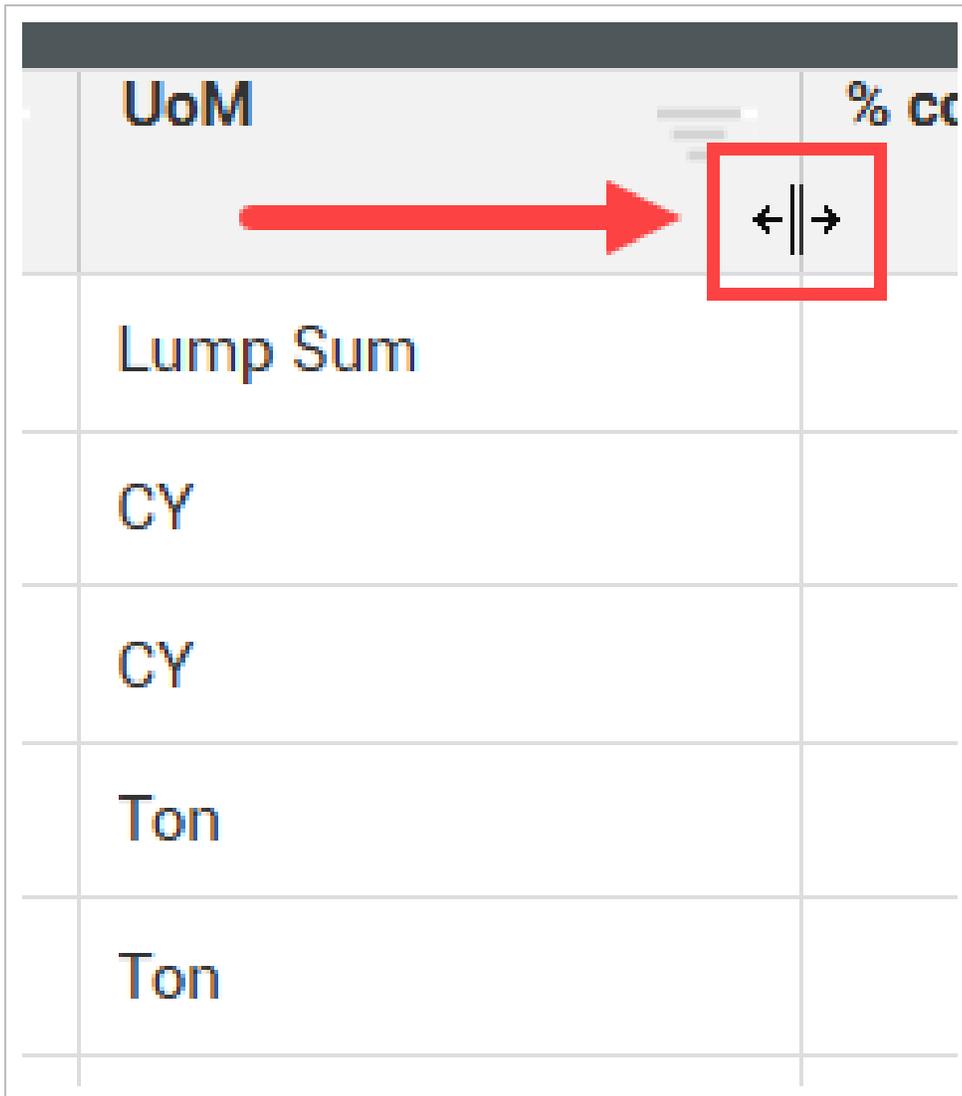
Icon		Function
1	Group Columns	Group rows of the cost breakdown structure by like information from selected columns.
2	Undo	Access a list of entries from the current day and select specific entries to undo.
3	Display Currency	Display currency in the CBS as entered or as the project default currency.
4	Add Data Block	Open a panel where you can manage data blocks and add data blocks to your view.
5	Import	Import cost item data from an Excel File.
6	Export	Export your register view to an Excel file. Only the data blocks currently displayed on the page will be exported to the file.
7	Row Density	Adjust the line height at which the register content is displayed. Choose between Relaxed, Narrow, or Tight.
8	Find	Find value in register content by selecting a data block column, selecting either the Begins with or Contains criteria, then entering the value to search for.

2.2 COLUMNS/GROUPING/SORTING

You can customize the columns on your pages according to your preferences. Changes made to columns and filtering will be retained across projects each time you access Control.

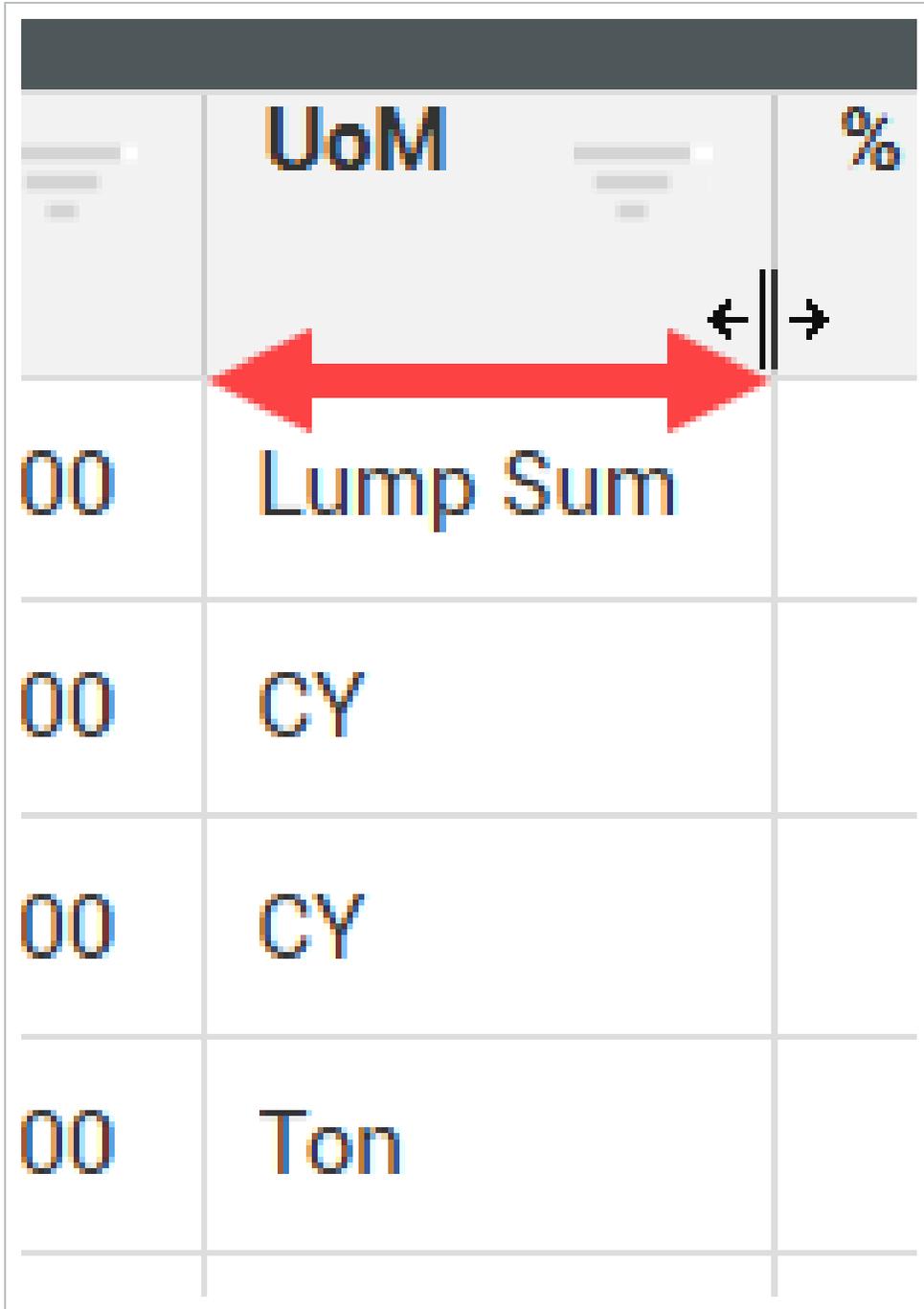
2.2.1 Resize column width

You can resize the width of a column to let you view the data more clearly. To resize a column, select the column border on the right, and then drag it to a new position.



UoM	% CC
Lump Sum	
CY	
CY	
Ton	
Ton	

To auto-fit the column to its contents, double-click the column border.



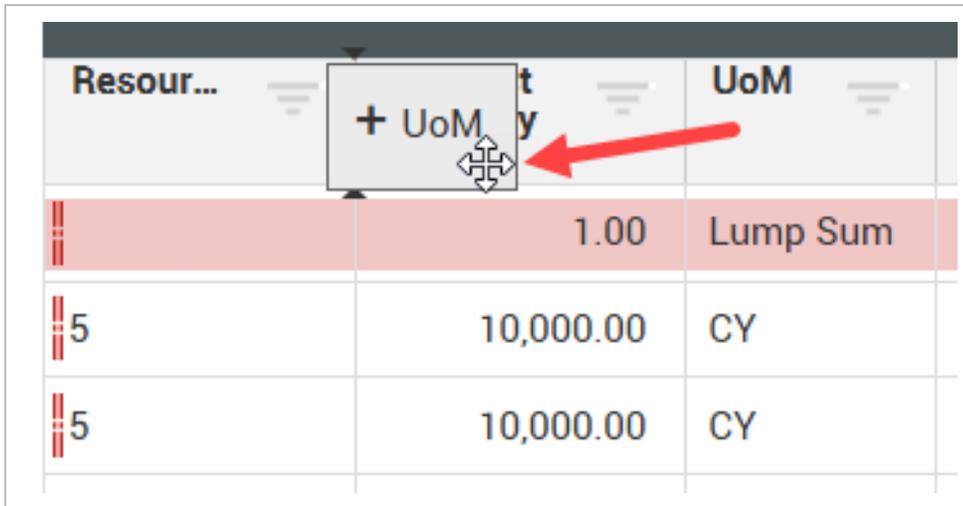
The image shows a table with a header row and four data rows. The header row has three columns: a grey column with a list icon, a grey column with the text 'UoM', and a grey column with a percentage sign '%'. A red double-headed arrow is positioned below the 'UoM' header, spanning across the 'UoM' column and the percentage column. A vertical line with left and right arrows is positioned at the right edge of the 'UoM' column. The data rows contain the following values:

	UoM	%
00	Lump Sum	
00	CY	
00	CY	
00	Ton	

2.2.2 Move Columns

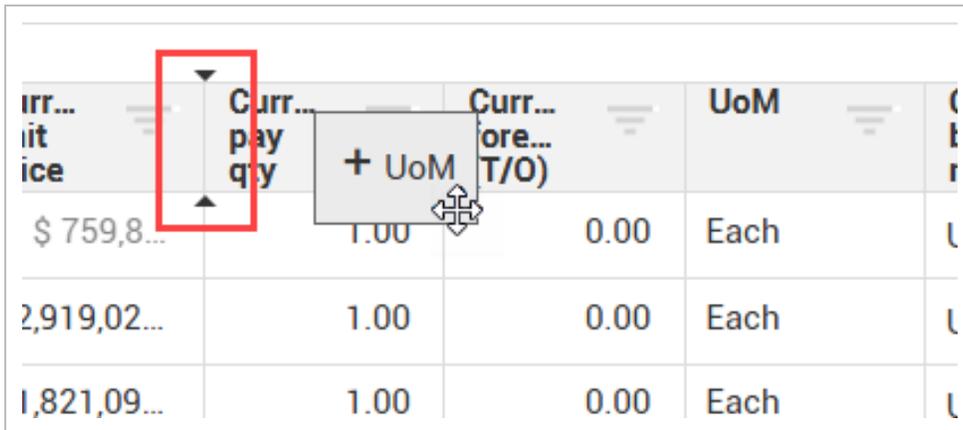
You can move a column from one place to another to customize your view using drag and drop.

To move a column, select the column header, and then drag and drop the column into a new position.



Resour...	UoM	
	Lump Sum	
5	10,000.00	CY
5	10,000.00	CY

Notice that two black arrows indicate the new position of the column.



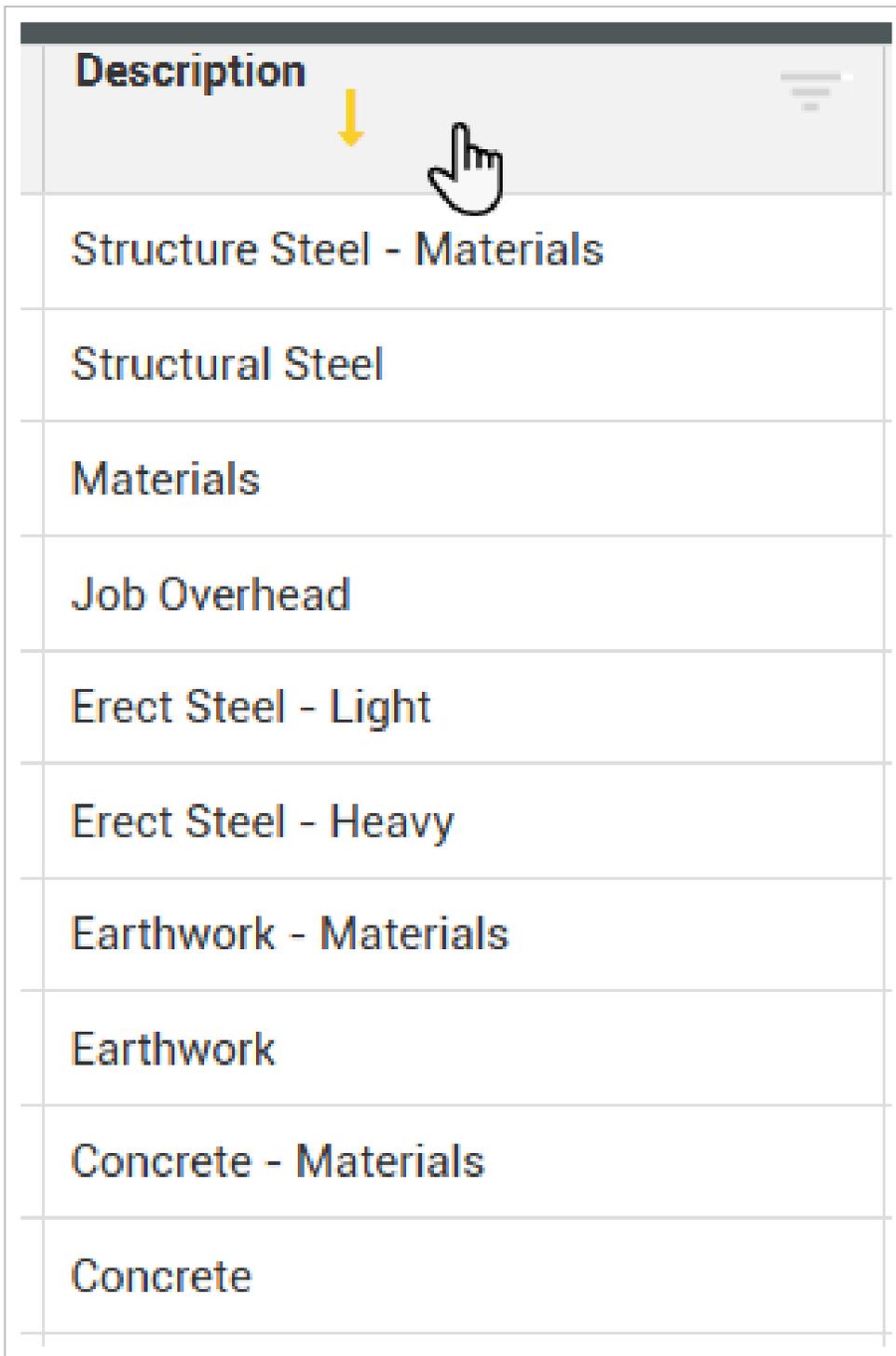
irr... it ice	Curr... pay qy	Curr... ore... T/O)	UoM
\$ 759,8...	1.00	0.00	Each
2,919,02...	1.00	0.00	Each
1,821,09...	1.00	0.00	Each

2.2.3 Sort Columns

You can sort columns by clicking the column header. Click once to sort the column in ascending order.

Description  
000 - Specifications
31510-151-DRG-CC-013
Bolted Connections
Concrete
Concrete - Materials
Earthwork
Earthwork - Materials
Erect Steel - Heavy
Erect Steel - Light
Job Overhead

Click the column header a second time to sort the column in descending order.



The image shows a table with a header row and several data rows. The header row is highlighted in light gray and contains the text "Description". A yellow arrow points downwards from the "Description" header, and a hand cursor is positioned over it. The data rows contain the following text: "Structure Steel - Materials", "Structural Steel", "Materials", "Job Overhead", "Erect Steel - Light", "Erect Steel - Heavy", "Earthwork - Materials", "Earthwork", "Concrete - Materials", and "Concrete".

Description
Structure Steel - Materials
Structural Steel
Materials
Job Overhead
Erect Steel - Light
Erect Steel - Heavy
Earthwork - Materials
Earthwork
Concrete - Materials
Concrete

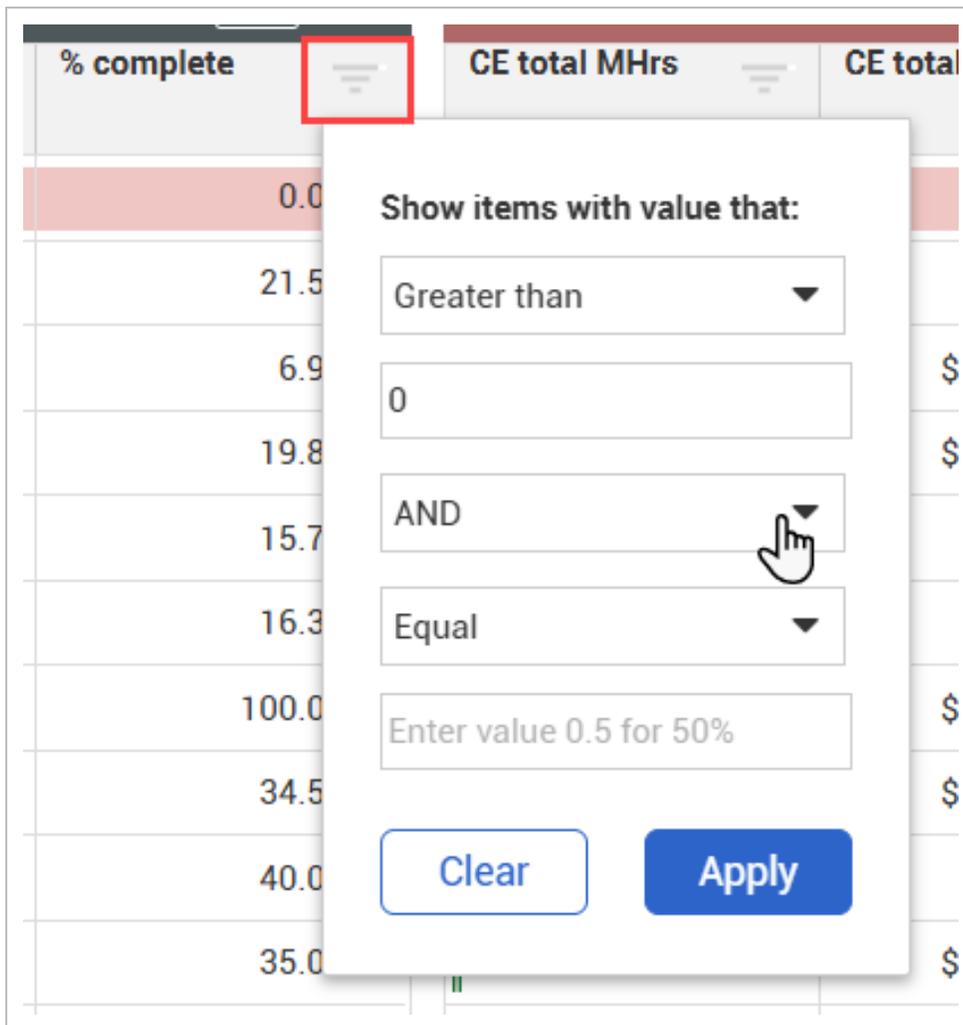
To clear the sorting, click the column header a third time.

2.2.4 Filter Columns

You can filter your column data to only show specific information you want to view. There are two ways to set a filter:

2.2.4.1 Method 1: Filter from Column Header

You can set a filter for a column by clicking the **Filter** icon on any column header. This opens a drop-down list of items you can filter by to apply to that specific column.



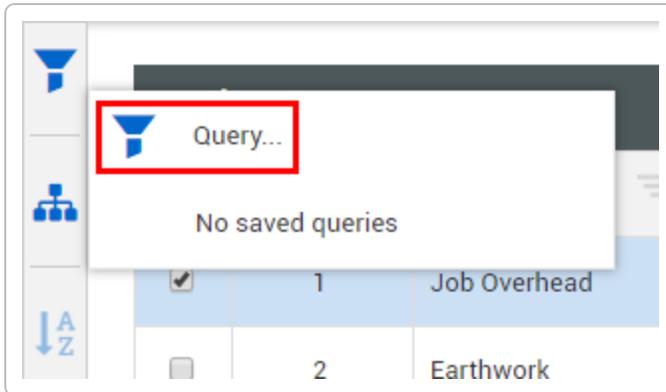
If you want to remove a single filter, locate the column you filtered, click the **Filter** icon, and then click the **Clear** button.

Selecting the Filter icon will remove all the filters applied to the columns.

2.2.4.2 Method 2: Filter by Query

You can also set a filter by clicking the **Filter** icon and selecting **Query**.

On the CBS and ACS tabs, the Filter icon shows on the side toolbar. On the Pay Items tab, Change Register, and Audit Log, the Filter icon shows on the top right toolbar.



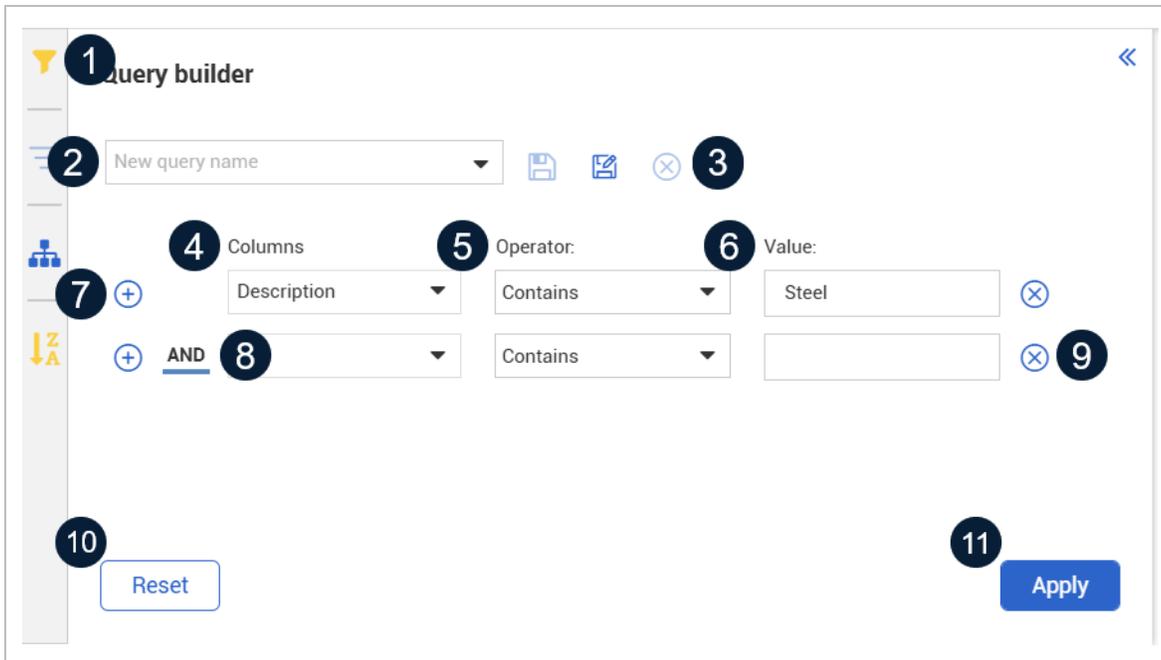
The filter by Query option is helpful when you:

- Need to search for the column you need to filter
- Need to apply filters to more than one column

Selecting Query opens the Query builder slide-out panel, where you can set the filter criteria.

2.2.4.3 Query Builder

You can build a query using multiple criteria. Each criterion includes a column, an operator, and a value. Use the AND/OR options to combine criteria and define how they relate to each other. The following image and table show the Query builder functions:

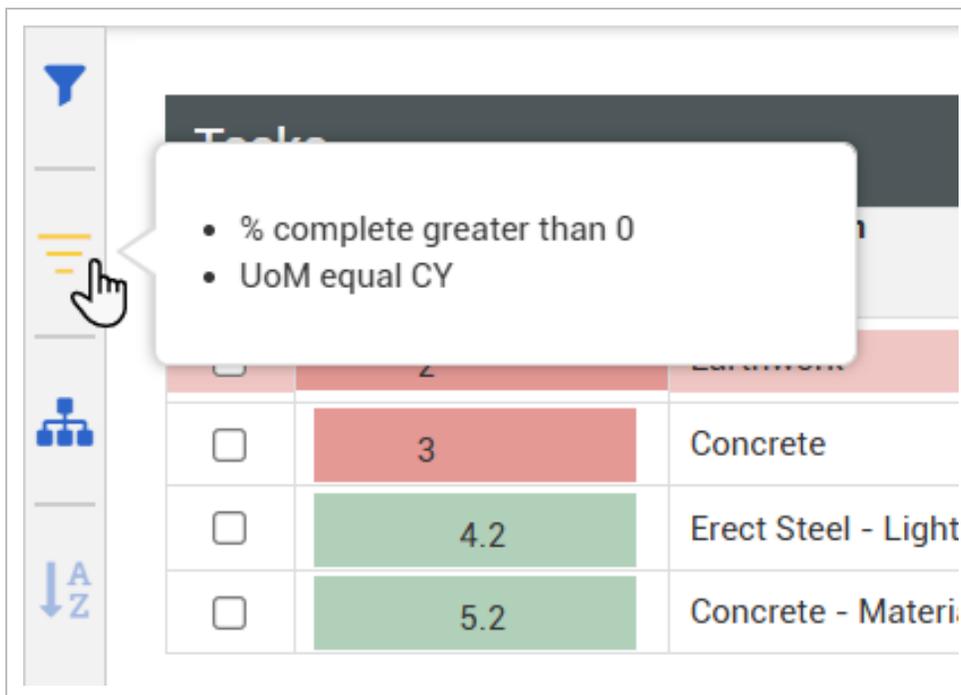


	Title	Description
1	Filter icon	Opens the Query builder slide-out panel.
2	Query name	Click the Save as icon to the right to input a name for the query. Open the query name drop-down menu to select a saved query.
3	Save Query icons	Click the Save as icon to enter a name for a new query, and then click the Save icon to save the query. Click the Delete icon to delete the saved query.
4	Columns	Open the Columns drop-down menu to select the column that the filter criterion will apply to.
5	Operator	Open the Operator drop-down menu to select the condition to be applied to the selected column.
6	Value	Enter the value you want to search for.
7	Add icon	Click the Add icon to add another criterion to the query.
8	AND/OR options	Click AND/OR to define how the query criteria relate to one another. When you click here, the options toggle between “And” and “Or”.
9	Delete icon	Click the Delete icon to remove the criterion from the query.

	Title	Description
10	Reset	Click the Reset button to remove the filter criteria from the CBS and close the Query builder.
11	Apply	Click the Apply button to apply the filter criteria to the CBS.

2.2.5 Filter Indicator

On the CBS tab, in addition to the two filtering methods, there is also a Filter indicator on the side toolbar. When a filter is applied, the Filter indicator turns yellow. Hover over the icon to view details of the applied filters.



Clicking the filter icon will remove all of the applied filters.

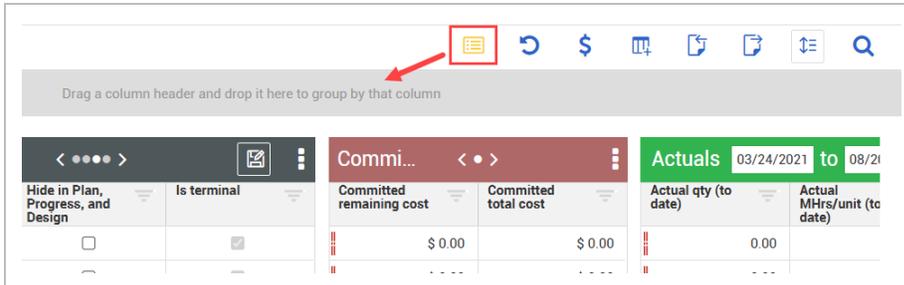
2.2.6 Grouping

Several tabs in Workspaces let you organize your data into groups based on column. This is useful when you want to view related records together, or if you want to see subtotal values by group.

Note that only columns with a discrete or predefined set of values such as categories, statuses, or units of measure can be used for grouping.

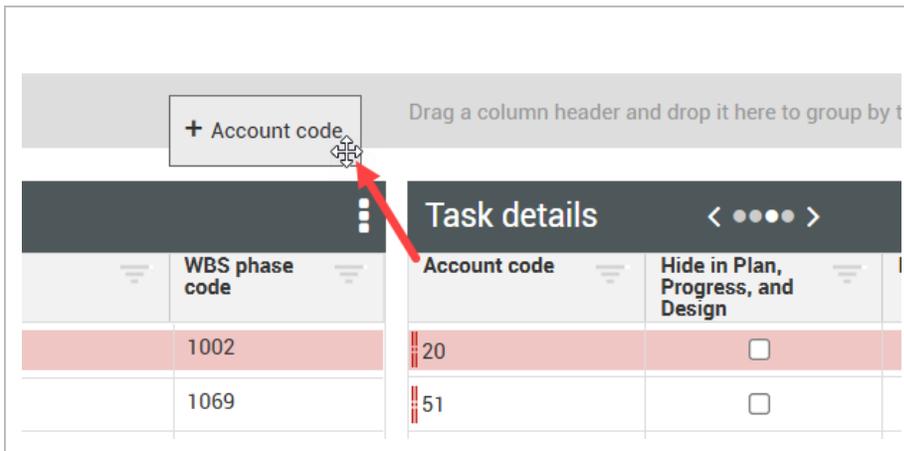
Group Data by Column Values

1. From the right toolbar, click the **Group columns** icon. This opens the grouping area at the top of the page.



On the Pay Items tab, the grouping area is always open.

2. Select a column header, and then drag and drop it into the grouping area. Your data is now grouped based on the values in that column.



3. To create a subgroup, select another column header, and then drag and drop it into the grouping area.

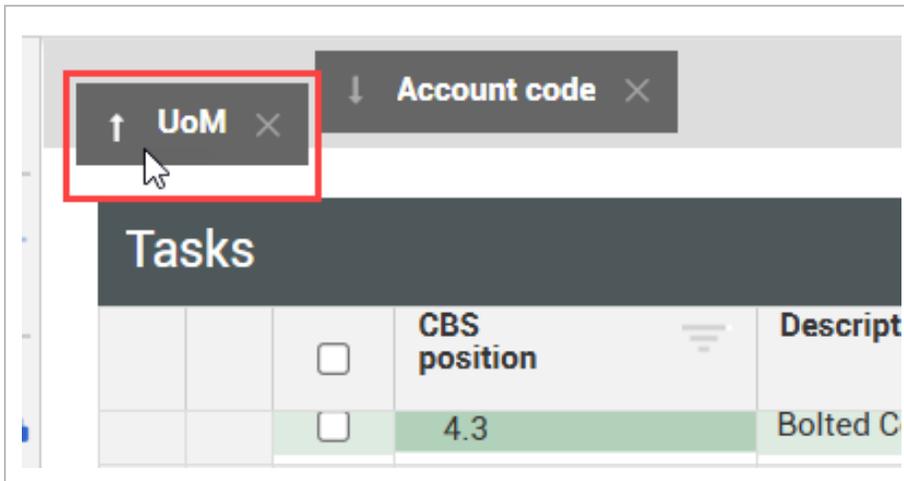
Tasks			
<input type="checkbox"/>	CBS position	Description	WBS phase code
Account code: (Count:13)			
UoM: CY (Count:4)			
<input type="checkbox"/>	2	Earthwork	1069
<input type="checkbox"/>	3	Concrete	1071
<input type="checkbox"/>	5.1	Earthwork - Materials	1085
<input type="checkbox"/>	5.2	Concrete - Materials	1086
Count:4			
UoM: Ea (Count:1)			
<input type="checkbox"/>	4.3	Bolted Connections	1006
Count:1			

Current estimate	
CE total Mhrs	CE total cost
8,000.00	\$ 400,000.00
30,000.00	\$ 1,500,000.00
0.00	\$ 250,000.00
0.00	\$ 1,000,000.00
38,000.00	\$ 3,150,000.00
1,246.00	\$ 62,300.00
1,246.00	\$ 62,300.00

4. To reverse the sorting of the groups, click the column header inside the grouping area.

Tasks		
<input type="checkbox"/>	CBS position	Description
<input type="checkbox"/>	4.3	Bolted Connector
Count:1		
UoM: Each (Count:1)		

To rearrange the subgrouping, drag and drop a column header inside the grouping area into a new position.



Click the **Close** icon on the column header to remove it from the grouping.

5. To remove the grouping on the page, click the Group columns icon again.

2.3 DATA BLOCKS

Each data block is a set of columns grouped together based on categories of information. Using data blocks helps you organize and manage all the columns on a page.

Data blocks are customizable, and you can view them side by side and move them within the register. The information in each data block shows in a grid-like format, maintaining a spreadsheet look and feel.

Tasks	CBS position	Description	WBS phase code
1	Job Overhead	1002	
2	Earthwork	1069	
3	Concrete	1071	
4	Structural Steel	1073	
4.1	Erect Steel - Heavy	1074	
4.2	Erect Steel - Light	1005	
4.3	Bolted Connections	1006	
5	Materials	1084	
5.1	Earthwork - Materials	1085	
5.2	Concrete - Materials	1086	
5.3	Structure Steel - Mat...	1087	
5.4	1 onn Trailer	1088	
Subtotals 13			

Task details	Resource	Forecast (T/O) quantity	UoM
16		1.00	Lump Sum
5		10,000.00	CY
6		10,000.00	CY
		1,000.00	Ton
5		800.00	Ton
5		200.00	Ton
8		2,000.00	Ea
		1.00	Each
1		10,000.00	CY
1		10,000.00	CY
		1,000.00	Ton
		1.00	Pl.S

Forecast	Forecast final cost	Forecast final M/Hrs	Forecast final man hours/Unit	Forecast final productivity factor	Forecast final unit cost
	\$ 695.00	11.00	11.00	0.00	
	\$ 400,000.00	8,000.00	0.80	1.00	
	\$ 1,500,000.00	30,000.00	3.00	1.00	
	\$ 1,000,035.71	20,000.71	20.00	1.05	\$
	\$ 800,000.00	16,000.00	20.00	1.00	\$
	\$ 200,000.00	4,000.00	20.00	1.00	\$
	\$ 35.71	0.71	0.00	1,400.00	
	\$ 1,750,000.00	0.00	0.00	0.00	\$ 1.75
	\$ 250,000.00	0.00	0.00	0.00	
	\$ 1,000,000.00	0.00	0.00	0.00	
	\$ 500,000.00	0.00	0.00	0.00	
	\$ 0.00	0.00	0.00	0.00	
	\$ 4,650,730.71	58,011.71			

Each type of data block has its own unique default settings such as date range selectors and date preset options (for financial periods). You can choose the total number of columns and panels for each data block.

2.3.1 Data Block Categories

There are three categories of data blocks: Standard, Cost Category and Custom.

2.3.1.1 Standard Data Block

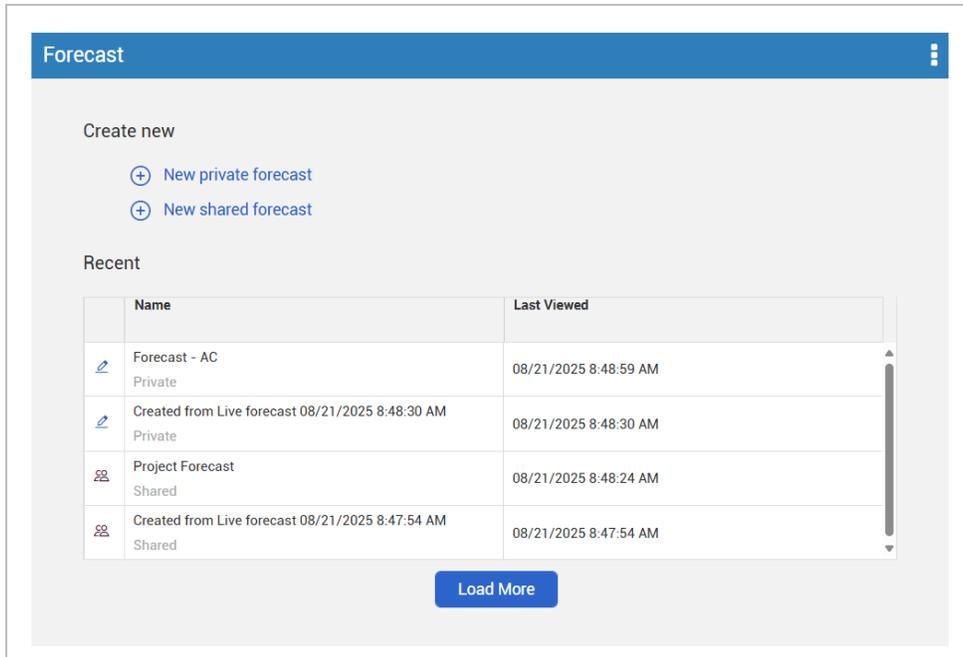
Standard data blocks include the following:

- Task Details
- Actuals
- Current Budget & Estimate
- Forecast
- Forecast Delta
- Live Forecast
- Schedule

You can customize the columns grouped within each of these data blocks.

2.3.1.2 Forecast Data Block

When you add a forecast data block to your view, you are prompted to select the specific forecast to show in this data block. You can create a new private or shared forecast or select an existing forecast.



See [Forecast Management](#) for more details on forecast data blocks.

2.3.1.3 Cost Category Data Block

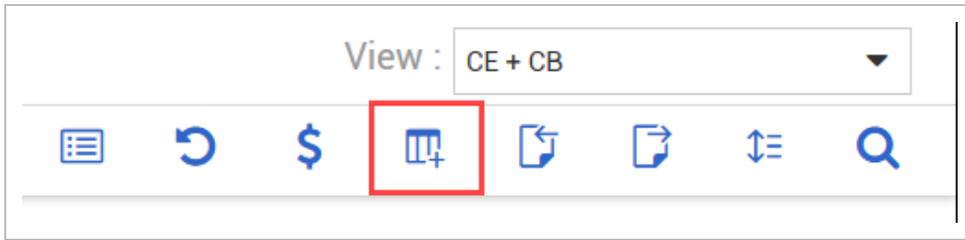
The Cost category data blocks organize key project progress information by cost category, and include the following:

- Cost categories: Actuals
- Cost categories: Current Budget
- Cost categories: Current Estimate
- Cost categories: Forecast

You can change the columns in Cost Category data blocks.

2.3.2 Manage Data Blocks

You can manage your data blocks by opening the Add data block slide-out panel. To open the Add data block slide-out panel, click the **Add data block** icon.

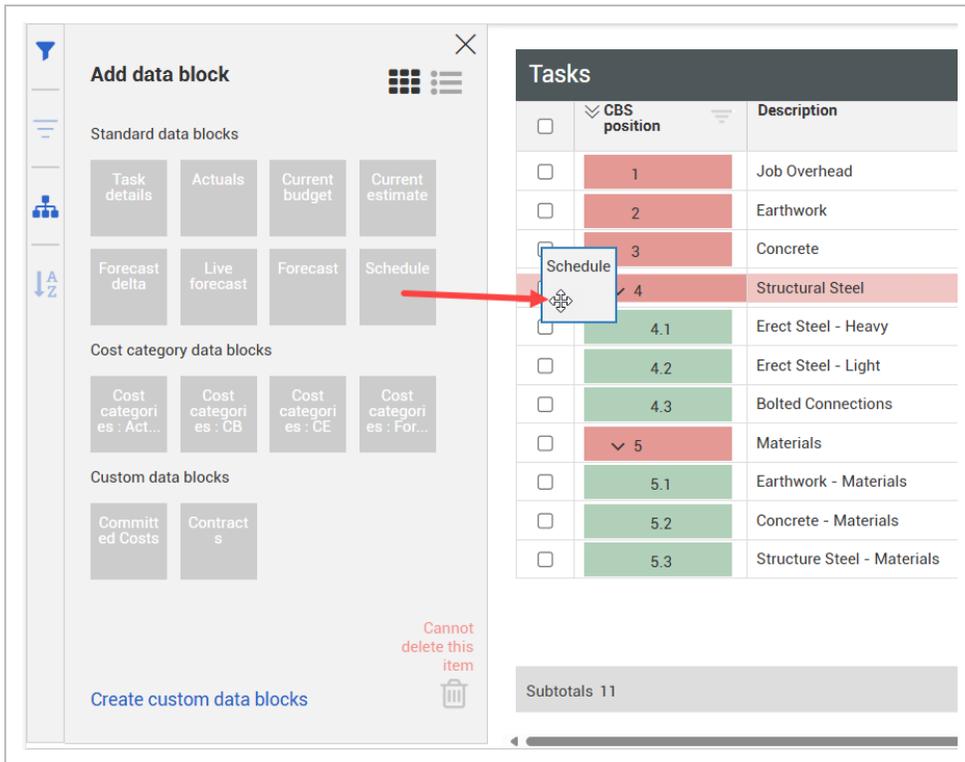


In the Add data block slide-out panel, you can switch between Thumbnail view or List view.

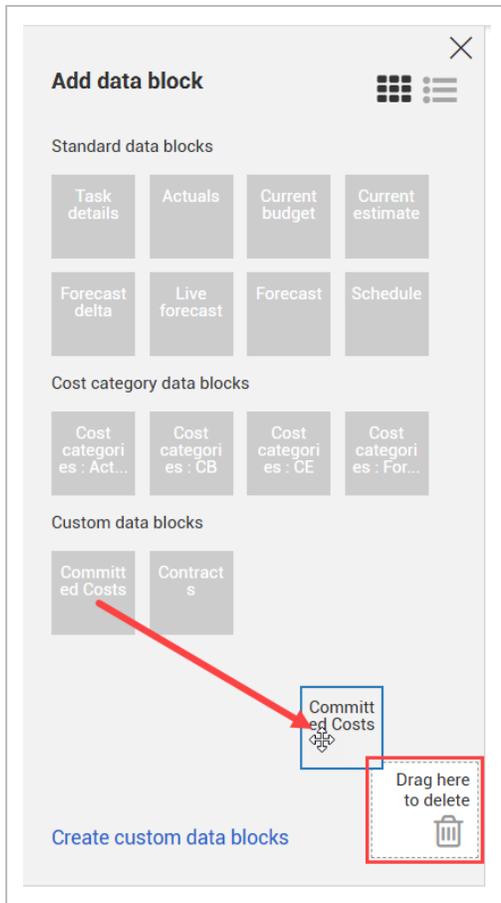
2.3.2.4 Thumbnail View

Thumbnail view is the default view of the Add data block slide-out panel. In this view, data blocks are shown as thumbnails.

To add a data block to your view, drag and drop it onto the page from the slide-out panel.



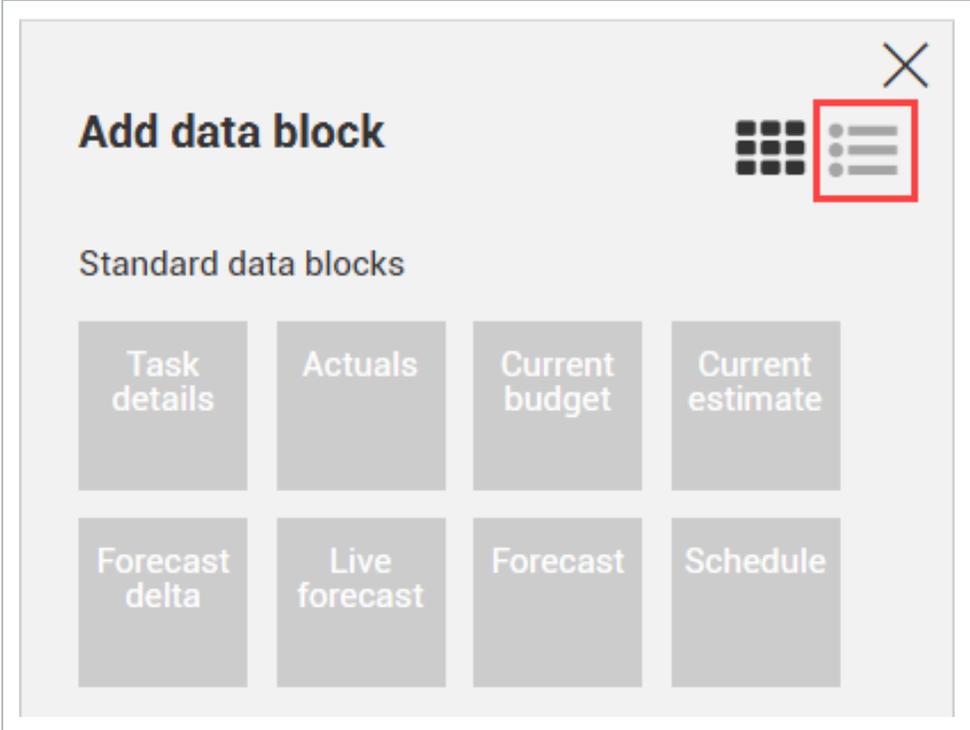
To delete a custom data block, drag and drop it onto the **Delete** icon.



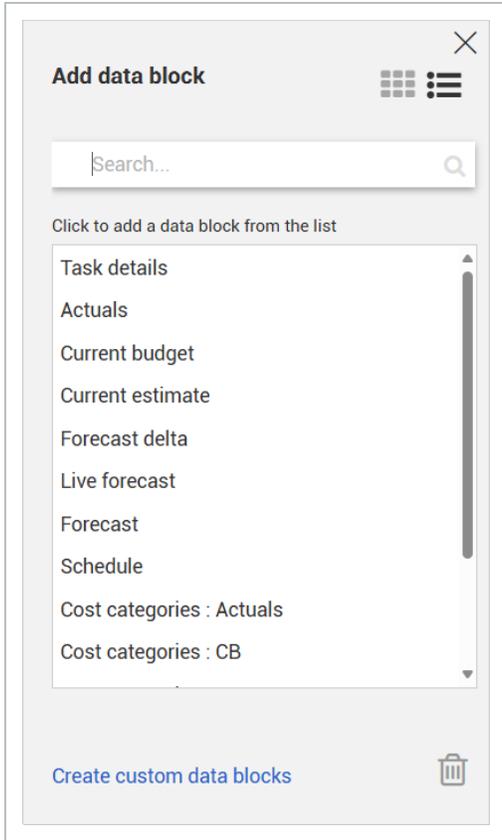
Note: You cannot delete preset data blocks.

2.3.2.5 List View

Click the **List View** icon to switch to List view.

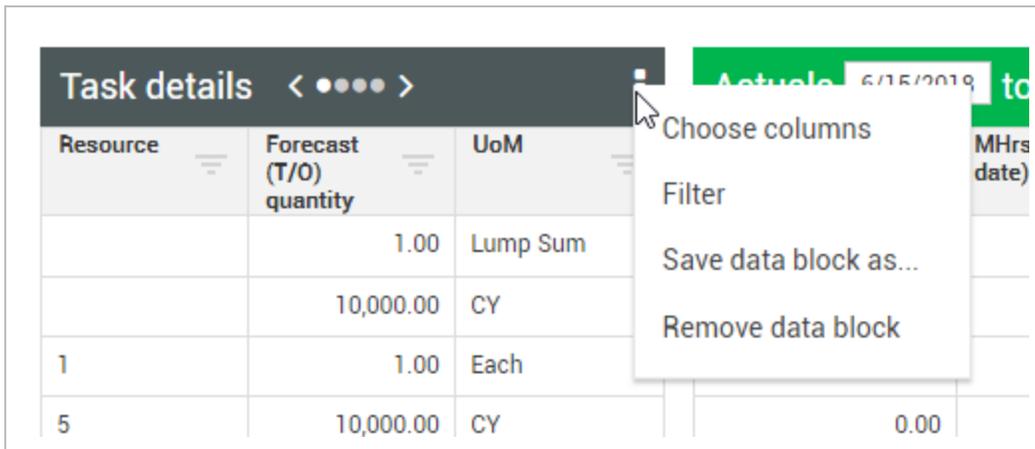


In this view, data blocks are shown in a list. You can search for a specific data block from the search bar. You can also add a data block to your view by double-clicking it from the list.



2.3.3 Data Block Context Menu

The data block Context Menu allows you to perform different operations specific to the data block you select.



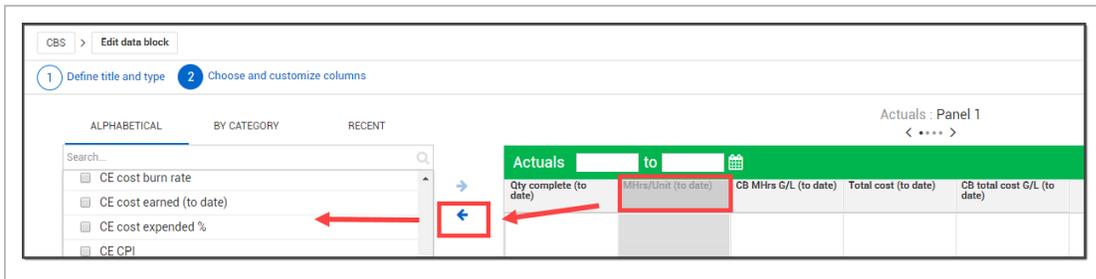
The following table provides an overview of Context Menu options:

Data Block Context Menu	
Title	Description
Choose columns	Open the column chooser menu and move, add, and remove columns from the data block.
Filter	Filter data within a data block.
Save data block as	Create a copy of the existing data block and save it.
Remove data block	Remove the data block from the current view.
Color coded terminal items (Tasks data block only)	Add colors to terminal items of your current data block.
Color-coded CBS position (Tasks data block only)	Adds colors to all CBS lines.
Show/Hide WBS Phase Code (Tasks data block only)	Display or remove the WBS Phase Code column within the Tasks data block.

In the following step by step, you will learn how to modify a custom or an existing data block using the Context Menu.

Edit a Data Block

1. In the CBS register, select the **Context Menu** icon of the custom data block you created.
2. Select **Choose columns** from the context menu.
3. Add a new column to your custom data block.
4. Remove a column from your custom data block by selecting the header and clicking the left-facing arrow to return it to the left column.



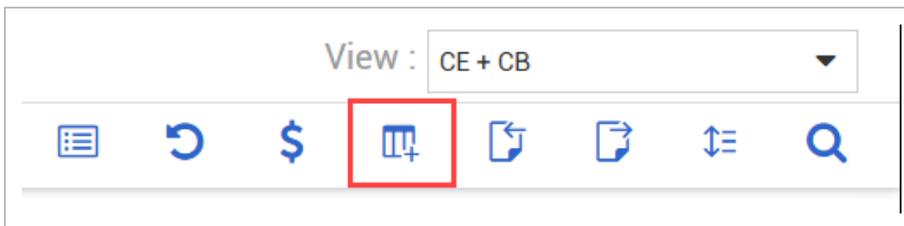
5. To close the slide out panel, click the **APPLY** button on the bottom right of the slide out.

2.3.4 Custom Data Blocks

You can create a custom data block based on your needs. Custom data blocks can be organized by color-coded type, and you can apply the same header functionality used in preset data blocks. Custom data blocks can be added to your view or saved for future use.

Create a Custom Data Block

1. From the right toolbar, click the **Add data block** icon.



2. From the Add data block slide-out panel, click **Create custom data blocks**.

Actions [dropdown] [plus] [edit] [close]

Add data block

Standard data blocks

- Task details
- Actuals
- Current budget
- Current estimate
- Forecast delta
- Live forecast
- Forecast
- Schedule

Cost category data blocks

- Cost categories : Act...
- Cost categories : CB
- Cost categories : CE
- Cost categories : For...

Custom data blocks

- Committed Costs

Create custom data blocks [trash]

Tasks	
<input type="checkbox"/>	∨ CBS position
<input type="checkbox"/>	1
<input type="checkbox"/>	2
<input type="checkbox"/>	3
<input type="checkbox"/>	∨ 4
<input type="checkbox"/>	4.1
<input type="checkbox"/>	4.2
<input type="checkbox"/>	4.3
<input type="checkbox"/>	∨ 5
<input type="checkbox"/>	5.1
<input type="checkbox"/>	5.2
<input type="checkbox"/>	5.3

Subtotals 11

3. In the data block title field, enter a name for your data block.

CBS > Create new data block

1 Define title and type 2 Choose and customize columns

Data block title
Contracts

Data block type

- General
- Forecast
- Live forecast
- Forecast delta
- Actuals
- Schedule
- Revenue
- Cost category
- Tasks

Preview

Contracts

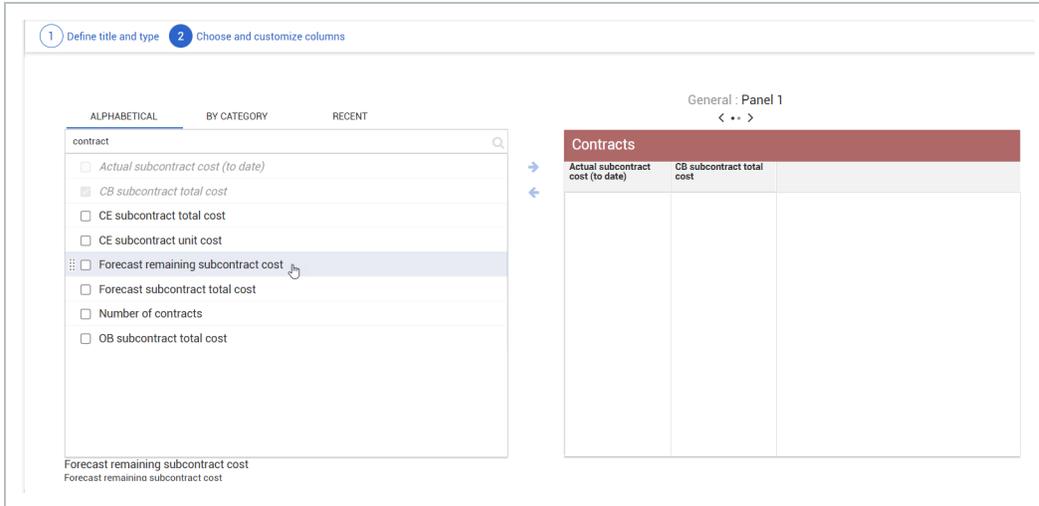
General

Cancel Next

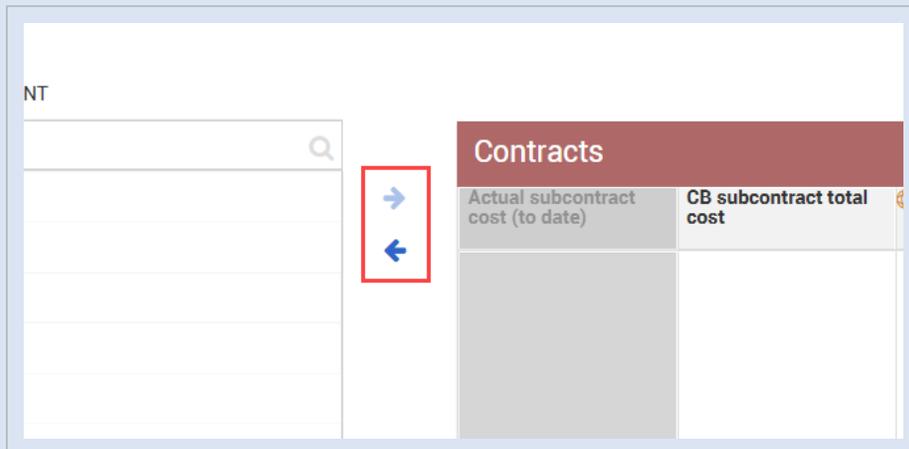
4. Under Data block type, select the type that best fits your data block.

The forecast, live forecast, forecast delta, and actuals data block types have unique header features.

5. Click **Next**.
6. Add columns to your data block. You can add a column by double-clicking the column from the left panel, or by dragging and dropping the column from the left panel to the data block preview on the right.

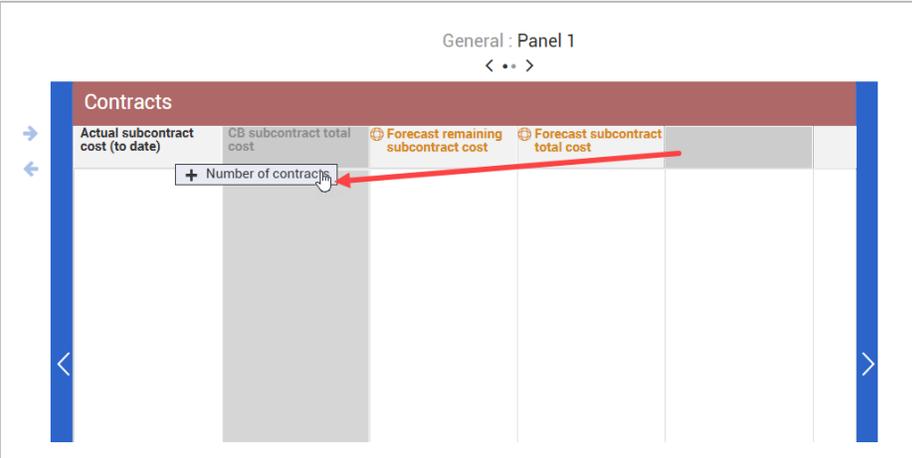


You can also add or remove columns by selecting the column(s) and using the left and



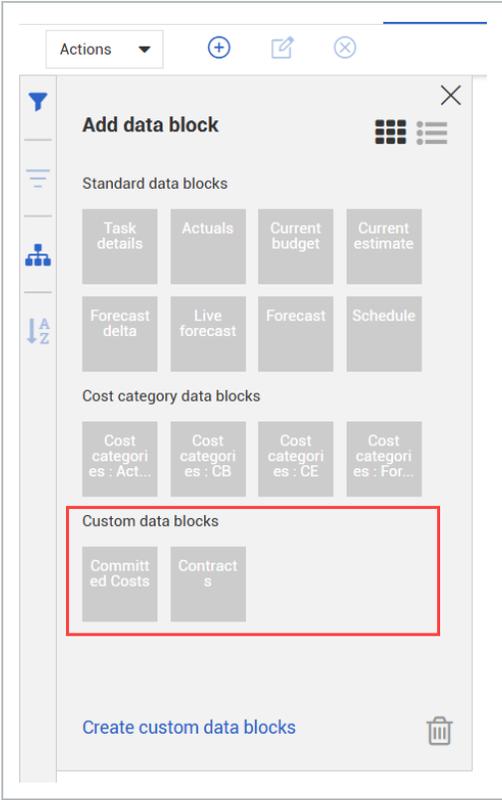
right arrows.

7. You can reorder the columns from the data block preview by dragging and dropping columns into a new position.



8. When finished, click **Save**.

Custom data blocks can be managed from the Add data block slide-out panel.

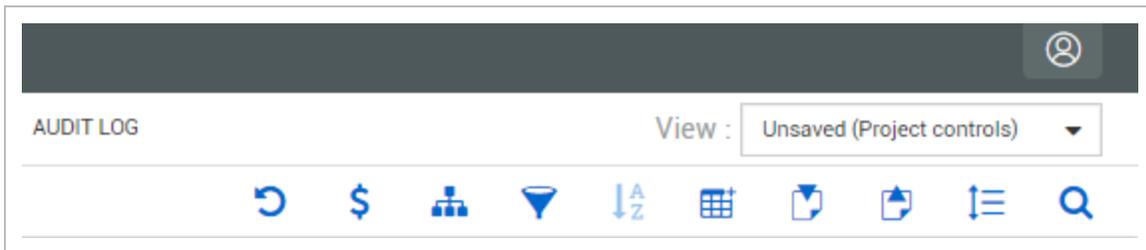


2.4 VIEWSETS

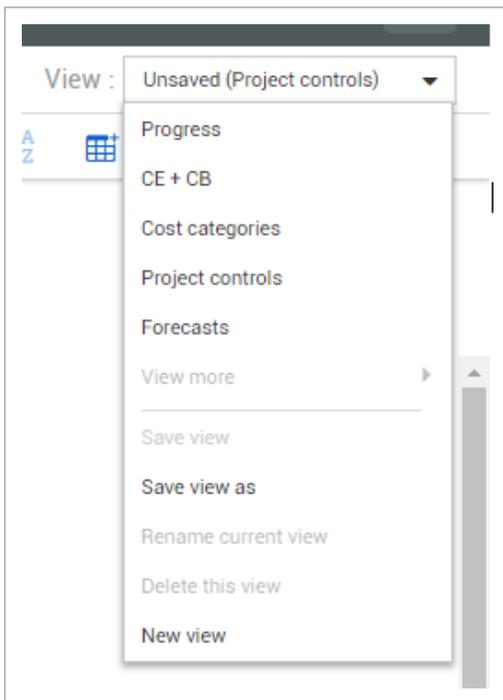
Once you have all desired data blocks organized to your liking, you can create a saved view of your page so that you can always revert to it. This saved view is called a Viewset. The viewset can also be shared with other users.

Create and Save a Viewset

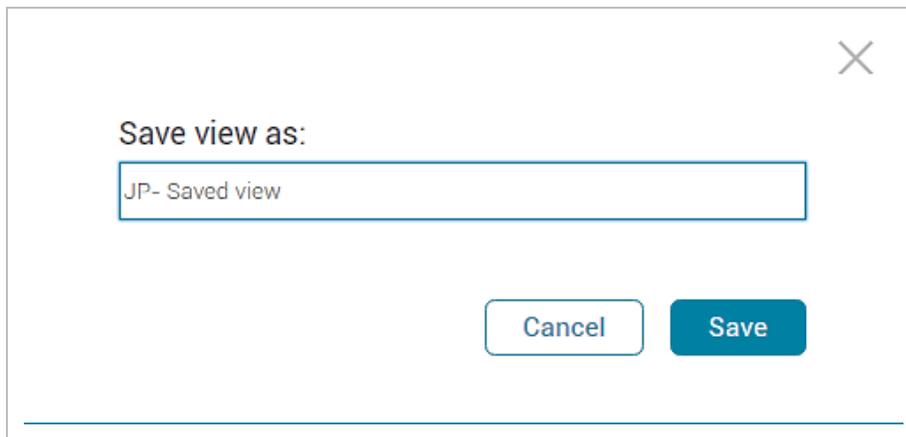
1. From the CBS register page, click on the **View** drop-down arrow.



2. From the Viewset drop-down list, select **Save view as**.



3. Name your view **[your initials] – Saved view**.



Save view as:

JP- Saved view

Cancel Save

4. Click **Save**.

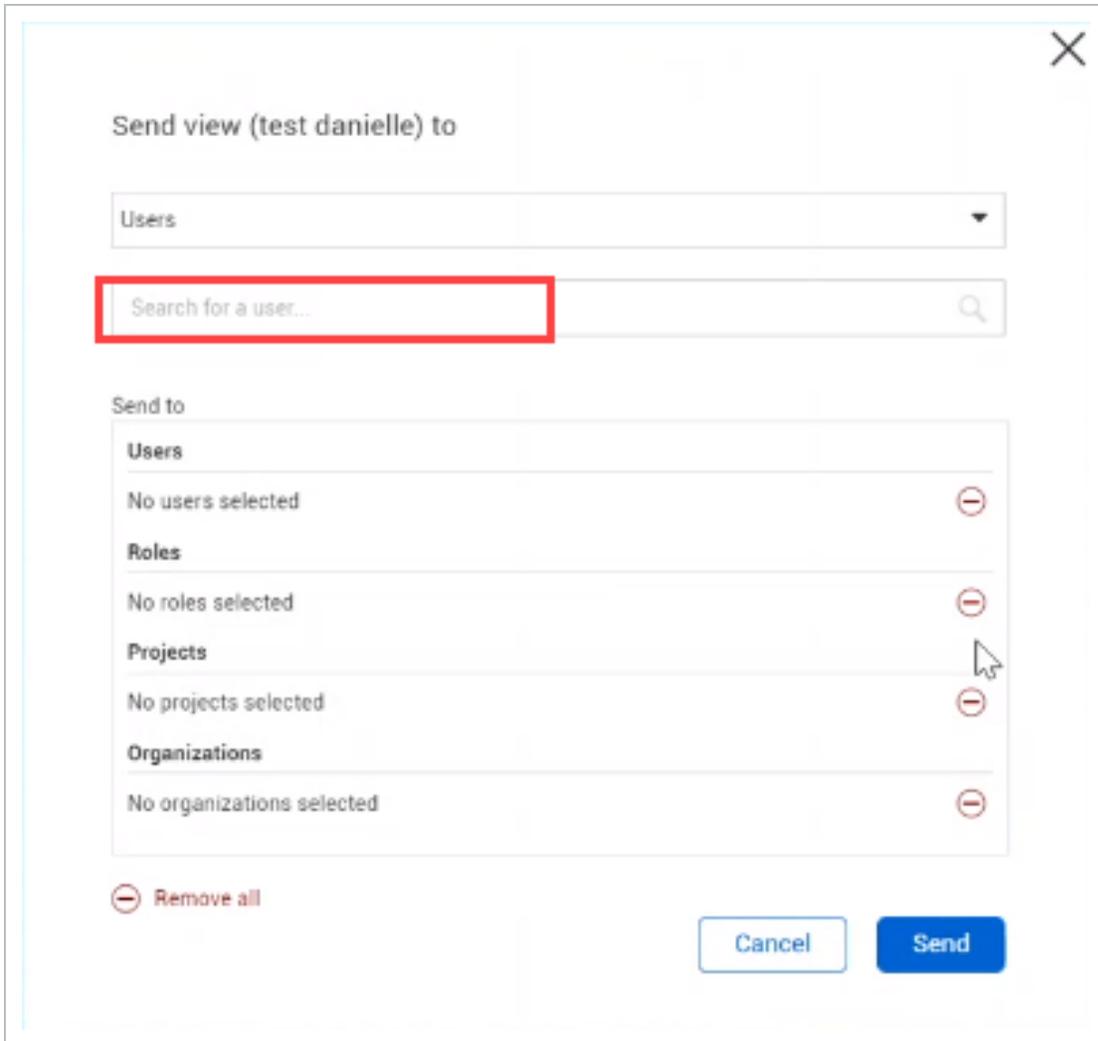
2.4.1 Sending Views and Data Blocks

Certain permissions are needed to send views and data blocks to roles.

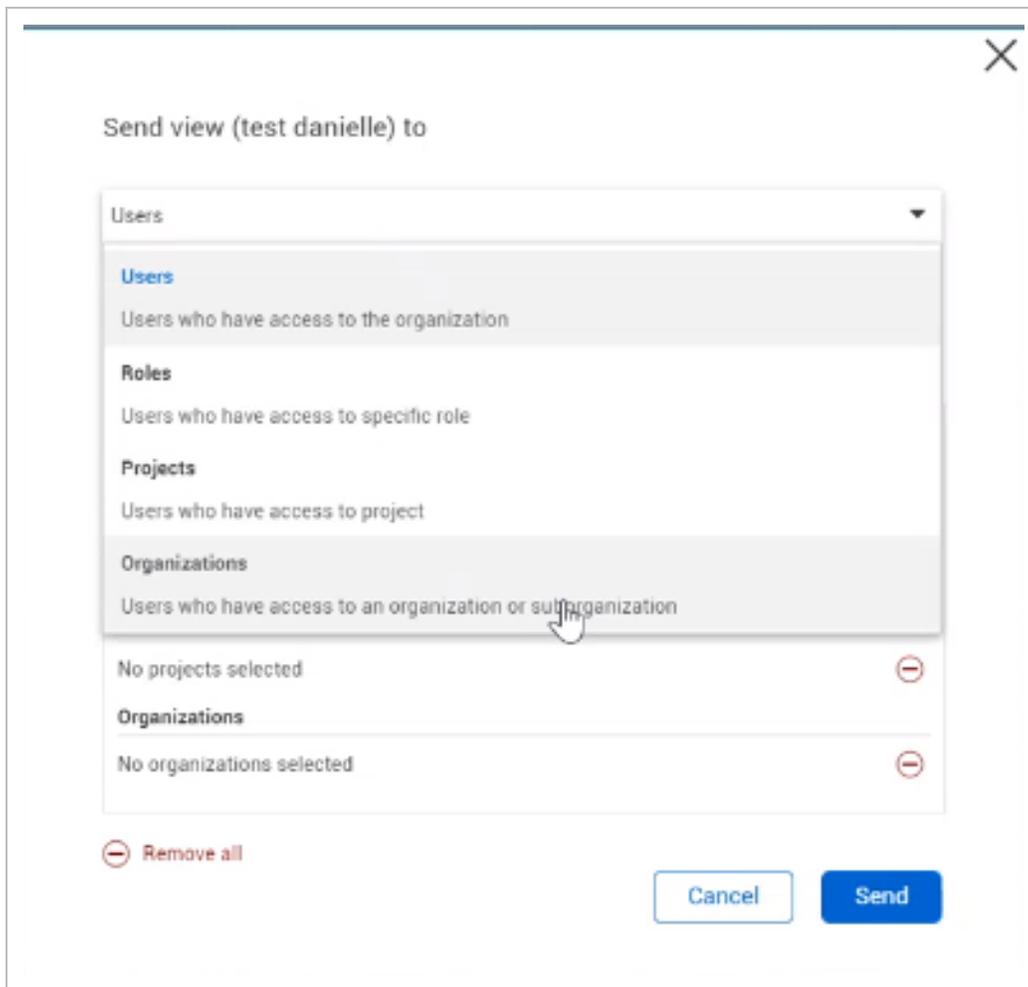
You can send views to all users that have a certain role. You can also send it to specific projects or full organizations. To send to a project, you have to be a user on that project or in that organization.

Send a Viewset

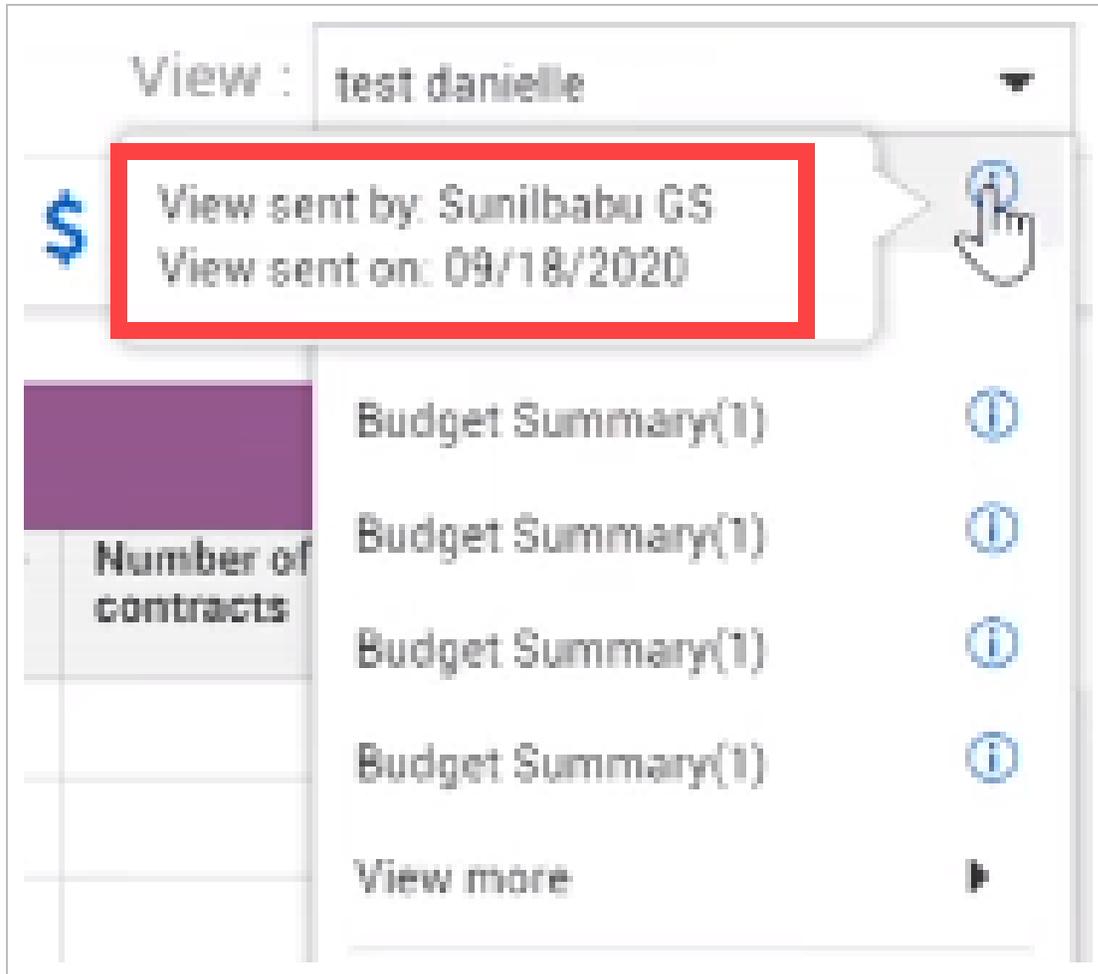
1. With the Viewset selected and shown, from the Viewset drop-down list, select **Send view**.
2. In the **Search for a User** field, type an employee's name and select their name from the list.



- To send to a project, you have to be a user on that project or organization. Then select the Send View to drop down list and select the option you want.



3. Click **Send**.
4. The selected Viewset will send a notification to the selected employee, and will be available in their drop-down list with sender's name and when the Viewset was sent.



If the user does not have the proper permissions to view all the columns in the view that was sent to them, then the employee will only be able to view the columns for which they have permissions.

2.5 ROW DENSITY

The row density feature allows you to change the spacing between rows within the various pages and slide out panels in Control, allowing you to view your data with the amount of spacing you prefer.

There are three options available:

- Relaxed

Tasks			Task details < ●●●● >		
<input type="checkbox"/>	CBS position	Description	Resource	Forecast (T/O) quantity	UoM
<input type="checkbox"/>	1	Job Overhead		1.00	Lump Sum
<input type="checkbox"/>	^ 2	Earthwork		10,000.00	CY
<input type="checkbox"/>	2.1	Earthwork Review	1	1.00	Each
<input type="checkbox"/>	2.2	Earthwork	5	10,000.00	CY

- Narrow

Tasks			Task details < ●●●● >		
<input type="checkbox"/>	CBS position	Description	Resource	Forecast (T/O) quantity	UoM
<input type="checkbox"/>	1	Job Overhead		1.00	Lump Sum
<input type="checkbox"/>	^ 2	Earthwork		10,000.00	CY
<input type="checkbox"/>	2.1	Earthwork Review	1	1.00	Each
<input type="checkbox"/>	2.2	Earthwork	5	10,000.00	CY
<input type="checkbox"/>	3	Concrete	5	10,000.00	CY

- Tight

Tasks			Task details < ●●●● >		
<input type="checkbox"/>	CBS position	Description	Resource	Forecast (T/O) quantity	UoM
<input type="checkbox"/>	1	Job Overhead		1.00	Lump Sum
<input type="checkbox"/>	^ 2	Earthwork		10,000.00	CY
<input type="checkbox"/>	2.1	Earthwork Review	1	1.00	Each
<input type="checkbox"/>	2.2	Earthwork	5	10,000.00	CY
<input type="checkbox"/>	3	Concrete	5	10,000.00	CY
<input type="checkbox"/>	^ 4	Structural Steel		1,000.00	Ton

The Row density icon is available on the CBS, ACS, Pay Items, Change Register, and Audit Log tabs.



When you select the Row density icon, a drop-down menu appears, where you can select the row density (space between rows) you prefer.



The row density you select applies to all registers within Control, including all tabs and slide out panels on the Workspaces and Project Library pages.

Row density is user-specific, so different users can apply different row densities within Control, and the row density option you select will remain the next time you log in.

Row density is independent from the Viewsets you create. The row density you select is therefore not saved as part of your viewsets.

2.6 AUDIT LOG

The **Audit Log** tab within the CBS register is used to capture changes that were made within InEight Control and is broken down into five sub-tabs located on a left sidebar menu. Each log is designed to capture the changes that happened within each of the different registers and during synchronization.

All five audit logs can be accessed by selecting the Audit log tab on the menu bar, then selecting each individual audit log on the far left.

		CBS	ACS	PAY ITEMS	CHANGE REGISTER	AUDIT LOG							
Actions ▾													
CBS	Audit ID	Data type	Item type	Desc:	WBS	Attrit	Chan by	Chan date	Value befor	Value after	Actuz comp	Forec total co...	Forec total co...
ACS	4871359	CBS	Cost Item	Concrete	1071	Schedule ...	Michael M...	07/23/20...	False	True			
Pay items	4871358	CBS	Cost Item	Earthwork	1069	Schedule ...	Michael M...	07/23/20...	False	True			
Integration	4871357	CBS	Cost Item	Job Overh...	1002	Schedule ...	Michael M...	07/23/20...	False	True			
Import history	4871356	CBS	Cost Item	Structural...	1073	Scheduled	Michael M...	07/23/20...	False	True			

2.6.1 CBS

You can access the CBS audit log by selecting CBS from the left side menu.

The **CBS audit Log** captures changes in the CBS register and utilizes an attribute field to identify what type of change was made. Other columns include:

- Changed By (who made the change)
- Change Date (the date and time the change was made)
- The attribute value before and after
- Forecast cost before and after
- Forecast man-hours before and after
- Posting date before and after

CBS	Audit ID	Data type	Item type	Desc:	WBS	Attrit	Chan by	Chan date	Value befor	Value after
ACS	4871359	CBS	Cost Item	Concrete	1071	Schedule ...	Michael M...	07/23/20...	False	True
Pay items	4871358	CBS	Cost Item	Earthwork	1069	Schedule ...	Michael M...	07/23/20...	False	True
Integration	4871357	CBS	Cost Item	Job Overh...	1002	Schedule ...	Michael M...	07/23/20...	False	True
Import history	4871356	CBS	Cost Item	Structural...	1073	Scheduled	Michael M...	07/23/20...	False	True

2.6.2 ACS

You can access the ACS Audit Log by selecting **ACS** from the left side menu.

The **ACS Audit Log** functions similarly to the CBS Audit Log, but contains the changes that were made within the ACS (Account Code Structure) tab. The fields utilized to capture what changes were made are:

- Change attribute
- Changed By (who made the change)
- Changed Date (the date and time the change was made)
- Attribute value before and after

CBS	Audit ID	Data type	Item type	Description	AC No.	Attribute	Changed by	Changed date	Value before	Value after
ACS	177	ACS	Account Code	Structural Steel industrial...	62.03.02.004.02	Primary Auto Quantity	Paul Benson	11/19/2018 12:28 PM	False	True
Pay items	176	ACS	Account Code	Structural Steel industrial...	62.03.02.004.02	Primary Auto Quantity	Paul Benson	11/19/2018 12:24 PM	True	False
Integration	175	ACS	Account Code	Structural Steel industrial...	62.03.02.004.06	Primary Quantity	Paul Benson	11/19/2018 12:21 PM	806.00	406.00
Import history	174	ACS	Account Code	Structural Steel industrial...	62.03.02.004.06	Primary Auto Quantity	Paul Benson	11/19/2018 12:21 PM	True	False
	170	ACS	Account Code	Structural Steel industrial...	62.03.02.004	Contribute Primary To Pri...	Paul Benson	11/19/2018 11:39 AM	False	True

2.6.3 Pay Items

You can access the Pay Item Audit Log by selecting **Pay Items** from the left side menu.

CBS	Audit ID	Data type	Item type	Description	Pay item No.	Attribute	Changed by	Changed date	Value before	Value after
ACS	4873330	Pay Item	Pay Item	Pay Item 1	001	Billing Method	Renee Japp	07/26/2019 01:...	Cost Plus	Fixed Final Price
Pay items	4872029	Pay Item	Pay Item		1	Pay item tag 8	Renee Japp	07/24/2019 02:...		PY 8
Integration	4872028	Pay Item	Pay Item		1	Pay item tag 6	Renee Japp	07/24/2019 02:...		PY 6
Import history	4872027	Pay Item	Pay Item		1	Pay item tag 4	Renee Japp	07/24/2019 02:...		PY 4

The **Pay Item Log** again functions similarly but contains changes that were made to the pay items. The fields utilized to capture what changes were made are:

- Attribute
- Changed By (who made the change)
- Changed Date (the date and time the change was made)
- Value before and Value after
- Total price before and after

Audit ID	Description	Attribute	Changed by	Changed date	Value before	Value after	Total price before
1333638	Testing 07/31	Description	paul trippi	07/31/2019 08:...	Test	Testing 07/31	\$1040.0000000...
1333637	Testing 07/31	Sales Order	paul trippi	07/31/2019 08:...		S1	\$40.000000000...

2.6.4 Integration

You can access the Integration/Sync Audit Log by selecting **Integration** from the left side menu.

	Audit ID	Interface	Status	Processing details	Start	Finish	User name	Log Handle
CBS	65639	ActualQty	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	4a2a98f6-eaa6-431b-81f-
ACS	65638	LiveForecast	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	ce90c8df-f916-4a50-847-
Pay items	65637	Budget	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	43b8dc1c-6825-413a-9c-
Integration	65636	CBS	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	0985605a-745c-4f27-88-
Import history								

The **Sync Audit Log** is different from the other three. This log is used to capture:

- Whether the synchronization process between InEight Control and the ERP system was completed successfully
- How long the sync process took to complete and who requested the sync

It keeps track of the functions performed under the Actions > Sync menu.

The syncing process will be discussed further in the *11.3 Audit Log - Integration on page 468*.

To help troubleshoot sync issues, you can click the link under the Processing details column to get more information on which steps succeeded, are suspended, or failed.

Last updated: 08/29/2018 01:03 PM
Use shortcut key F5 to refresh status

Completed details - - Plan quantities pull: 31570

Step	Status
Step 1: Recieving data	Complete
Step 2: Populating data	Complete

Close

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INEIGHT

If a sync error should occur, you can click on the Log Handle link to obtain troubleshooting information.



This brings you into the InEight **Suite App Logs** screen, where you can see information relating to the error including Level, Time, Domain, Area, Exception Message, Exception Type and Correlation Id, which can help you determine the cause of the sync error.

2.6.5 Import history

You can access the Import history audit log by selecting **Import history** from the left side menu.

The Import history log contains status information for all imports coming into all InEight products. For example, cost item and actuals import processes can both be viewed in the Import history log for status, then you can eventually make corrections and reprocess.

	File name	Status	Processi Details	Total line items	Errors	Total imported	Added estimate resource	Added pay items	Created by	Created date	Last edited by	Last edited date
CBS												
ACS	Market_SL_9_8_17_GMP_Baseline.xer (Mark...	Failed	Step_3	1842	0	0	0	0	Renee Japp	07/24/2019 1...	Renee Japp	07/24/2019 1...
Pay Items	Market_SL_9_8_17_GMP_Baseline.xer (Mark...	Failed	Step_3	1842	0	0	0	0	Renee Japp	07/23/2019 1...	Renee Japp	07/23/2019 1...
Integration	Book1.xlsx	Processing		2	2	0	0	0	Renee Japp	07/12/2019 0...	paul trippi	07/30/2019 0...
Import history	Market_SL_9_8_17_GMP_Baseline.xer (Mark...	Cancelled	Step_5	0	0	0	0	0	Renee Japp	07/10/2019 0...	Renee Japp	07/23/2019 1...

The Import history audit log allows you to take action on import and sync failures, based on error messages. Error messages are contained within the error file for those imports that have failed import.

You can view progress in sync longs, view error messages, and then resolve issues in effort to continue with your import.

Control – Audit Log

Section	Description
1 File name	The name of the actual import file being used to import data.
2 Status	The current status of the import file. There are six import status that can define the current state of an import process.
3 Processing Details	This column describes the processing state in which the file is being processed. This column is not applicable for all statuses.
4 Total line items	This is the total line items that are included within the Excel import file.

Control – Audit Log (continued)

Section		Description
5	Errors	This is a count of the number of errors during import.
6	Total import	This is the total amount of records that were successfully imported from the Excel import file.
7	Added estimate resources	This is the total amount of added estimate resources that were added in the CBS.
8	Added pay items	This is the total amount of pay items successfully imported from the Excel import file.
9	Created by	This is user responsible for importing the Excel upload file.
10	Created date	This is the actual date the Excel upload file was imported.
11	Last edited by	This is the last user to edit the Excel upload file.
12	Last edited date	This is the last date the Excel upload file was edited.

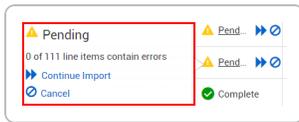
File name	Status	Processing Details	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
NEWPROJ.xer (D...	Pending	Step_5	18	0	0	0	0	paul trippi	08/02/2019 12:1...	paul trippi	08/02/2019 12:1...
NEWPROJ.xer (D...	Cancelled	Step_5	0	0	0	0	0	paul trippi	08/02/2019 12:1...	paul trippi	08/02/2019 12:1...
NEWPROJ.xer (D...	Cancelled	Step_5	0	0	0	0	0	paul trippi	08/02/2019 12:0...	paul trippi	08/02/2019 12:1...
NEWPROJ.xer (D...	Cancelled	Step_5	0	0	0	0	0	paul trippi	08/02/2019 12:0...	paul trippi	08/02/2019 12:0...

If you hover over one of these Status symbols below, it provides you with a brief explanation of the selected status.



Here are some examples:





There are six possible import statuses listed below.

Import history Statuses

Status	Status Icon	Definition
Failed		Import failed due to a duplicate row within the Excel file.
Failed with errors		Import failed with an attachment to download with further information.
Pending		The Excel import file is pending, further action is needed. The double blue arrows will open a new window where you can correct and re-process the Excel import file. The blue circle with the line through it will cancel the import completely.
Cancelled		The Excel import file has been cancelled.
Processing		The Excel import is still processing. Once this is complete, the status will move into one of the other five statuses.
Complete		Processing of the Excel import files is complete.

2.6.5.1 Pending status

When an import is in a **Pending** status, this means that further action is needed to complete the Excel file import.



There are two options:

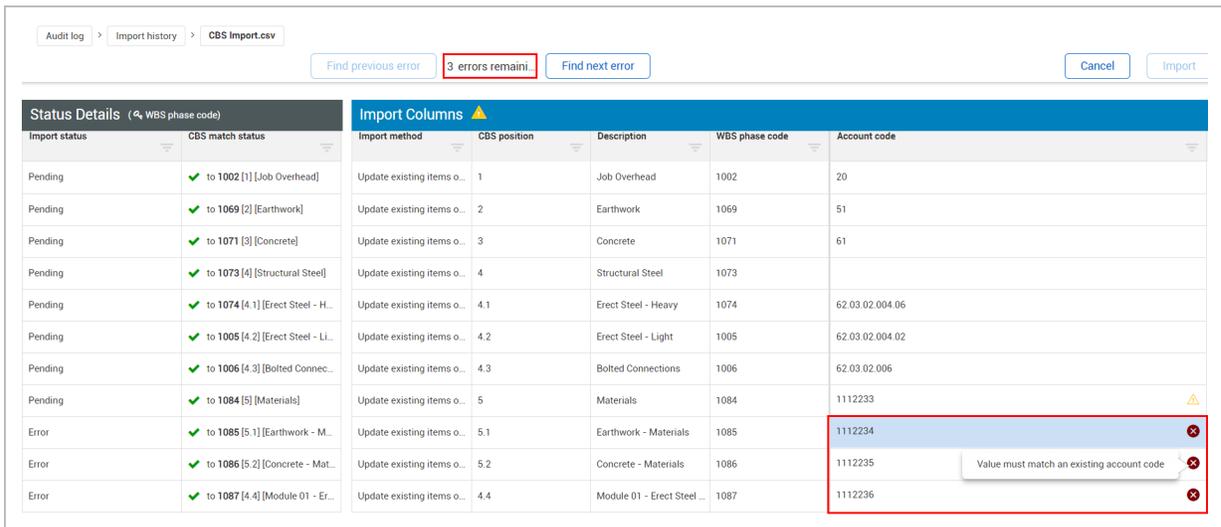
Option 1

1. By selecting the double blue errors, you will be taken to another window to continue processing the faulty records.



As an example, in the below screenshot, there are 3 existing errors. If you hover over one of the errors, it will tell you what needs to be corrected.

In this case, there is an issue with the account code assignment, as the pop-up hover suggests.



The screenshot shows the 'Import Columns' window with a table of import data. The table has columns for 'Import status', 'CBS match status', 'Import method', 'CBS position', 'Description', 'WBS phase code', and 'Account code'. The 'Account code' column contains values like 20, 51, 61, 62.03.02.004.06, 62.03.02.004.02, 62.03.02.006, 1112233, 1112234, 1112235, and 1112236. The last three rows are highlighted in red, indicating errors. A tooltip for the 1112235 error says 'Value must match an existing account code'.

Import status	CBS match status	Import method	CBS position	Description	WBS phase code	Account code
Pending	✓ to 1002 [1] [Job Overhead]	Update existing items o...	1	Job Overhead	1002	20
Pending	✓ to 1069 [2] [Earthwork]	Update existing items o...	2	Earthwork	1069	51
Pending	✓ to 1071 [3] [Concrete]	Update existing items o...	3	Concrete	1071	61
Pending	✓ to 1073 [4] [Structural Steel]	Update existing items o...	4	Structural Steel	1073	
Pending	✓ to 1074 [4.1] [Erect Steel - H...]	Update existing items o...	4.1	Erect Steel - Heavy	1074	62.03.02.004.06
Pending	✓ to 1005 [4.2] [Erect Steel - Li...]	Update existing items o...	4.2	Erect Steel - Light	1005	62.03.02.004.02
Pending	✓ to 1006 [4.3] [Bolted Connec...]	Update existing items o...	4.3	Bolted Connections	1006	62.03.02.006
Pending	✓ to 1084 [5] [Materials]	Update existing items o...	5	Materials	1084	1112233
Error	✓ to 1085 [5.1] [Earthwork - M...]	Update existing items o...	5.1	Earthwork - Materials	1085	1112234
Error	✓ to 1086 [5.2] [Concrete - Mat...]	Update existing items o...	5.2	Concrete - Materials	1086	1112235
Error	✓ to 1087 [4.4] [Module 01 - Er...]	Update existing items o...	4.4	Module 01 - Erect Steel ...	1087	1112236

2. When you double click into one of the 3 errors, it will take you directly into an account code assignment screen where you can make the correction.

From here you can select an account code and click on Assign.

Assign account code

Search...

Select	Account code	Description	UoM
<input type="radio"/>	00	Overhead.6233 EDIT	PLS
<input type="radio"/>	00.03	OH - Get Work	MWk
<input type="radio"/>	00.03.02	OH - Estimating	MWk
<input checked="" type="radio"/>	00.03.02.002	OH - Estimating - Engineering (Pr...	MWk
<input type="radio"/>	00.03.02.006	OH - Estimating - Research & Qu...	MWk
<input type="radio"/>	00.03.02.008	OH - Estimating - Prepare Estima...	MWk
<input type="radio"/>	00.03.02.010	OH - Estimating - Review (Pre-Bid)	MWk
<input type="radio"/>	00.03.02.014	OH - Estimating - Post Bid	MWk
<input type="radio"/>	00.03.02.016	OH - Estimating - Management	MWk
<input type="radio"/>	00.03.02.018	OH - Estimating - 2nd Estimates	MWk

Cancel **Assign**

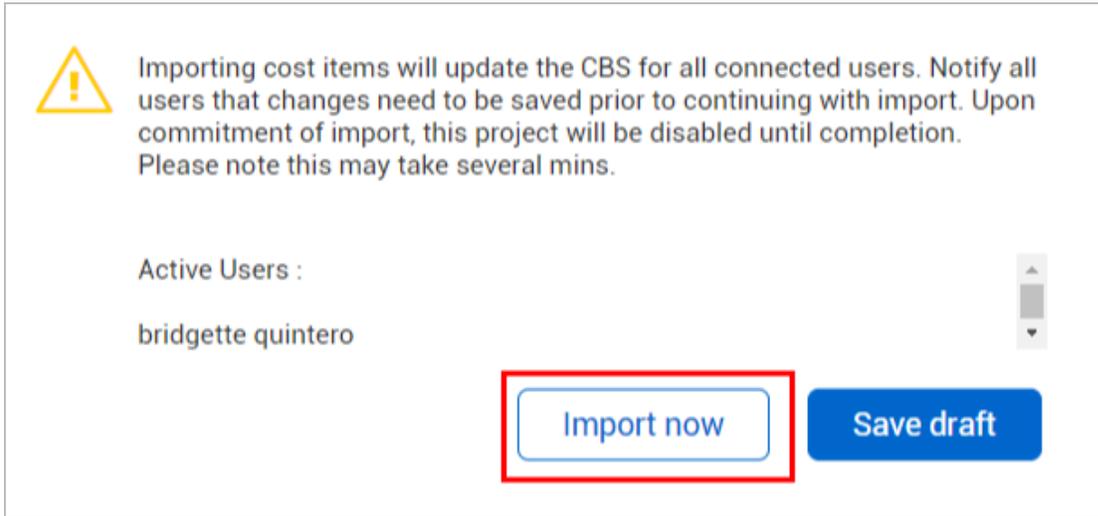
3. After all corrections have been made to the existing errors, you can select the Import button on the top right on the screen.

Find next error

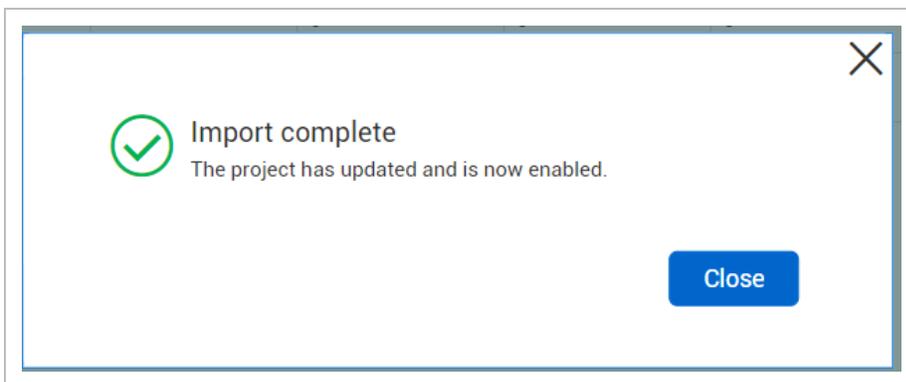
Cancel **Import**

Description	WBS phase code	Account code
Job Overhead	1002	20
Earthwork	1069	51
Concrete	1071	61
Structural Steel	1073	

- 4. A warning message appears stating that changes will be made, and this project will be disabled until completion.



- 5. Once processing has finished, you will receive an Import complete message.



- 6. The Import history page now shows that the imported file is now successfully imported and updates the Last edited date.

File name	Status	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
CBS Import.csv	Complete	11	0	0	0	0	Keith Anderson	06/19/2019 06:30 ...	paul trippi	07/31/2019 10:32 ...

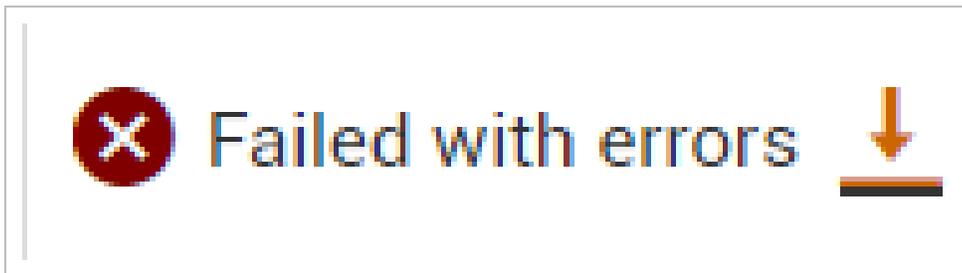
Option 2

1. Selecting cancel, the blue circle with the line through it, will cancel the import completely.

File name	Status
CBS Import.csv	 Pending  

2.6.5.2 Failed with errors status

When an import is in a **Failed with errors** status, the system will generate a Word error report. The document displays detected errors while attempting to import the Excel file values. Errors will need to be reviewed within the Word document



An example of the Failed with errors Word **error file** provides direction on how to proceed with correcting the Excel import errors, and a course of action to run the import again

```
Import actuals CBS data: CBS import.xls
File Import attempted on: 7/31/2019 3:45:03 PM

The following errors were detected while attempting to import actual
values into control.
Review the errors below, once all the errors have been resolved,
reattempt the import to Control.

Error 1: Posting date in external system must be valid (this error
affects 10 WBS/CBS items out of 10 total attempted imported WBS/CBS items
and 10 rows out of 10 total attempted imported rows)

WBS: 2904
CBS: 10
Row: 7

WBS: 2905
CBS: 11
Row: 8

WBS: 2906
CBS: 12
Row: 9

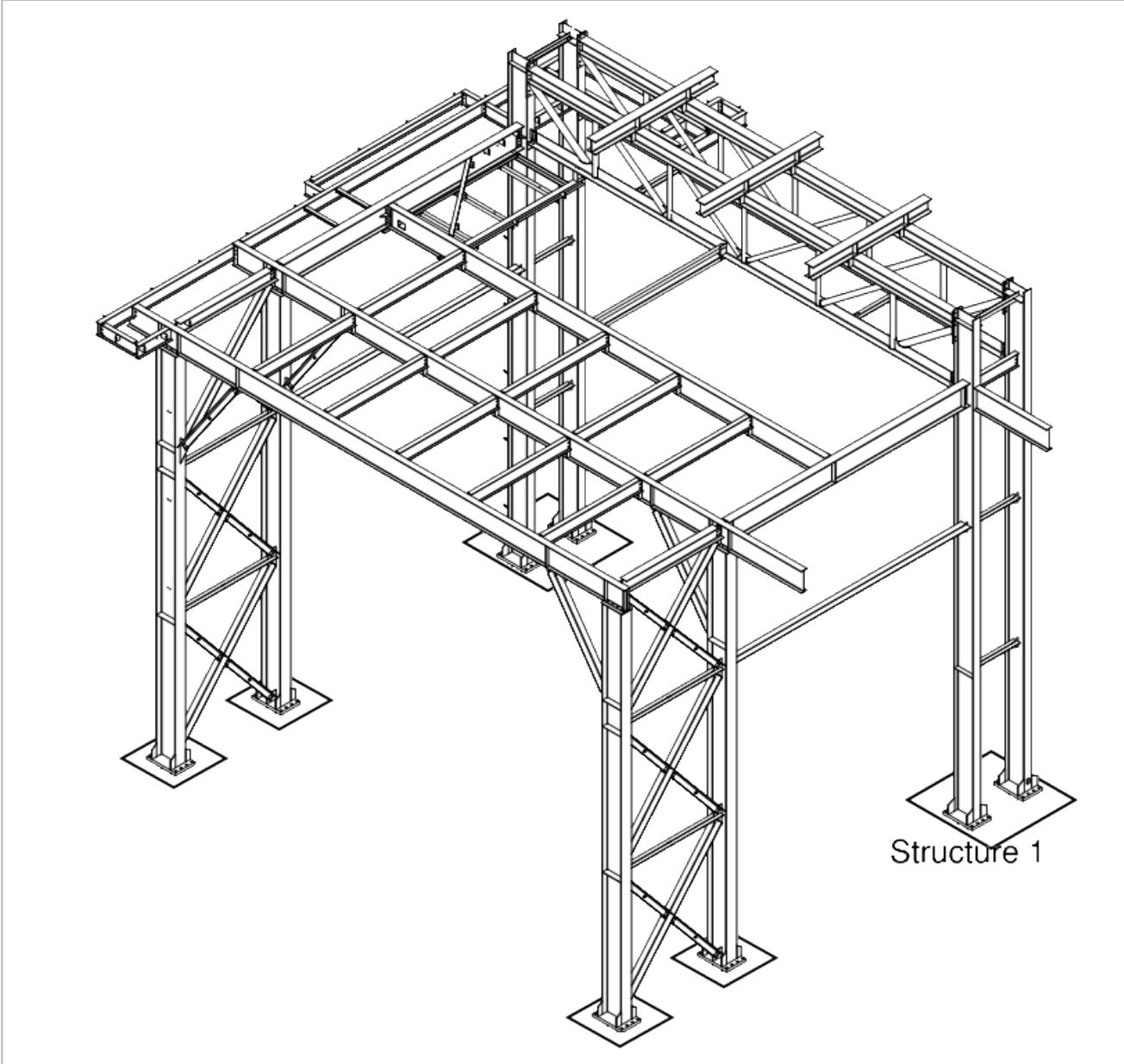
WBS: 2907
CBS: 13
Row: 10
```

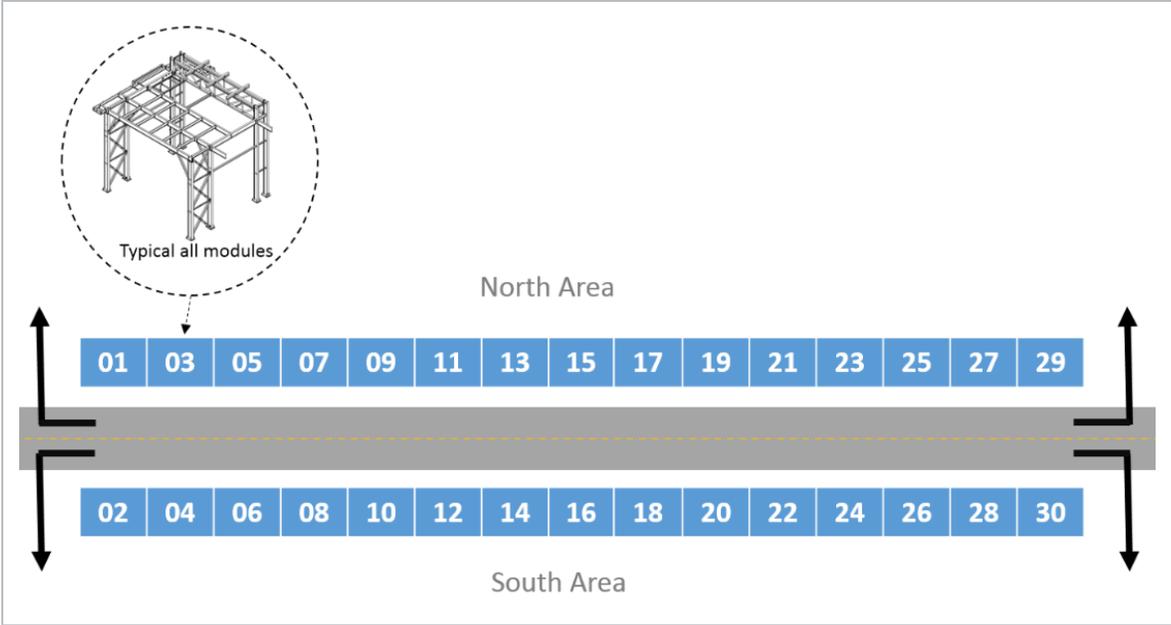
The only option with a Failed with errors status is to review the errors, resolve them within the initial Excel file import, and then re-import the file.

2.7 PROJECT INTRODUCTION

You will be using the project titled “**Steel Structure Training Job**” for the InEight Control training. Within this Control training, you will create cost items and other data that will be utilized in trainings covering the other InEight products (Plan, Progress, etc.)

The project consists of the construction of multiple steel support platforms in a greenfield site. The project scope ranges from site preparations, concrete foundation and footing pours, steel erection, and bolted connections.





Review

1. Match each term to its correct definition:

<u>Term</u>	<u>Definition</u>
Home Menu	Select available actions for the current register tab you are viewing.
Actions Menu	Navigate to the CBS, ACS, Pay Items, Change Register and Audit Log register pages.
Tabs	Select what application you want to use (Control, Plan, etc.), as well as other project settings.
Right Toolbar	Contains functions for the register page you are currently viewing.
Second Level Menu	Returns to the Organization or Project home landing page

2. Which two of the following are not a data block category?

- a. Standard
- b. Unique
- c. Cost category
- d. Custom
- e. Audit

3. How are filtered columns in InEight Control indicated in the content register's data blocks?

- a. Column header is highlighted green
- b. Column will shade red

- c. Sort/Filter button in column header is yellow
 - d. No indication is given
-
4. How do you change the spacing of your rows in Control?
 - a. Select the Row density icon from the right toolbar
 - b. Select Row density from the Actions menu
 - c. Change Row density in the Project settings

Summary

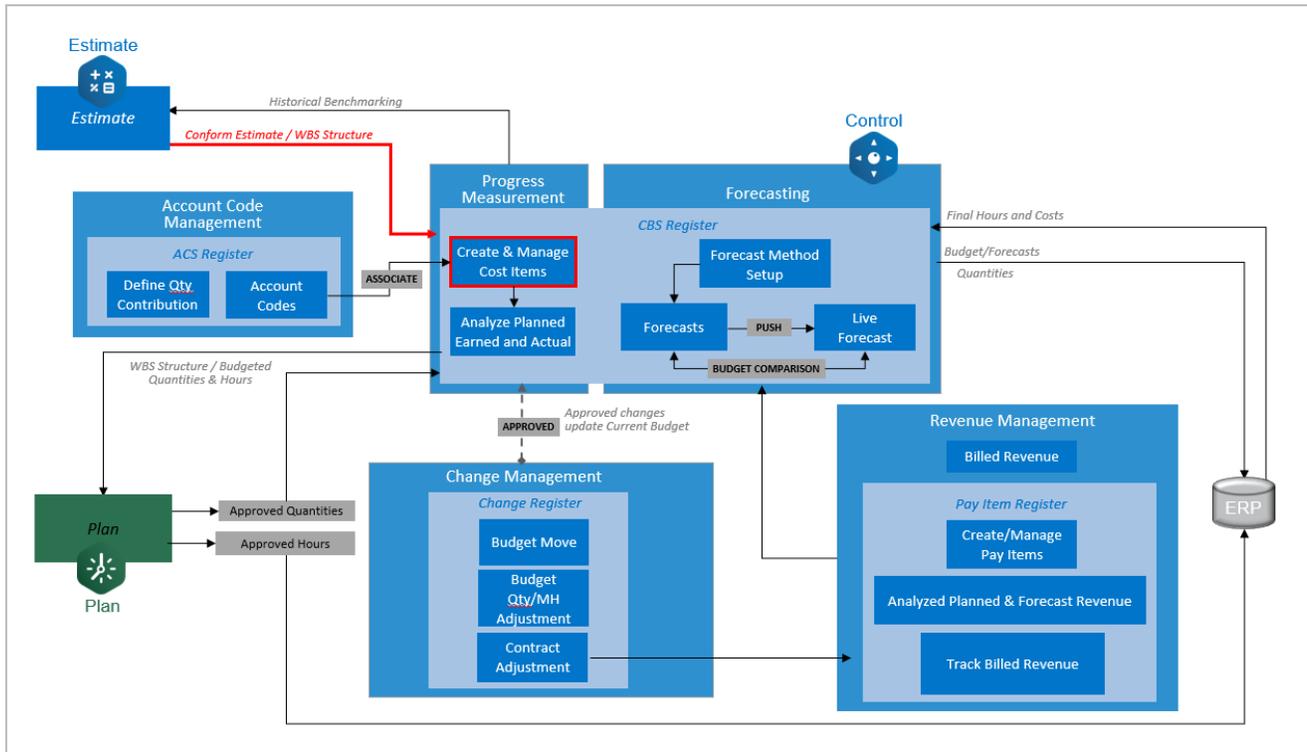
As a result of this lesson, you can:

- Navigate the InEight Control Workspaces page
- Manage data blocks
- Group Pay Items
- Manage columns
- Create viewsets
- Change row density

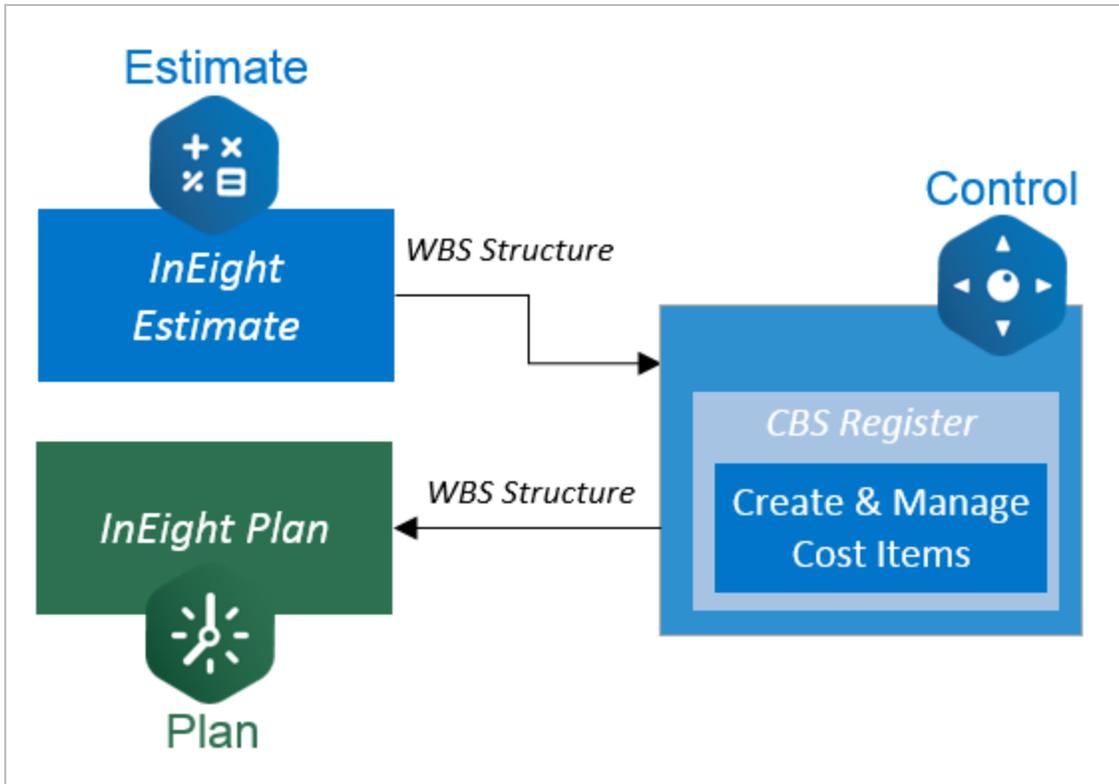
CHAPTER 3 – COST ITEM SETUP

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3.1 COST ITEM SETUP WORKFLOW



InEight Control is the application used to create and manage cost items. The cost breakdown structure developed and maintained in Control is utilized by other InEight applications which inherently share the same data set to eliminate duplicate data entry.



3.2 COST ITEM OVERVIEW

3.2.1 Cost Breakdown Structure

The CBS (Cost Breakdown Structure) is the main tab of the Workspaces page in Control and is the tab where you typically spend most of your time. Each row in the CBS represents a work activity and is called a cost item.

Tasks				Task details			Current estimate			
CBS position	Description	WBS phase code	R.	Forecast (T/O) qty	UoM	CE total Mhrs	CE total cost	CE Mhrs/unit	CE units/Mhr	
1	Job Overhead	1002			Lump Sum	0.00	\$ 250,000.00	0.00	0.00	
2	Earthwork	1069	5	10,000.00	CY	8,000.00	\$ 400,000.00	0.80	1.25	
3	Concrete	1071	5	10,000.00	CY	30,000.00	\$ 1,500,000.00	3.00	0.33	
4	Structural Steel	1073		1,000.00	Ton	23,000.00	\$ 1,150,000.00	23.00	0.04	
4.1	Erect Steel - Heavy	1074	5	900.00	Ton	18,000.00	\$ 900,000.00	20.00	0.05	
4.2	Erect Steel - Light	1005	5	200.00	Ton	4,000.00	\$ 200,000.00	20.00	0.05	
4.3	Bolted Connections	1006	5	2,000.00	Ea	1,000.00	\$ 50,000.00	0.50	2.00	
5	Materials	1084		1.00	Each	0.00	\$ 1,750,000.00	0.00	0.00	
5.1	Earthwork - Materials	1085	1	10,000.00	Ton	0.00	\$ 250,000.00	0.00	0.00	
5.2	Concrete - Materials	1086	1	10,000.00	CY	0.00	\$ 1,000,000.00	0.00	0.00	
5.3	Structure Steel - Materials	1087		1,000.00	Ton	0.00	\$ 500,000.00	0.00	0.00	
6	Merrill Iron & Steel - Steel Material	1088		100.00	Ton	0.00	\$ 50,000.00	0.00	0.00	

The CBS is organized in a hierarchy of superior and subordinate cost items. A cost item is superior and/or subordinate based on its relationship to other cost items. This is similar to a parent and a child relationship where an individual can be both a parent and a child at the same time. The CBS is color coded to identify which level of the hierarchy a specific cost item is located.

CBS position	Description	WBS phase code
1	Job Overhead	1002
2	Earthwork	1069
3	Concrete	1071
4	Structural Steel	1073
4.1	Erect Steel - Heavy	1074
4.2	Erect Steel - Light	1005
4.3	Bolted Connections	1006
5	Materials	1084
5.1	Earthwork - Materials	1085
5.2	Concrete - Materials	1086
5.3	Structure Steel - Materials	1087

Tasks			
<input type="checkbox"/>	CBS position	Description	WBS phase code
<input type="checkbox"/>	1	Job Overhead	1002
<input type="checkbox"/>	2	Earthwork	1069
<input type="checkbox"/>	3	Concrete	1071
<input type="checkbox"/>	4	Structural Steel	1073
<input type="checkbox"/>	4.1	Erect Steel - Heavy	1074
<input type="checkbox"/>	4.2	Erect Steel - Light	1005
<input type="checkbox"/>	4.3	Bolted Connections	1006
<input type="checkbox"/>	5	Materials	1084
<input type="checkbox"/>	5.1	Earthwork - Materials	1085
<input type="checkbox"/>	5.2	Concrete - Materials	1086
<input type="checkbox"/>	5.3	Structure Steel - Materials	1087

If a cost item has no subordinates it is considered a terminal cost item. Terminal cost items are where cost is tracked. All superior items are a roll up of the budget, manhours, and cost of the cost items below. Terminal items are identified with a special symbol located at the first column of each data block.

Tasks				Task details
<input type="checkbox"/>	CBS position	Description	WBS phase code	Resources
<input type="checkbox"/>	1	Job Overhead	1002	<input type="checkbox"/>
<input type="checkbox"/>	2	Earthwork	1069	<input type="checkbox"/>
<input type="checkbox"/>	3	Concrete	1071	<input type="checkbox"/>
<input type="checkbox"/>	4	Structural Steel	1073	<input type="checkbox"/>
<input type="checkbox"/>	4.1	Erect Steel - Heavy	1074	<input type="checkbox"/>
<input type="checkbox"/>	4.2	Erect Steel - Light	1005	<input type="checkbox"/>
<input type="checkbox"/>	4.3	Bolted Connections	1006	<input type="checkbox"/>
<input type="checkbox"/>	5	Materials	1084	<input type="checkbox"/>

This terminology and associated graphics provide a way to communicate and understand the hierarchy of the Cost Breakdown Structure. The following table provides definitions for each of these terms.

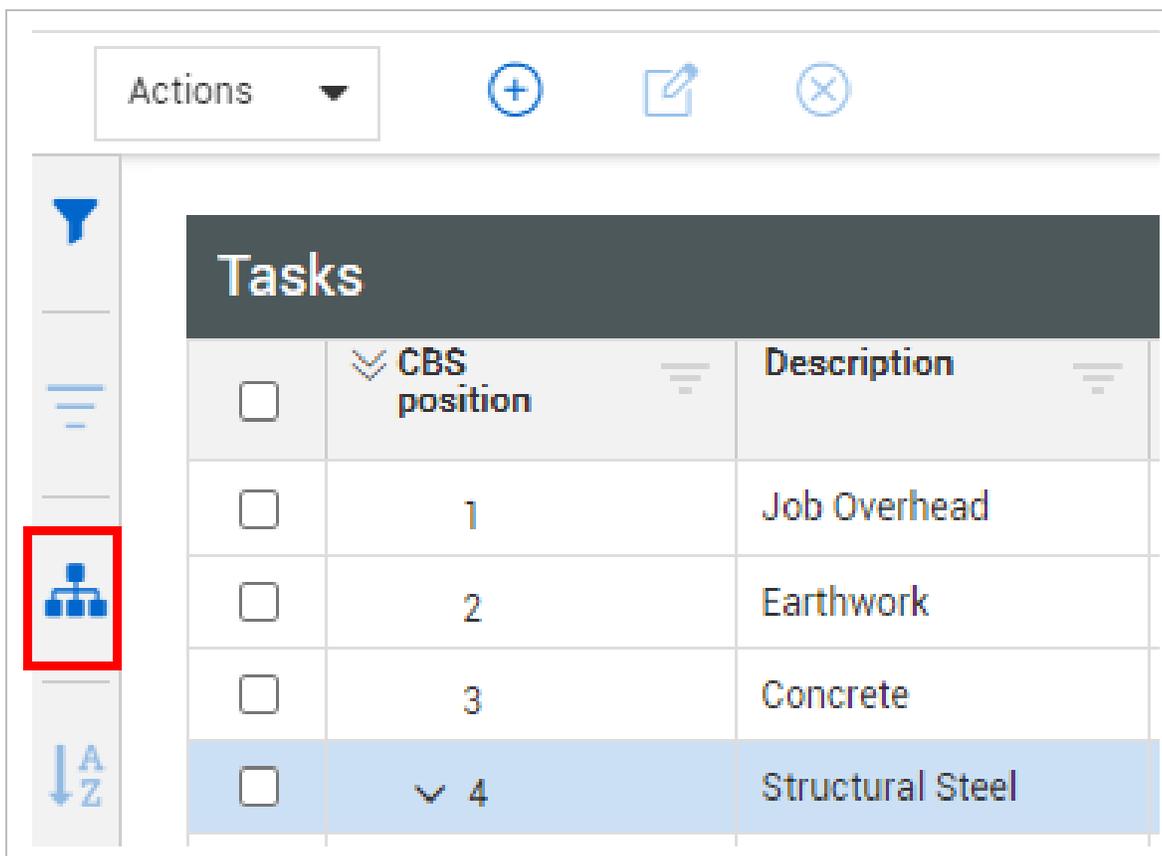
Term	Definition
Superior	Cost item that has subordinate subcost items that roll up under it.
Subordinate	Cost item that is a child to a superior cost item.
Terminal	Cost item that has no subordinate beneath it. Costs and hours are defined at the terminal level.

As accurate as estimators try to build the estimate, changes occur during the project's execution that affect the CBS register in Control. To learn how to maintain, improve, and use the CBS register properly, this topic focuses on the fundamentals of the Cost Breakdown Structure.

3.2.2 CBS Tree

The CBS tree provides a way to navigate up and down your Cost Breakdown Structure and a way to filter down to a subset of the structure.

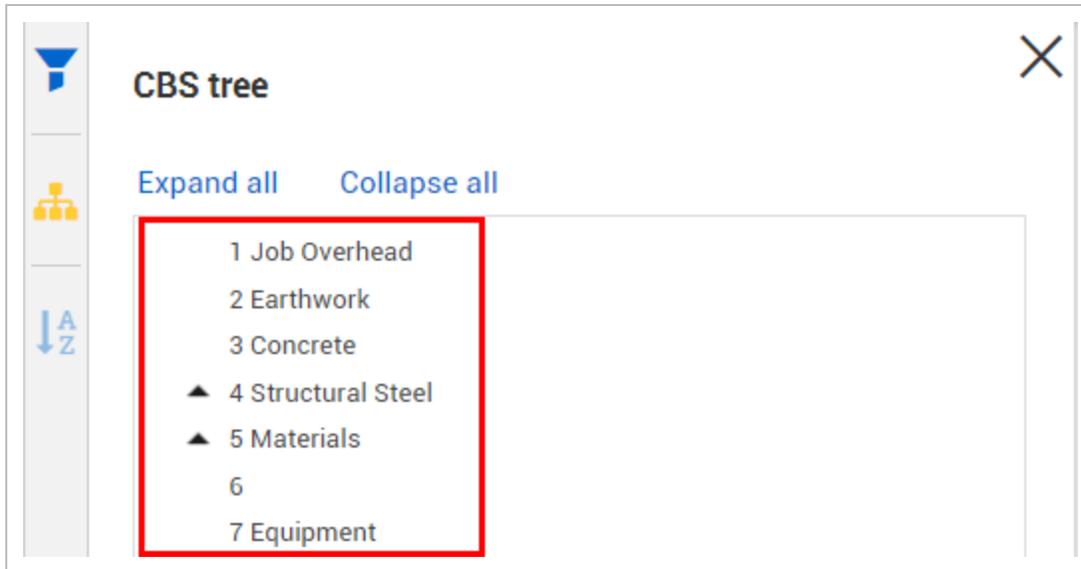
You open the CBS tree slide out panel by clicking on the CBS Tree icon on the Side Toolbar.



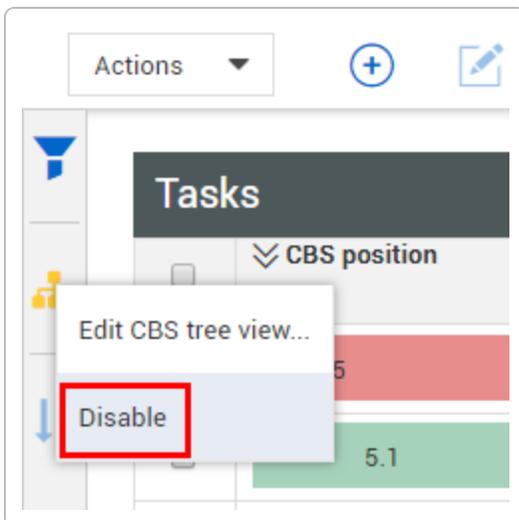
The screenshot shows a software interface for managing a Cost Breakdown Structure (CBS). At the top, there is a header bar with an 'Actions' dropdown menu and three icons: a plus sign (+), a pencil (edit), and a close sign (X). Below this is a side toolbar with several icons: a funnel (filter), a list icon, a tree icon (highlighted with a red box), and a sort icon (A-Z and Z-A). The main area displays a table titled 'Tasks' with the following columns: 'CBS position' and 'Description'. The table contains five rows of data:

	CBS position	Description
<input type="checkbox"/>	1	Job Overhead
<input type="checkbox"/>	2	Earthwork
<input type="checkbox"/>	3	Concrete
<input type="checkbox"/>	4	Structural Steel

When selected, the CBS tree icon turns yellow and the slide out panel appears.



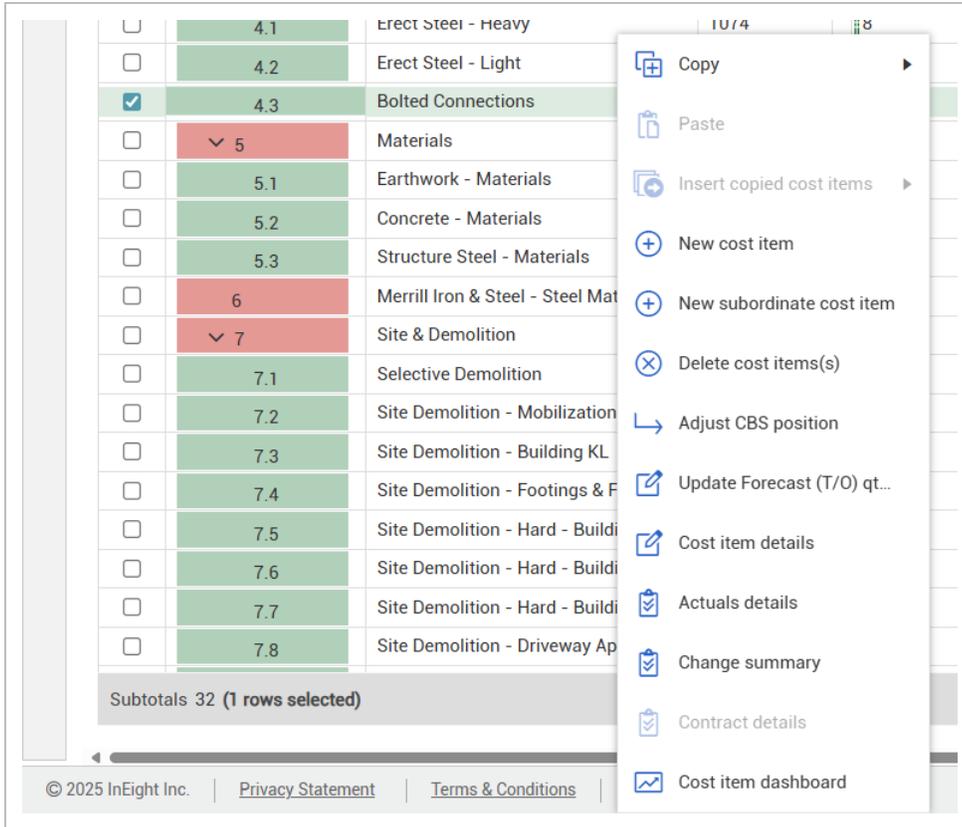
- Select Expand all to expand the entire Cost Breakdown Structure
- Select Collapse all to collapse the entire Cost Breakdown Structure
- Click on the arrow icons to expand a cost item to view its subordinates
- Select a cost item and then click **Apply** to filter your view to that cost item and its subordinates
- To clear the CBS filter, click the CBS tree icon and then click Disable



You can select more than one cost item on the tree to create a customized view.

3.2.3 Cost Item Menu

You can access a variety of cost item details and actions from the Cost Item menu.



You can open the Cost Item menu in one of two ways:

- Right-click the cost item
- Click the three vertical dots in the Description column

<input type="checkbox"/>	4.2	Erect Steel - Light		1005
<input type="checkbox"/>	4.3	Bolted Connections	⋮	1006
<input type="checkbox"/>	5	Materials		1084

The following table provides details for the options in the Cost Item menu.

Option	Details
Copy cost item	Copy the selected cost item with its associated resources.
Copy selection	Copy the value from a specific cell.
Paste	Paste the copied content.
Insert copied cost items	Insert the copied cost item in a CBS position that is above, below, or subordinate to the selected cost item.
New cost item	Create a new cost item.
New subordinate cost item	Create a new cost item that is subordinate to the selected cost item.
Delete cost item(s)	Delete the selected cost item.
Adjust CBS position	Move the selected cost item to a new position in the CBS.
Update Forecast (T/O) qty with Plan component total qty	Copy the total quantity of the associated component in InEight Plan to the Forecast (T/O) quantity of the selected cost item.
Cost item details	Open the Cost Item Details slide-out panel, where you can manage the cost item.
Actuals details	Open the Actuals Details slide-out panel, where you can input claimed quantities and view actuals history and commitments.
Change summary	Open the Change Order Details slide-out panel, where you can view associated change orders, the budget change summary, and the change order summary.
Contract details	Open the Contract Details slide-out panel, where you can view associated contract details from InEight Contract.
Cost item dashboard	Open the Cost Item Dashboard slide-out panel.

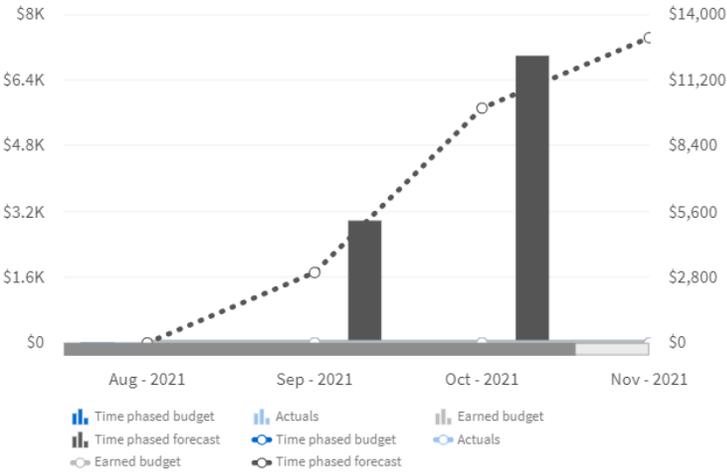
3.2.4 Cost Item Dashboard

The Cost Item Dashboard slide-out panel shows multiple cost item affiliated graphs. These graphs let you further analyze cost item past and current performance trends related to time-phased distribution, current budget changes, value over time, completion progress indicators, and a CBS audit history log.

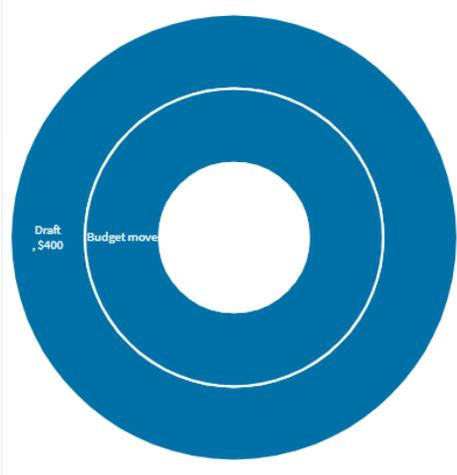
1074

Erect Steel - Heavy

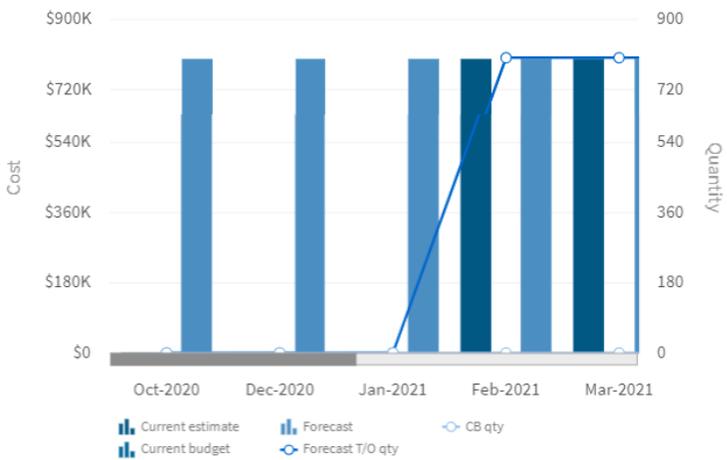
Time phased distribution



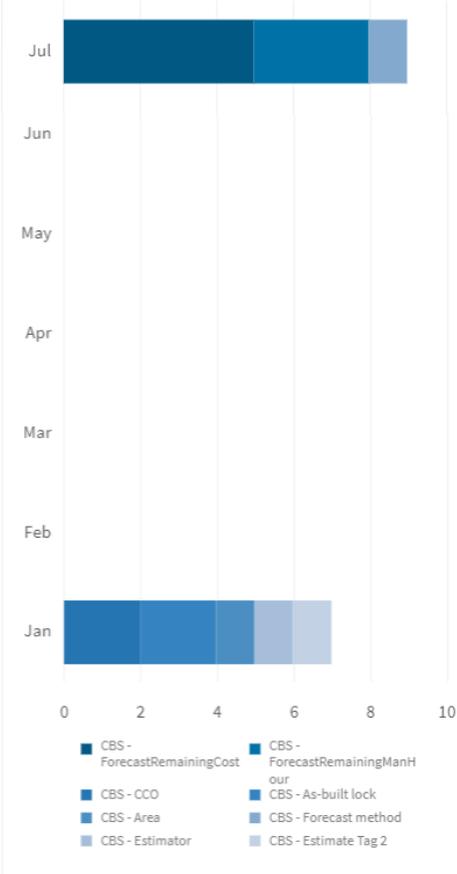
Current budget changes



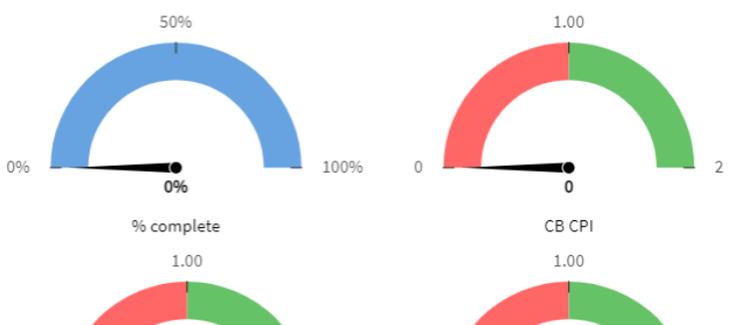
Value change over time



CBS audit log history



Completion progress



3.3 COST ITEM SETUP

While most of your project structure typically imports from your estimating system, you may need to adjust the Cost Breakdown Structure (CBS) to better reflect how the work will be executed in the field. Additionally, contract changes or newly added scope may require updates. To accommodate these needs, you can add, edit, and rearrange cost items as necessary.

If you need to build additional structure from the ground up, you can create new cost items manually. This flexibility allows you to construct an entirely new project structure within Control – even starting from a blank project if needed.

3.3.1 Cost Item Creation

In Control, you can create a new cost item in two ways:

- **New Cost Item:** Creates a new cost item at the same hierarchy level as the selected item, using the next available number. For example, if you select 1.6, the new item will be 1.7 (if available).
- **New Subordinate Cost Item:** Creates a new cost item one level below the selected item, using the next available number at that level. For example, if you select 1.6, the new item will be 1.6.x, where x is the next available number.

When creating a new cost item, there are multiple fields available for populating the cost item details. Not all fields are required; you can edit these details after the cost item has been created. The following table provides more information on the available options.

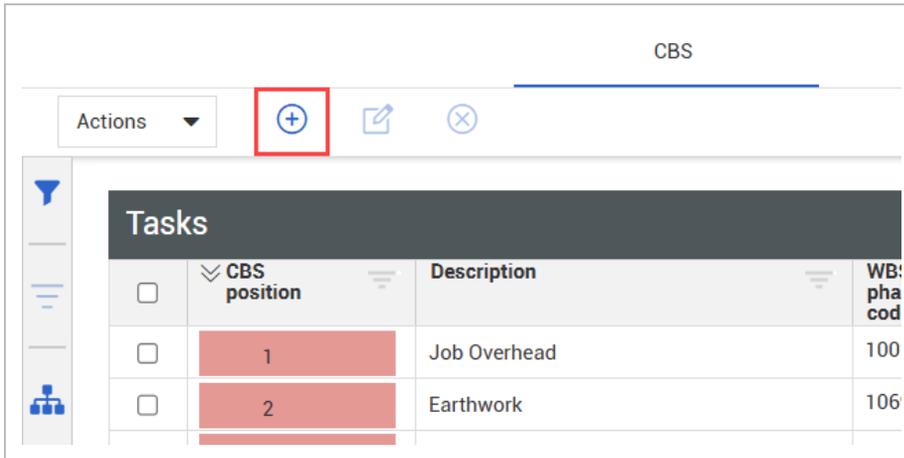
Field	Required	Details
Description	Optional	Text field for the name or description of the cost item.
Forecast T/O qty	Required	The Forecast Takeoff Quantity is the amount of work or materials expected to be completed for the cost item. This value can be updated as project details progress.
UoM	Required	The Unit of Measure is the standard measurement used to quantify the Forecast T/O qty, such as linear feet, cubic yards, or labor hours.

Field	Required	Details
Cost source	Required	Indicates how the cost item's value is derived - either as a Plug (a lump-sum amount) or as Detail (built from associated quantities, rates, or resources).
Current Estimate fields	Optional	If available, input costs, unit rates, man-hours, and/or equipment hours. Many of these values are linked, and changes to these values will update related values as well as the Current Estimate total cost. Fields include CE total cost , CE total MHrs , CE total equipment Hrs , CE unit cost , CE MHR/Unit , CE Units/MHrs , and CE labor cost/MHrs .
Cost segment	Required	Categorizes whether the cost item is a direct or indirect cost. <ul style="list-style-type: none"> • Direct Cost - Costs that directly pertain to the deliverables (pay items) of the job • Job Overhead - Overhead costs associated with running and managing the job (e.g., management, jobsite facilities) • Business Overhead - Overhead costs associated with running the business (not directly related to running the job) • Subcontract - Subcontract associated costs
Pay item assignment	Optional	Select an existing pay item to associate to this cost item.
Account code	Optional	Select an organizational account code for this cost item.
Live forecast method	Optional	Select how the live forecast is calculated for this cost item. Forecast Method applies to individual cost items and can be changed at any time.

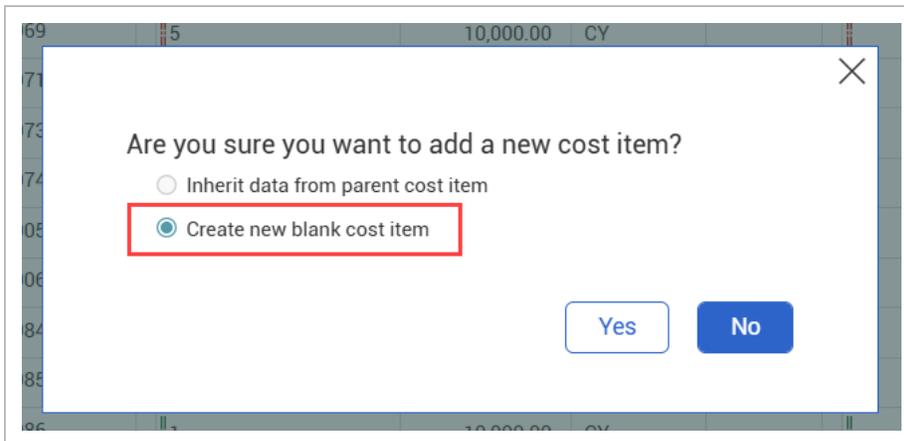
Field	Required	Details
Allow as-built	Required	<p>Determines whether you can enter actual costs and quantities for a cost item.</p> <ul style="list-style-type: none"> • None - Cost item does not accept cost or quantities. This is typically seen in Superior cost items • All - Allows a cost item to accept both direct costs and quantities • Quantities - Cost item only accepts quantities • Cost - Cost item only accepts costs, man hours, and equipment hours
Quantity driver	Required	<p>Defines how a cost item's Forecast T/O qty is controlled.</p> <ul style="list-style-type: none"> • Superior CI - Automatically updates the quantity based on changes to a parent cost item using a proportional multiplier • Fixed - Keeps the quantity constant regardless of changes to related cost items
Currency	Required	Select a currency unit for this cost item.
As-built lock	Optional	Select the checkbox to lock the ERP status for this cost item. Once you lock the ERP status, your ERP does not allow the cost item to be progressed.
Hide in Plan, Progress, and Design	Optional	Select the check box to make this cost item unavailable for claiming in InEight Plan, Progress, and Design. For more information, see Hide in Plan, Progress, and Design .
CBS contribute qty	Optional	Select the check box to add the Forecast (T/O) qty of this cost item with any other selected siblings to the superior (parent) cost item. Note that the UoM must be the same for all cost items.

Create A New Cost Item

1. From the CBS tab of Control > Workspaces, click the **Add Cost Item** icon on the top left toolbar.



2. Select **Create a new blank cost item**, and then click **Yes**.



- To specify the CBS position of the new cost item, first select an existing cost item from the CBS, and then click Add Cost Item > **New cost item**.
3. The New cost item dialog box opens to the Details tab. Enter the cost item details as needed.

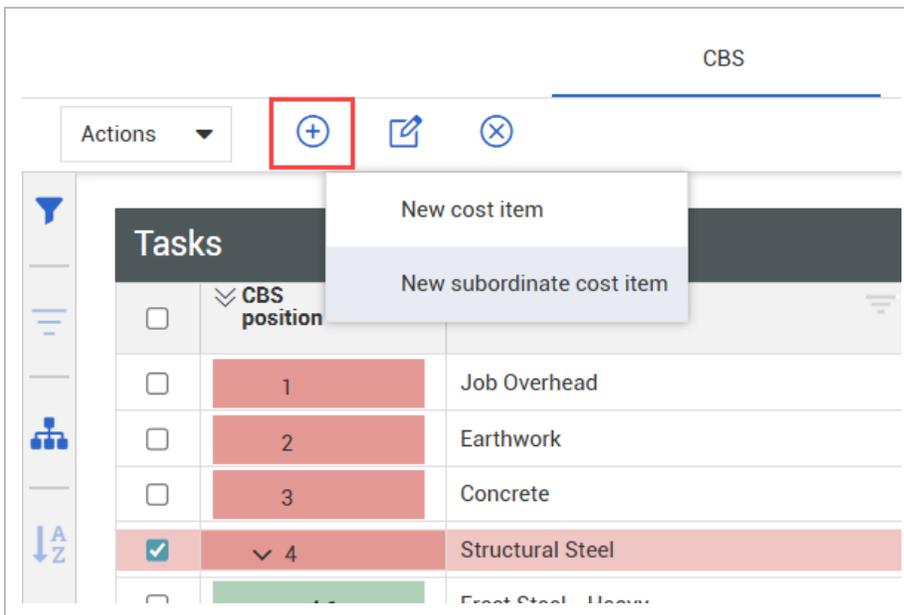
4. When finished, click **Save**.

Create a New Subordinate Cost Item

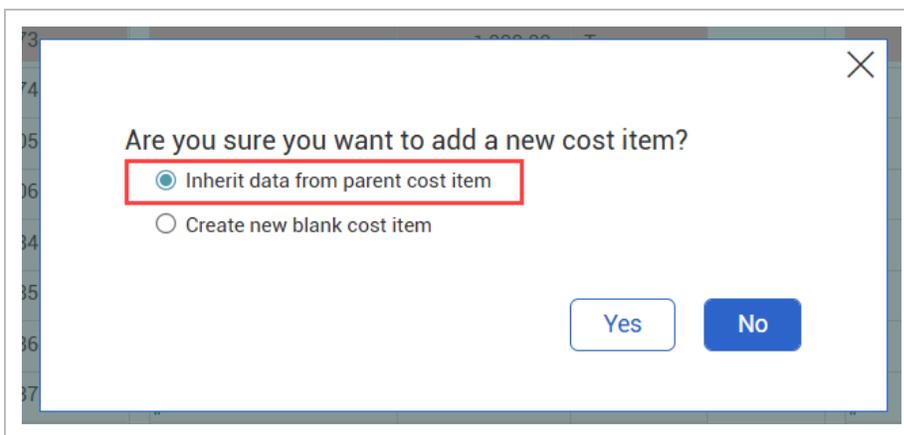
1. From the CBS tab of Control > Workspaces, select the superior cost item.

Tasks	CBS position	Description	WBS phase code
<input type="checkbox"/>	1	Job Overhead	1002
<input type="checkbox"/>	2	Earthwork	1069
<input type="checkbox"/>	3	Concrete	1071
<input checked="" type="checkbox"/>	4	Structural Steel	1073
<input type="checkbox"/>	4.1	Erect Steel - Heavy	1074
<input type="checkbox"/>	4.2	Erect Steel - Light	1005

2. On the top left toolbar, click **Add cost item > New subordinate cost item**.



3. Select **Inherit data from parent cost item**, and then click **Yes**.



- Note that the fields in the New cost item window are populated with the existing data from the selected cost item.

4. Modify the cost item details as needed.

Forecast T/O qty	UoM	CE unit cost	CE total cost
1,000.00	Ton	\$0.00	\$0.00

DETAILS ATTRIBUTES

Description: Structural Steel, Forecast T/O qty: 1,000.00, UoM: Ton, WBS phase code: Generated on Save

Cost source: Plug, CE total cost: \$0.00, CE total M/hrs: 0.00, CE total equipment Hrs: 0.00

CE unit cost: \$0.00, CE M/hrs/Unit: 0.00, CE Units/M/hrs: 0.00, CE labor cost/M/hrs: \$0.00

Cost segment: Job Overhead, Pay item assignment, Account code, Live forecast method: None

Buttons: Cancel, Save

5. When finished, click **Save**.

3.3.1.1 Create Multiple Cost Items

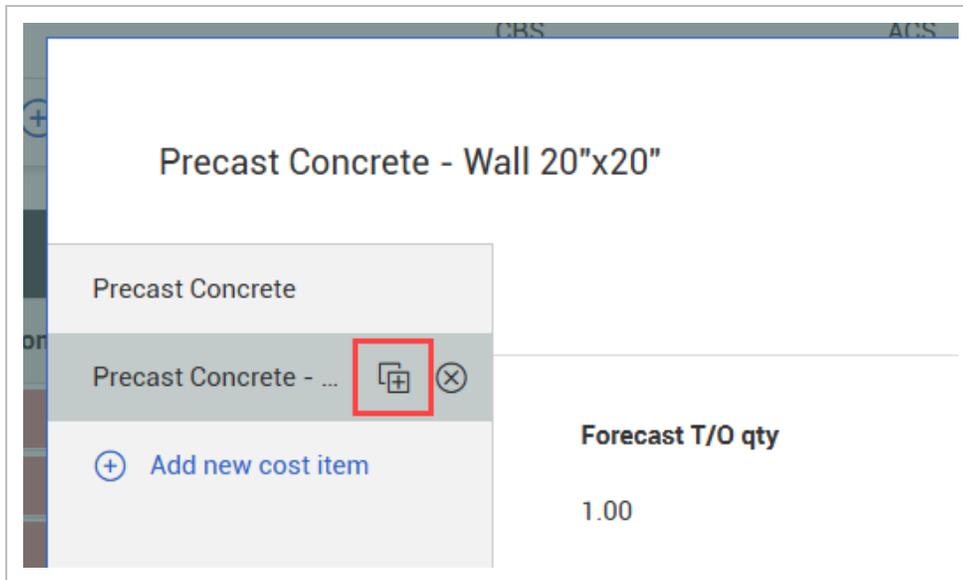
When you need to create multiple cost items, you can save time by including additional cost items in the New cost item window. From the left panel, click **Add new cost item** to add another cost item record.

Forecast T/O qty	UoM
1.00	PLS

DETAILS

Buttons: Add new cost item (highlighted)

To copy the details of a new cost item record, click the **Copy cost item** icon.



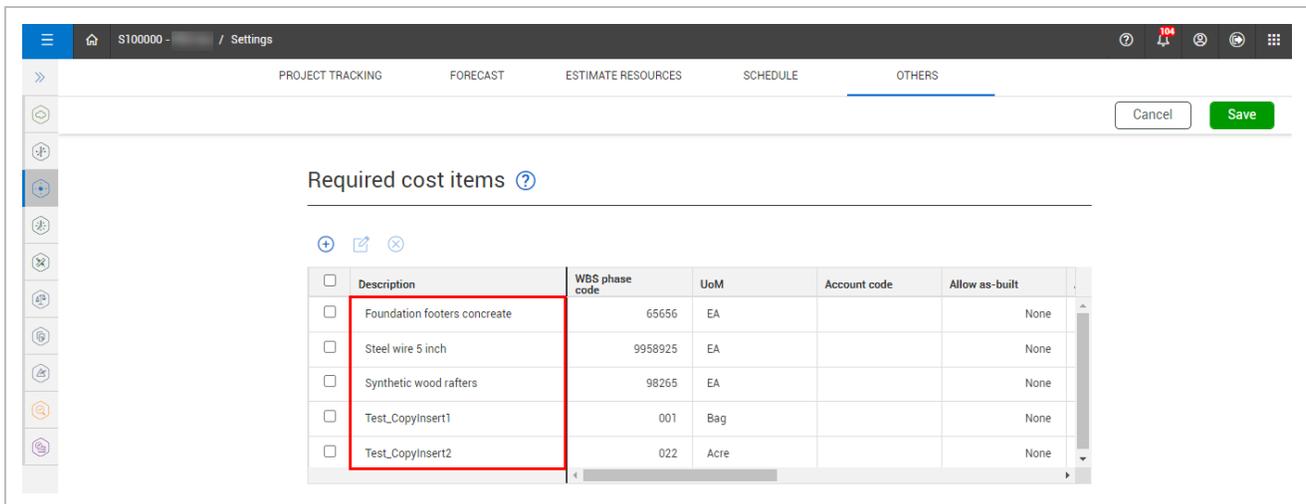
When you're finished, click **Save**. The new cost items will appear in sequence in the CBS.

<input checked="" type="checkbox"/>	4.4	Precast Concrete Wall - 8"	1089	69.00	Ea
<input checked="" type="checkbox"/>	4.5	Precast Concrete Wall - 9"	1090	71.00	Ea
<input checked="" type="checkbox"/>	4.6	Precast Concrete Wall - 20"	1091	1.00	Ea
<input checked="" type="checkbox"/>	4.7	Precast Concrete Wall - 20"x20"	1092	29.00	Ea

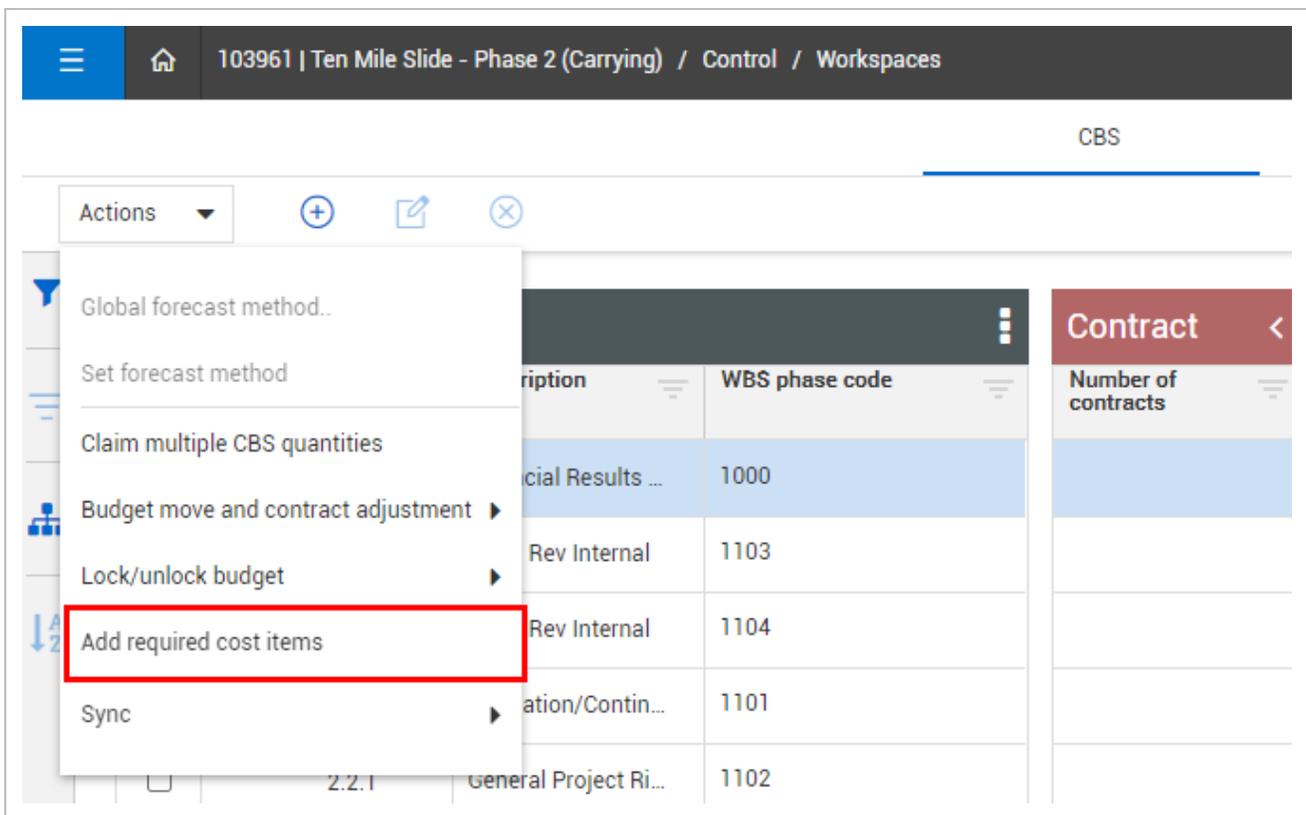
3.3.2 Required Cost Items

The Required cost items feature lets you create standardized or commonly used cost items at the organization level, and then add them at the project CBS level. Changing any of the required cost items at the organization level, such as the account code or UOM, also updates the cost items at the project level.

When required cost items are added in Settings > Control > Others > **Required cost items**, the feature provides standardization across all projects for those cost items that are commonly used.



This feature can be a substitute for copying and pasting cost items from one project into another and ensures the same WBS phase code is being used regardless of the project a team member is working on.

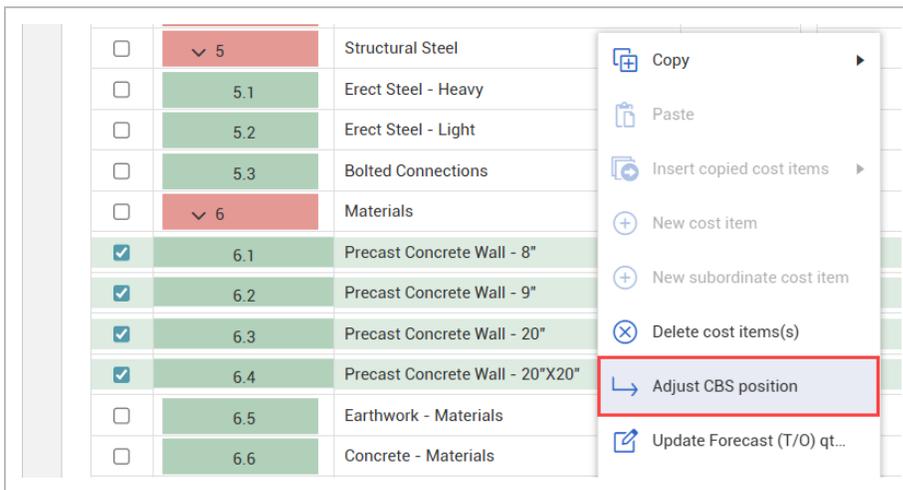


3.3.3 Cost Item Arrangement

As the project progresses, you may need to rearrange cost items in the CBS to accommodate project changes.

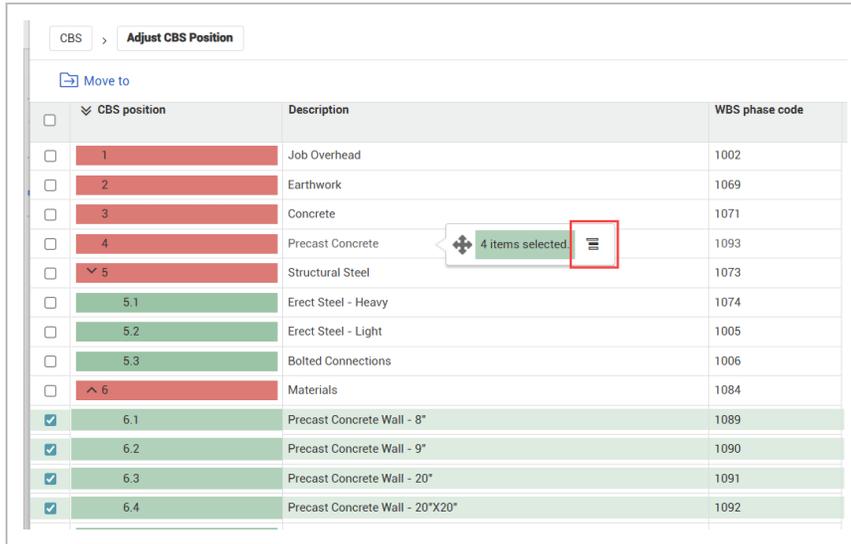
Move a Cost Item

1. Select the cost item(s) that you want to move.
2. Right-click the cost item(s) to open the cost item menu, and then select **Adjust CBS position**.

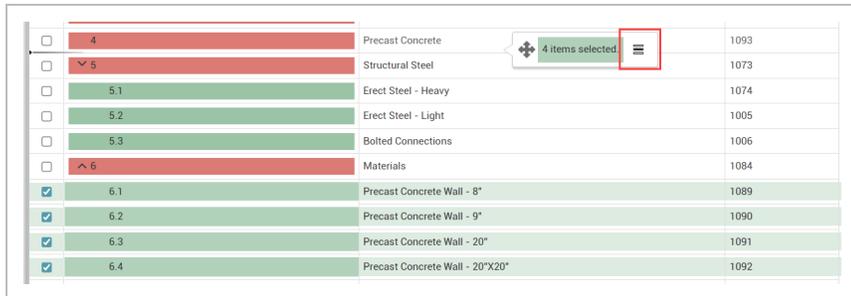


3. In the Adjust CBS Position window, drag and drop the selected cost item(s) into a new position in the CBS.

- This icon indicates that the cost item is moved into a subordinate position.



- This icon indicates that the cost item is moved into an equal position.



- If you prefer not to use drag and drop, click the **Move to** icon. Input the applicable CBS position, and then click **Move to** again. Select Child to move the cost item(s) into a subordinate position, or Sibling to move the cost item(s) to an equal position.



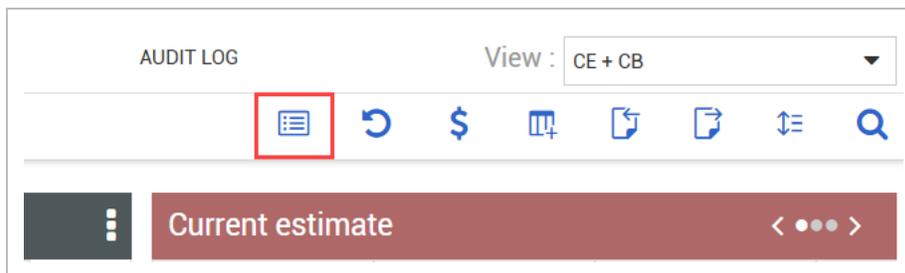
4. Confirm the new position in the Adjust CBS Position window. When finished with the changes, click **Save**.

3.3.4 Viewing the CBS Grouped by Column

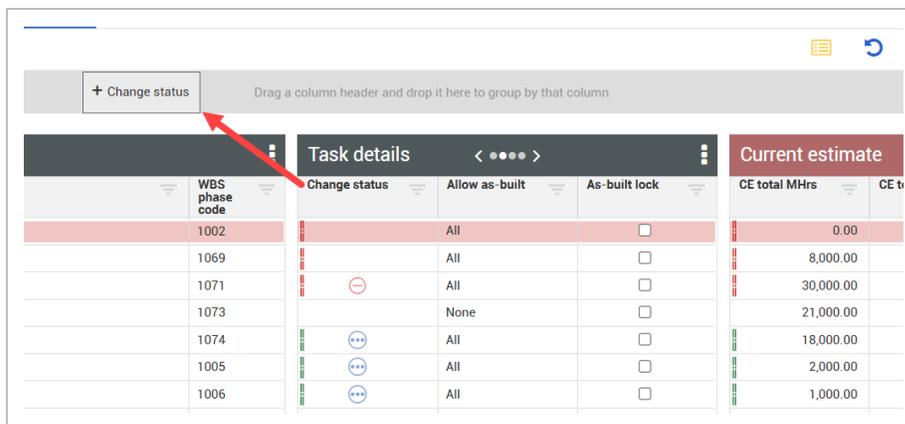
Navigating the CBS can be challenging when searching for specific information, as data is often distributed across multiple levels. Projects may contain large volumes of diverse data, making it difficult to locate and view relevant details- especially in a flat list format. The CBS Group By feature helps simplify this by allowing users to organize the CBS into logical groupings based on shared attributes. You can drag and drop column headers to group cost items by the criteria most relevant to your workflow.

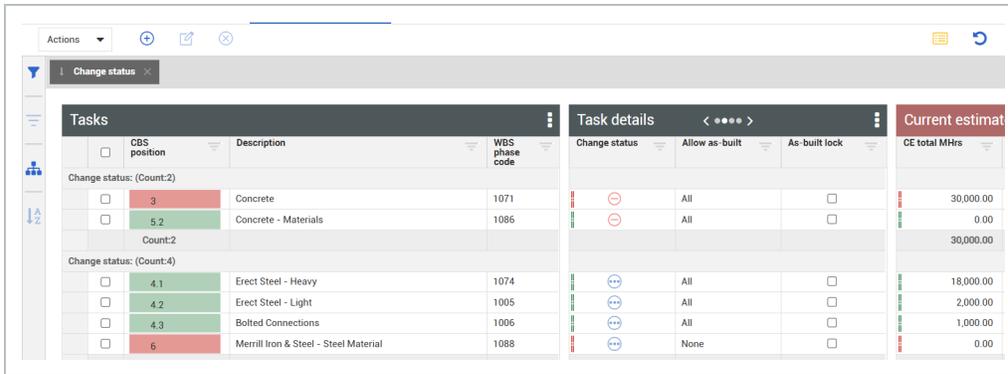
CBS Group by Column

1. On the CBS register tab, select the **Group Columns** icon on the right toolbar.

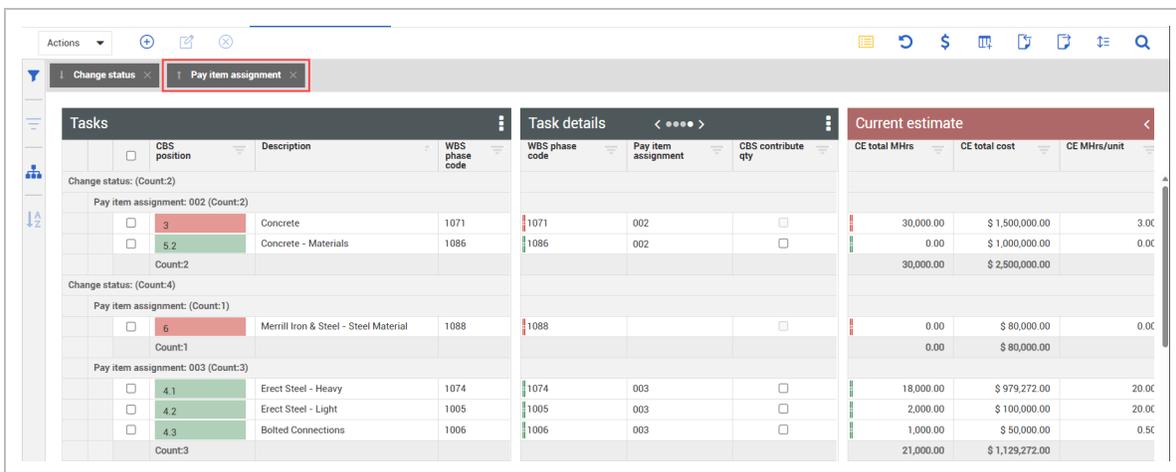


2. Drag the **column header** of a column and drop it into the grey grouping area.
 - Note that this feature can only be used with columns with a predefined set of discrete values, such as UoM or Allow as-built.





- To add subgroupings, drag and drop additional column headers into the grouping area. You can rearrange these headers in the grouping area to modify the subgroupings.



- To return to the standard CBS, click the **Group columns** icon again.

3.3.5 Cost Item Deletion

You can delete one cost item or multiple cost items by selecting the cost items, right clicking, and then selecting **Delete Cost Item**.

When deleting cost items from the CBS, deleting the forecast, clearing out the account code, or changing attributes to delete a cost item is not necessary.

<input checked="" type="checkbox"/>	2	Earthwork	1069
<input type="checkbox"/>	3	Concrete	
<input type="checkbox"/>	▼ 4	Structura	
<input type="checkbox"/>	4.1	Erect Ste	
<input type="checkbox"/>	4.2	Erect Ste	
<input type="checkbox"/>	4.3	Bolted C	
<input type="checkbox"/>	▼ 5	Material	
<input type="checkbox"/>	5.1	Earthwo	
<input type="checkbox"/>	5.2	Concrete	
<input type="checkbox"/>	5.3	Structur	
<input type="checkbox"/>	5.4	Material	
<input type="checkbox"/>	5.5	Material	
<input type="checkbox"/>	6		

Subtotals 14 (1 rows selected)

-  Copy
-  Paste
-  Insert copied cost items
-  New cost item
-  New subordinate cost item
-  Delete cost items(s)
-  Adjust CBS position
-  Cost item details
-  Actuals details
-  Change summary
-  Contract details
-  Cost item dashboard

You can also select a cost item and click the **Delete** icon on the left toolbar.

Actions ▼


 →

Tasks

CBS position	☰	Description

A cost item must meet the following conditions to be deleted:

- Total Cost (To Date) = 0, MH (To Date) = 0, Eqp Hours (To Date) = 0, Qty Complete (To Date)=0
- C B-Total Cost = 0, C B-Total MH = 0, CB-Total Quantity = 0, C B-Qty Remaining = 0
- If the cost item is a parent item, all the subordinate cost items will also need to be checked to see if they can be deleted

If you are deleting multiple cost items and do not meet the following conditions for deletion, a downloadable file appears that lists all of the validations and why they failed.

3.3.6 Copying Cost Items with Resources

You can copy and paste entire cost items with resources from the CBS tab to any cost item you select.

When you copy a cost item, you cannot copy the current budget because the current budget must be approved in a contract adjustment or budget move.

Follow the step by step to copy a cost item.

Copy and paste cost items

1. From the CBS tab, select one or more cost items that you want to copy that contain a resource.

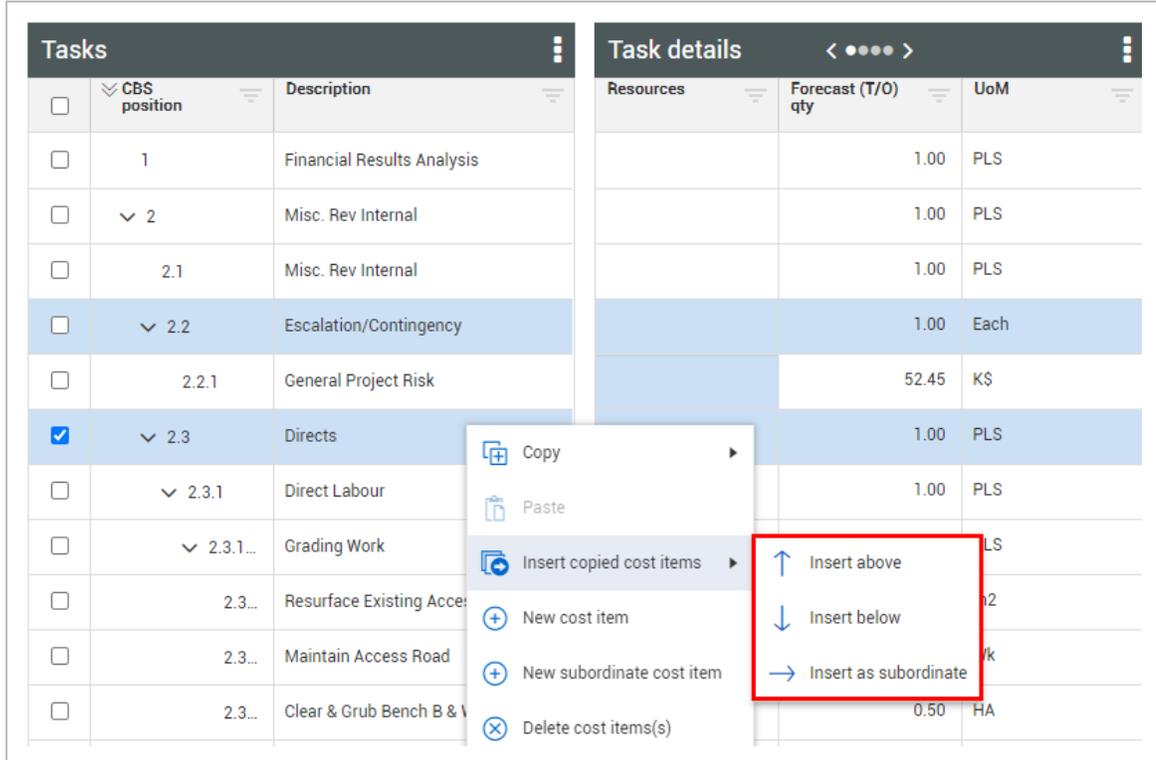
This can be checked in the Resources column. If the cost item has a 1 or higher, then a resource is attached to that cost item.

2. Right-click your selected cost items.
3. Hover over the Copy selection and select **Copy cost item**.

<input checked="" type="checkbox"/>	3.1	Excavation	<div style="border: 1px solid #ccc; padding: 5px;"> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Copy ▶</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Paste</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Insert copied cost items ▶</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">New cost item</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">New subordinate cost item</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Delete cost items(s)</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Adjust CBS position</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Cost item details</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Actuals details</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Change summary</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Contract details</div> <div style="border-bottom: 1px solid #ccc; padding: 2px 5px;">Cost item dashboard</div> </div>
<input checked="" type="checkbox"/>	3.2	Embankm	
<input checked="" type="checkbox"/>	▼ 4	Aggregate	
<input type="checkbox"/>	4.1	Furnish &	
<input type="checkbox"/>	4.2	Finegrade	
<input type="checkbox"/>	▼ 4.3	Install Agg	
<input type="checkbox"/>	4.3.1	Place Agg	
<input type="checkbox"/>	4.3.2	Blue Top A	
<input type="checkbox"/>	▼ 5	Asphalt Co	
<input type="checkbox"/>	5.1	Furnish &	
<input type="checkbox"/>	5.2	Install Hot	
<input type="checkbox"/>	▼ 6	36 Inch RC	
<input type="checkbox"/>	6.1	Furnish RC	
<input type="checkbox"/>	6.2	Excavate F	
<input type="checkbox"/>	6.3	Install RCF	
Subtotals 96 (3 rows selected)			
InEight Inc. Privacy Statement Term WZGsy			

4. Right-click on another cost item in the CBS tab.
5. Hover over the option **Insert copied cost items**. You have three options as to where to place the copied cost items:
 - Insert above
 - Insert below

- Insert as a subordinate



You can also view the pasted cost items in the Resources tab of the Cost item details slide-out panel.

3.3.7 Design Total Qty and Man-hours Columns in CBS

Control displays the sum of the Forecast T/O quantity from the associated InEight Design items against the attributed cost items. You can compare the Design total quantity and Design total man-hours to the Forecast (T/O) quantity and Forecast hours columns, to make sure the values match up with what is in Design.

Design total qty Forecast T/O qty as determined and pulled from the Design application (Quantity item - Forecast TO qty)		Design total MHrs Current estimate man hours as determined and pulled from the Design application (Quantity item - CE MHrs)	
Forecast remaining cost	Design total qty	Design total MHrs	Forecast method
\$ 52,598,900.46	53,898.000	0.993	Rollup
\$ 5,760,886.07	370.000	0.651	Rollup

3.3.8 Create Cost Items in InEight Change

You can also create cost items with resources in Change, and then have them created in Control upon the approval of a contract adjustment. This reduces the amount of extra steps needed for creating cost items in multiple areas.

Creating cost items in Change is performed by first creating an issue with your newly created cost items, then executing your change order.

Executed Change order sent to Control

Executed ...	Cost	Billing mark...	Markup	Margin	Deductions	Net va...	CCO status	Pricing status	Proposal status
\$6,116.00	\$5,560.00	\$0.00	\$556.00	10.00%	\$0.00	\$6,116...	Executed	None	None

Priming summary	ROM	Estimate	Proposal	Agreed
Direct cost total				
Labor				
Type labor name				
Issue 75 - New scope				
Labor cost item pricing			\$5,150.00	
Labor subtotal				
Materials				
Type material name				
Issue 75 - New scope				
Materials cost item pricing			\$410.00	

In Control, go into the Change Register and click on the change order to review the new cost items that originated from Change.

Ch...	ID	Description	CCO	Cre... date	Issue #
16...	28.0	New scope	Demo 22.2	02/28/2022	75
16...	27.0	Budget Move: IWO/...		11/29/2021	
16...	26.0	Budget Allowance M...		11/29/2021	
16...	25.0	Buyout Gain: PVS, M...		11/23/2021	
16...	24.0	Budget Move: Temp ...		11/04/2021	
16...	23.0	Budget Move: Temp ...		11/04/2021	
16...	22.1	Budget Move: Morol...		11/04/2021	
16...	22.0	Budget Move: Morol...		11/02/2021	
16...	21.0	Budget Move: Adjust...		11/01/2021	
16...	20.0	Budget Move: BTA m...		11/01/2021	
16...	19.0	Budget Move: Distrib...		10/29/2021	
16...	18.0	Temp Entrance: Lab...		09/30/2021	02
16...	17.2	Buyout Adjustment: ...		09/23/2021	
16...	17.1	Buyout Adjustment: ...		09/23/2021	

Pay item number	Description	Current billing method	Adjusted current price	Adjusted current unit price	Adjusted current pay qty	Locked date
2	Amendment #2	Fixed final price	\$ 6,116.00	\$ 0.00	6,116.00	
			\$ 6,116.00	\$ 0.00		

CBS position	Description	WBS phase code	Adjusted CB total cost	Adjusted CB total Mhrs	Adjusted CB total Qty	Locked date
4.36	New scope - Plug values	1353	\$ 5,150.00	50.00	1.00	02/28/2022
4.37	New scope - Resources	1354	\$ 410.00	0.00	1.00	02/28/2022

Revise the change order to make any further adjustments, such as associating pay items to your cost items. Notice how the cost category assignments have all come over to Control that originated from the change document.

CBS position	Description	WBS phase code	CB total cost	Adjusted CB total cost	Markup %	Marku
<input checked="" type="checkbox"/>	New scope - Plug values		\$ 0.00	\$ 5,150.00		
<input type="checkbox"/>	New scope - Resources		\$ 0.00	\$ 410.00		

Cost category	CB total cost	Pending
^ Total	\$ 0.00	\$ 5,150.00
↳ Labor	\$ 0.00	\$ 50.00
↳ Construction Equipment	\$ 0.00	\$ 0.00
↳ FOM Rented Equipment	\$ 0.00	\$ 0.00
↳ Supplies	\$ 0.00	\$ 0.00
↳ Materials	\$ 0.00	\$ 5,100.00
↳ Subcontract	\$ 0.00	\$ 0.00
↳ Fees	\$ 0.00	\$ 0.00
↳ Allowance	\$ 0.00	\$ 0.00
G & A	\$ 0.00	\$ 0.00
Undefined	\$ 0.00	\$ 0.00
Totals	\$ 0.00	\$ 5,150.00

Approving the change order creates the new cost items with the resources specified in Change, and places them within the hierarchy specified in the contract adjustment, and if none is specified, then they are placed at the bottom of the CBS.

The screenshot displays a software interface with a table of change orders and a 'Tasks' pop-up window. The table has columns for ID, Description, Creation date, Last change by, Last change on, Notes, Status, and three Change Management tags. A red box highlights the 'Approve' button in the 'Last change by' column for the row with ID 24.0. A red arrow points from this button to the 'Tasks' window. The 'Tasks' window is a table with columns for CBS position, Description, and WBS phase code. The last two rows of the 'Tasks' table are highlighted with a red box: '4.36 New scope - Plug values' and '4.37 New scope - Resources'.

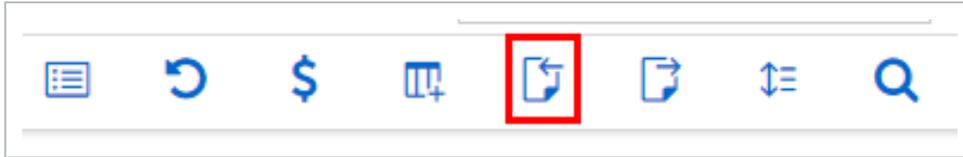
ID	Description	Creation date	Last change by	Last change on	Notes	Status	Change Management tag 1	Change Management tag 2	Change Management tag 3
28.0	New scope	02/28/2022		02/28/2022		CCO-Pending			
27.0	Budget Move: IWO/...	11/29/2021	Details	11/29/2021		Approved			
26.0	Budget Allowance M...	11/29/2021	Revise	11/29/2021		Approved			
25.0	Buyout Gain: PVS, M...	11/23/2021	Approve	11/23/2021		Approved			
24.0	Budget Move: Temp ...	11/04/2021	Approve	11/04/2021		Approved			
23.0	Budget Move: Temp ...	11/04/2021	Review	11/04/2021		Approved			
22.1	Budget Move: Morol...	11/04/2021		11/04/2021		Draft			

CBS position	Description	WBS phase code
4.13	Visqueen Material - Available	1229
4.14	LICENSES, PERMITS, & BONDS	1039
4.15	Security Personnel IWO - Available	1320
4.16	Available	1169
4.17	Available	1171
4.18	Available	1172
4.19	Available	1183
4.20	Available	1158
4.21	Available	1349
4.22	Available	1143
4.23	Available	1147
4.24	Available	1150
4.25	Available	1126
4.26	Available	1127
4.27	Available	1131
4.28	Available	1132
4.29	Available	1136
4.30	Available	1107
4.31	Available	1110
4.32	Available	1339
4.33	Construction Equipment	1070
4.34	FINISH CARPENTRY	1188
4.35	SHEAR CORE WALLS	1121
4.36	New scope - Plug values	1353
4.37	New scope - Resources	1354

3.4 COST ITEM EXCEL IMPORT

When you need to add multiple cost items to your project, adding them manually can be tedious and time consuming. To save time, if you can export your cost items to Microsoft Excel (e.g., export to Excel from your estimating software), you can import them into Control, allowing you to update your estimate in bulk, without needing to manually enter data into individual cells.

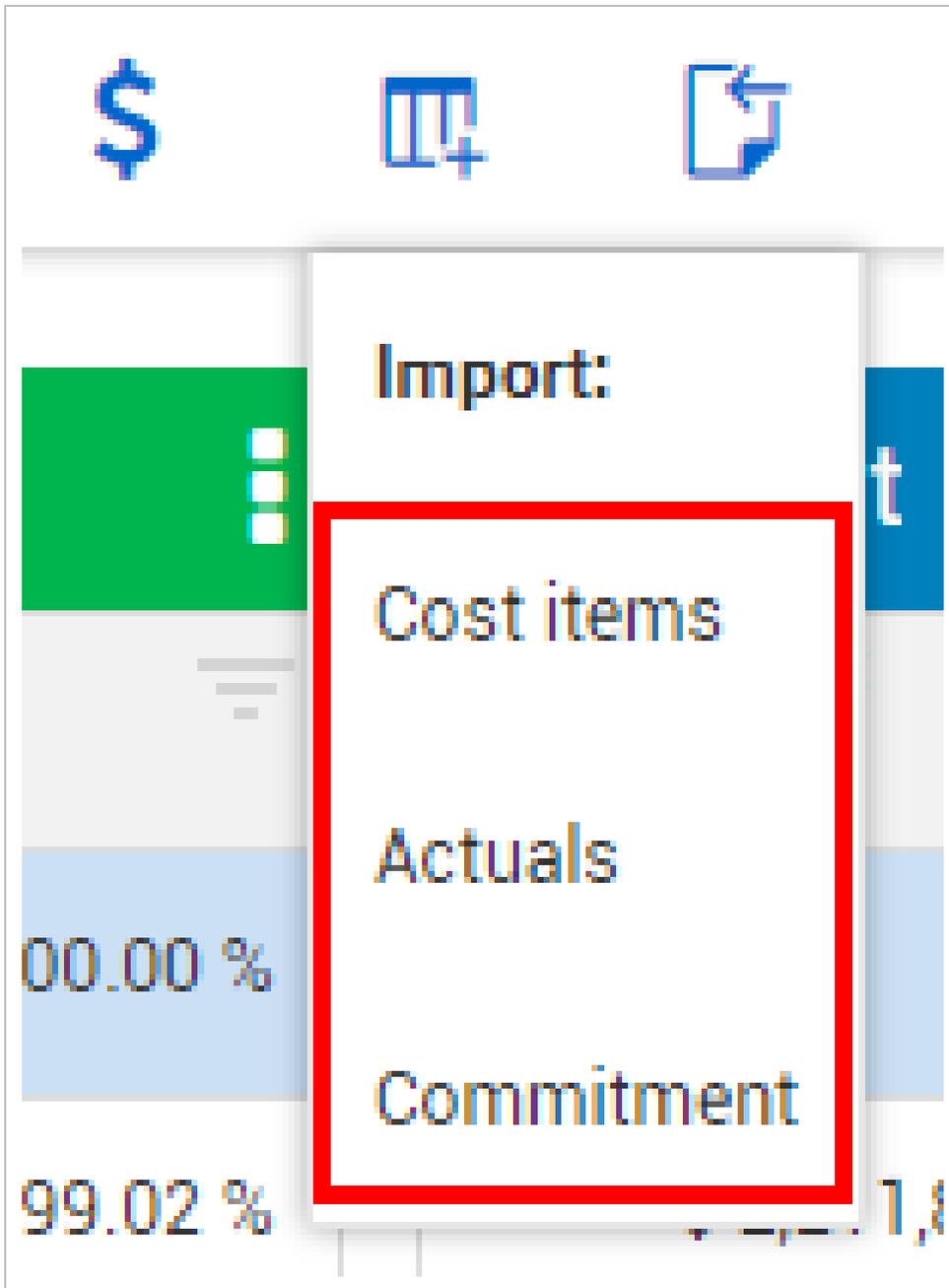
Click the **Import** icon on the right toolbar of the Control > **Workspaces** page to go access the Excel import feature.



The table below indicates the data you can import into Control from Excel.

Data Type	CBS Columns
Tasks	CBS position, Description, UoM, code-related fields, user-defined fields, other settings found in the Task details data block in Control.
Schedule	Schedule ID, schedule dates, Scheduled, Schedule plug days, Plug days, Cost curve, Roll up schedule
Current Estimate	CE final MHrs, final costs, total equipment hours, MHR/Unit, units/MHR, equipment hour/unit, labor cost/MHR, equipment cost/MHR, Secondary Qty, Scales 1, 2, and 3.
Cost Categories	Total and unit costs.

When you click on the **Import** icon on the CBS tab of the Workspaces page, you have three import type options. You can import cost items, actuals, or a schedule.



After you make a selection, the Import CBS data window opens.

Overview - Import CBS Dialog box

Title		Description
1	Import from Excel	You can either drag and drop or browse to the file to import. Microsoft Excel files (.xlsx, .xls) and Comma Separated Value (.csv) files can be

Overview - Import CBS Dialog box (continued)

Title		Description
		imported.
2	Options	You can add new cost items and update cost items that already exist in the project, choose to only update existing cost items, or only add new.
3	Cost item matching criteria	When adding and updating cost items, the structure in the spreadsheet you are importing from may be in a different order than the structure in Control. By specifying a code for matching your cost items, the import routine will know which cost items in the spreadsheet are new when adding new items, and which cost items to update with data from the spreadsheet when updating cost items.
4	Information message	This information provides a description of available functionality and instructions for proceeding to the next step.

Import CBS data

Import from Excel (.xlsx, .xls) or Comma separated value (.csv) 1

Drag and drop the file here
or browse

Browse

Options 2

* Import type

Update existing and new items

Cost item matching criteria

Update existing items 3

New items

4

i Once the import file is read, Cost item match options and field mapping can be specified. Mapping uses row 1 headers from the source document. New cost items are inserted to the bottom of the CBS.

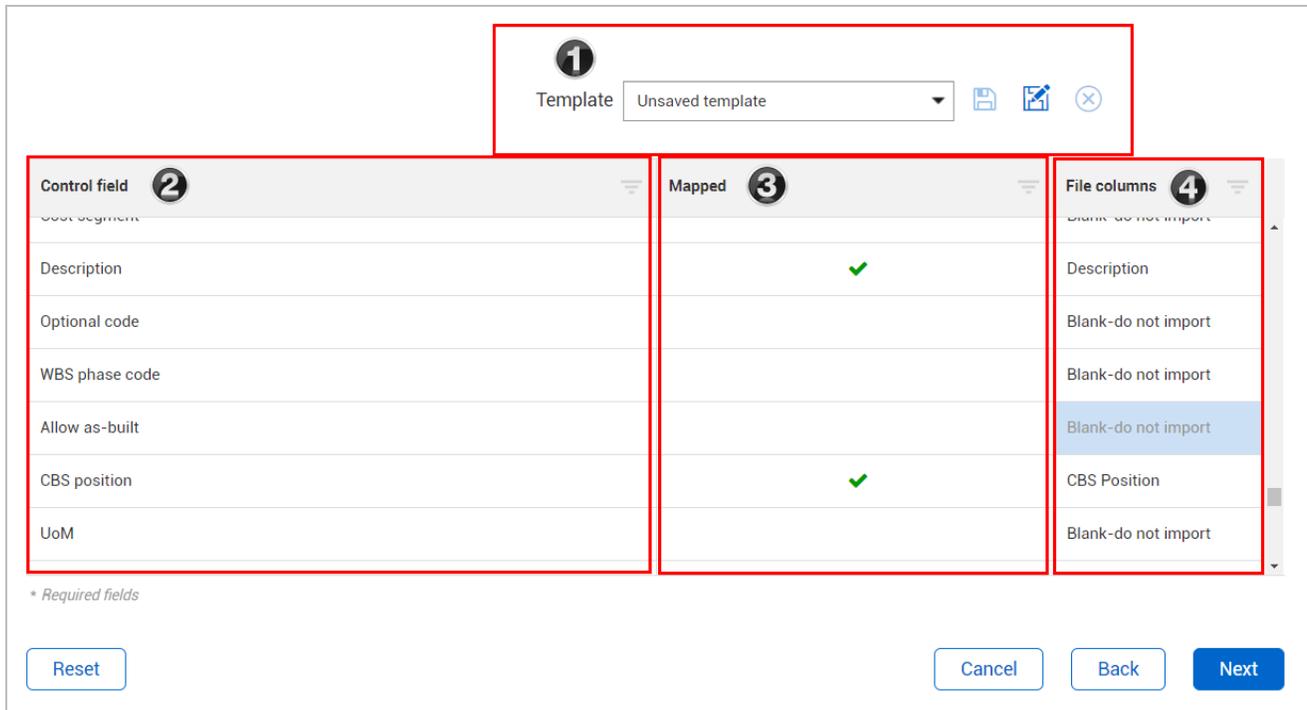
Clicking Next opens the Map columns dialog box, where you can map your Excel columns to the appropriate column in Control.

Overview - Map Columns Window

	Title	Description
1	Template	After you map the import file columns to the CBS columns in Control, you can save your settings as a template for future use. This is helpful when you need to make scope changes or updates on a regular basis.
2	Control field	The names of the column headers in Control that you can map your data to.
3	Mapped	A green checkmark indicates the column in your import file is mapped

Overview - Map Columns Window (continued)

Title	Description
	correctly to the CBS column. The Green key indicates the matching code you specified is locked.
4	File columns The names of the column headers in your import file that you can map to the CBS columns in Control.



3.4.1 Forecast Excel Import

When manually importing cost items by either updating existing cost items or importing new cost items, you can also import forecast values via Excel. How the fields are mapped in Excel determines which CBS forecast columns are populated.

Examples of some forecast columns that can be mapped via the Excel CBS import cost item process include, Forecast total cost, Forecast total MHRs, and Forecast total unit cost. Cost categories can also be selected for importing into Control.

Import CBS data - ALL PERMISSION LC_12102021054633.xlsx

Map columns

Template Unsaved template   

Control field	Mapped	File columns
Live Forecast		
Forecast method		Blank-do not import
Forecast total Cost		Blank-do not import
Forecast total Mhrs		Blank-do not import
Forecast total Mhr/Unit		Blank-do not import
Forecast total productivity		Blank-do not import
Forecast total unit cost		Blank-do not import
Forecast remaining cost		Blank-do not import
Forecast remaining Mhrs		Blank-do not import

* Required fields

Reset Cancel Back Next

3.4.2 Spreadsheet Rules

For the import process to work correctly, the items in your Excel spreadsheet must be formatted in a certain way so that Control can recognize the items. The following table indicates important spreadsheet rules to follow to make sure your data imports successfully.

Attribute	Rules
Import function	Reads the first worksheet within the referenced workbook.
First row of data	Considered to be the header row of the data. This imports as titles which are referenced during the mapping process. The import stops reading headers if it encounters a blank header cell.
Numbers	Needs to be the actual number, and not the summation of cells. Values cannot contain the \$ symbol or other currency symbols.
Second row of data	Considered the first row of data to be imported.

If you make changes in the spreadsheet, you must save the spreadsheet before importing (only saved data will be imported).

Below is a list of items to be aware of during the population of the import template.

1. The Excel file should not be open while simultaneously using the import wizard.
 - a. If there are any edits made to the spreadsheet, it must be saved and closed prior to importing.
2. CBS positions cannot be duplicates. They must be unique to each cost item.
 - a. The system will show an error if there are any duplicates.
3. The WBS phase codes are not required during the import but must also be unique per cost item.
4. Cost categories are spelling and case sensitive, and must match directly to the cost categories spelling.
 - a. The cost categories list can be exported from the import wizard.
5. The Excel sheet cannot contain any blank cells during the import. Blank cells show an error and cause the import to stall.
6. Make sure any blank columns from an export file are removed before importing again.
7. Date formats must match spreadsheet date formats. The Import Wizard will prompt you to chose a date format used in the spreadsheet.
 - a. The Import wizard will prompt you to chose a date format prior to initiating the import.

3.4.3 Best Practices and Recommendations

1. Use WBS phase code as the matching criteria for updating existing items.
 - a. WBS phase code are tied 1:1 for each cost item. The CBS position can be changed, but the WBS phase code remains the same regardless of CBS position.
2. Set up the views for exporting of data to match the import template created. Views are customizable for flexibility in what is being imported/exported.
3. Import template mapping is unique to each individual user. Master mapping cannot be set at a global level. It is recommended to provide users with a step-by-step import mapping document to set up data mapping initially during the on-boarding of InEight.
4. When exporting data in Control, current system drops trailing zeros on CBS positions. Example: 1.10 exports as 1.1.
 - a. One way to get around this is opening data as a CSV file in Excel.
5. Once you have downloaded the export file, proceed to the following steps.
 - Open blank Excel sheet
 - Navigate to **Data** tab
 - Click **Get Data > From File > From Text/CSV**
 - Choose downloaded export file
 - Click **Import**
 - Click **Load**

Your data will now be imported into the sheet where updates are made. Once you have completed your updates, you may save and re-import the same file.

3.4.4 CBS Hierarchy

If you select CBS position as the matching criteria for the import, the import routine recognizes the hierarchy of your structure by the numbering of the codes.

	A	B	C
1	CBS position	Description	Forecast T/O qty
2	1.1.1.5	Parent	1
3	1.1.1.5.1	Child 1	10
4	1.1.1.5.2	Child 2	1
5	1.1.1.5.2.1	Child 2.1	15
6	1.1.1.5.2.2	Child 2.2	20
7	1.1.1.5.3	Child 3	1

After the import is complete, if the CBS position for the new cost items match existing cost items in the CBS, your new CBS cost items will import as you have defined them. The existing CBS cost items will shift down and be relabeled to match the next corresponding number.

When adding new cost items to an existing CBS position, a warning message displays informing you the CBS positions you have picked already exist. The message then asks you to confirm if you would like to continue with this import.

3.4.4.1 CBS Predictive Hierarchy

New cost items created via the import process automatically adjust the CBS structure hierarchy to match your import as needed and predict the movements in the current hierarchy, and the hierarchy that is being added via the Excel import.

Tasks			
<input type="checkbox"/>	CBS position	Description	WBS phase code
<input type="checkbox"/>	1	A - Road materials	1000
<input type="checkbox"/>	1.1	B - Rock	1001
<input type="checkbox"/>	1.1.1	C - Mix	1002

For example, you have three cost items that you want to import, as shown below. Positions 1 and 1.1 already exist in the CBS, and position 2.1.2 is new.

	A	B
1	CBS position	Description
2	1	D - Maintenance
3	1.1	E - Equipment
4	2.1.2	F - Subcontracts

The import process imports Excel CBS positions 1 and 1.1, and places 2.1.2 at the bottom of the hierarchy.

Tasks			
<input type="checkbox"/>	CBS position	Description	WBS phase code
<input type="checkbox"/>	1	D - Maintenance	1003
<input type="checkbox"/>	1.1	E - Equipment	1004
<input type="checkbox"/>	2	A - Road materials	1000
<input type="checkbox"/>	2.1	B - Rock	1001
<input type="checkbox"/>	2.1.1	C - Mix	1002
<input type="checkbox"/>	2.1.2	F - Subcontracts	1005

The following steps walk you through the import process.

The following steps are only applicable when importing new cost items.

Options

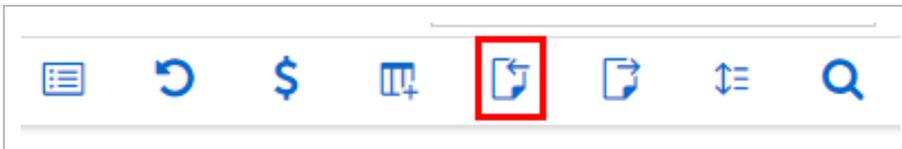
* Import type

Cost items and cost item attributes

- Update existing and new items
- Update existing items
- New items

Import CBS Data

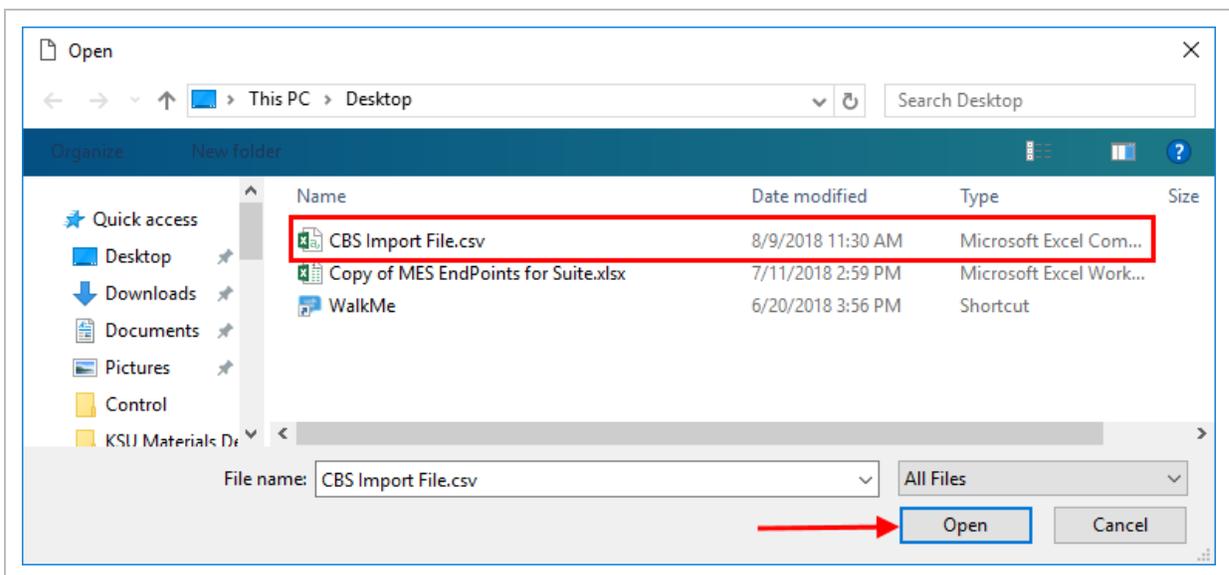
1. From the Control > Workspaces page, on the CBS tab, click on the **Import** icon on the right toolbar.



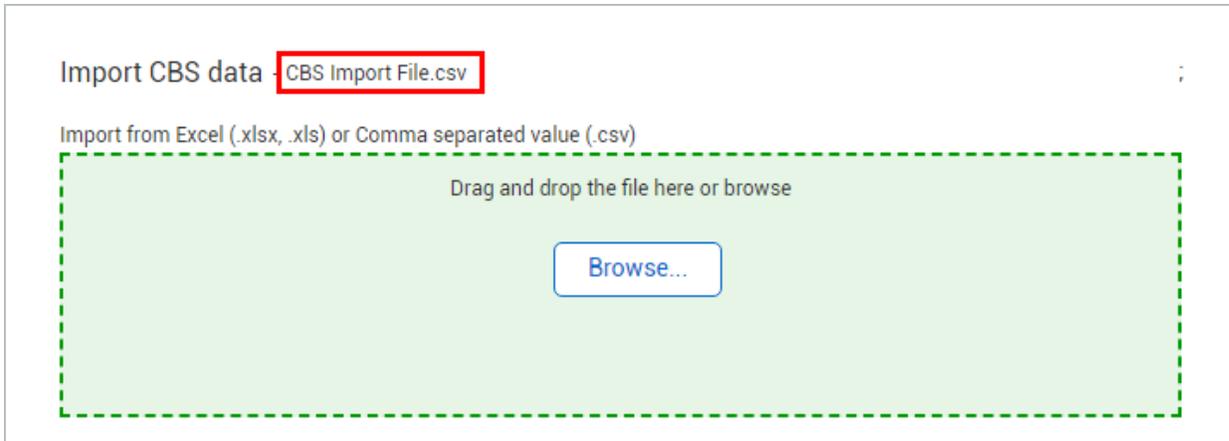
2. Select **Cost Items** when the Import CBS data window appears.
3. Click on the **Browse** button to select a file to import.



4. Browse to the Excel file you wish to import.
 - The file and its location should be indicated by your instructor if you're in a classroom setting, otherwise you can select one of your own
5. Select the import file and click **Open**.



- The import file is now selected



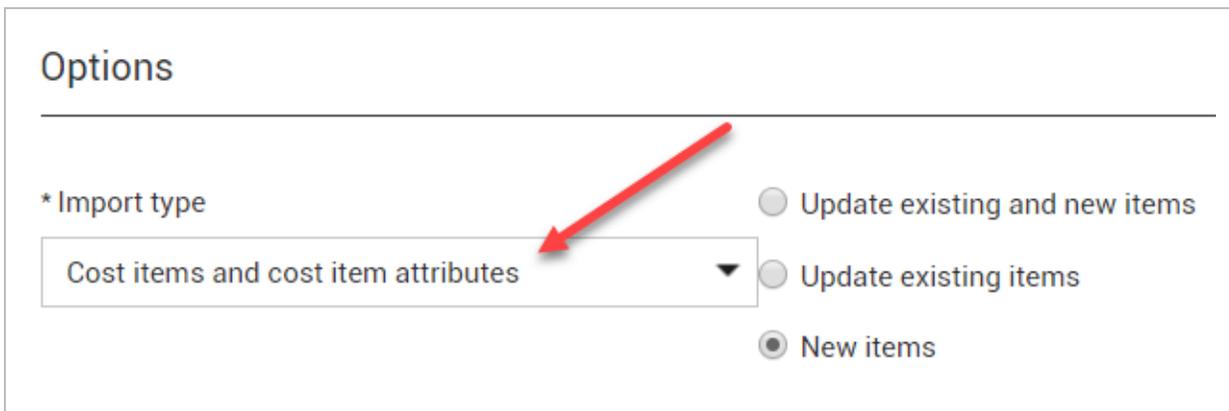
Import CBS data **CBS Import File.csv** ;

Import from Excel (.xlsx, .xls) or Comma separated value (.csv)

Drag and drop the file here or browse

Browse...

6. Under Options, select **New Items** (if not already selected).
7. For the Cost item matching criteria, select **Cost items and cost item attributes** from the drop-down list.



Options

* Import type

Cost items and cost item attributes ▼

Update existing and new items

Update existing items

New items

8. Click **Next**.
 - This takes you to the **Map columns** window
 - Note that the File columns fields are set to **Blank-do not import by default**
9. Under File columns, click in the field on the same row as the UoM CBS column, then click again to expand the drop-down list for that field.

Map columns

Template   

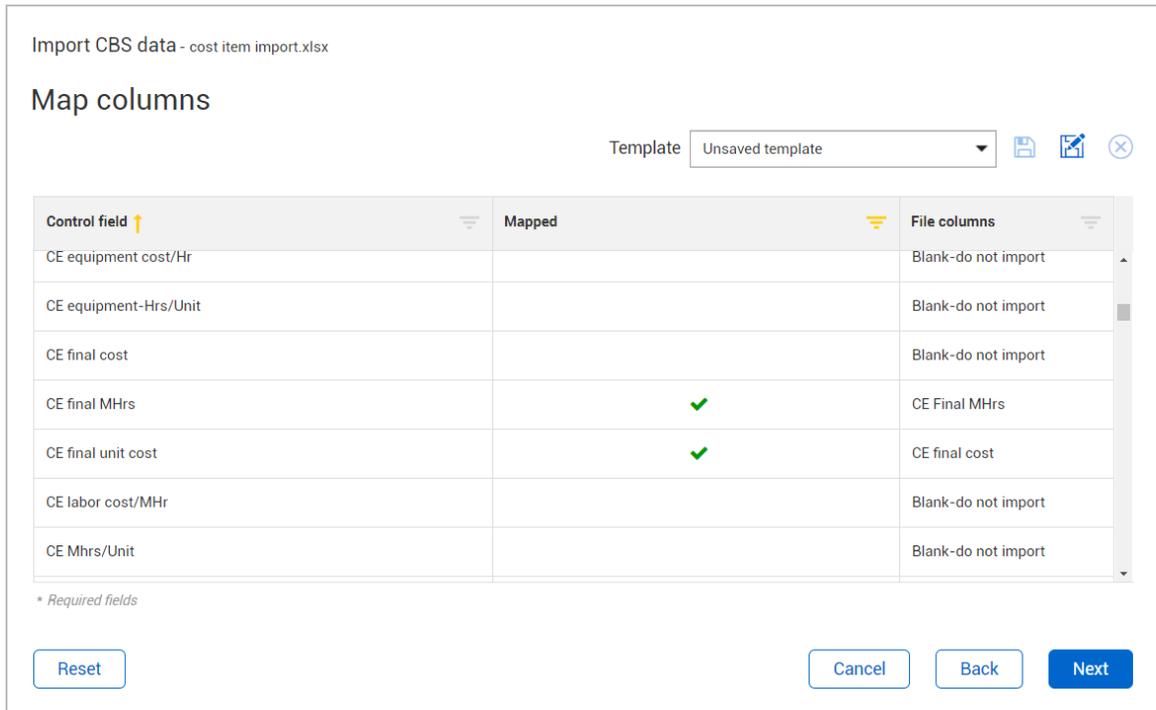
Control field	Mapped	File columns
WBS phase code		Blank-do not import
Allow as-built		Blank-do not import
CBS position		Blank-do not import
UoM		Blank-do not import
Account code		
Pay item assignment		

* Required fields

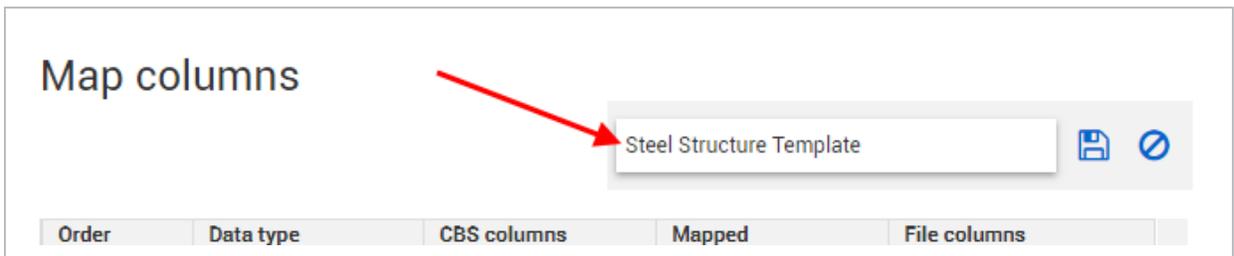
Blank-do not import ▼
 | 
 Blank-do not import
 CBS Position
 Description
 CE materials total cost
 CE subcontract total cost
 UOM

10. Select UOM from the drop-down list to map the UOM column in the Excel file to the UoM CBS column.
11. Repeat the selection process to select the appropriate File columns to map to the following CBS columns:
 - CBS position
 - Description
 - WBS Phase Code
 - Forecast (T/O) quantity
 - CE Final MHrs
 - CE final cost

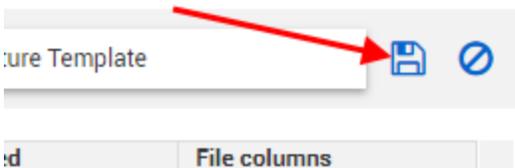
- A green check mark indicates successful mapping of your file columns



12. To save these settings for future use, click in the Template field and type **Steel Structure Template**.

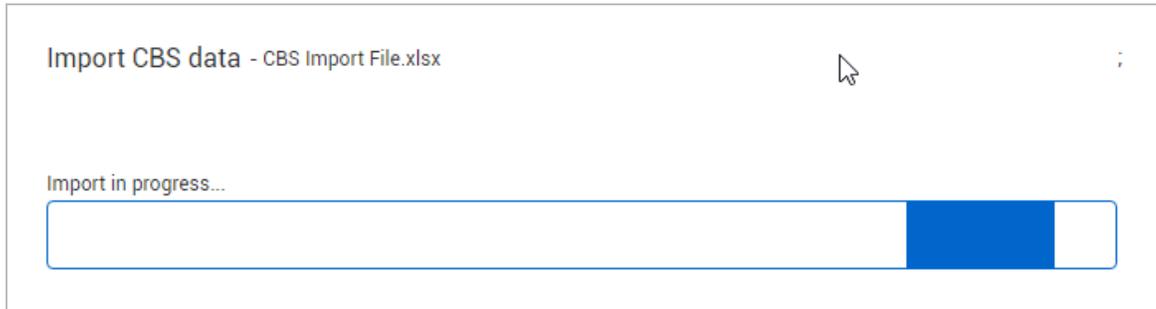


13. Click the **Save** icon to save the template.

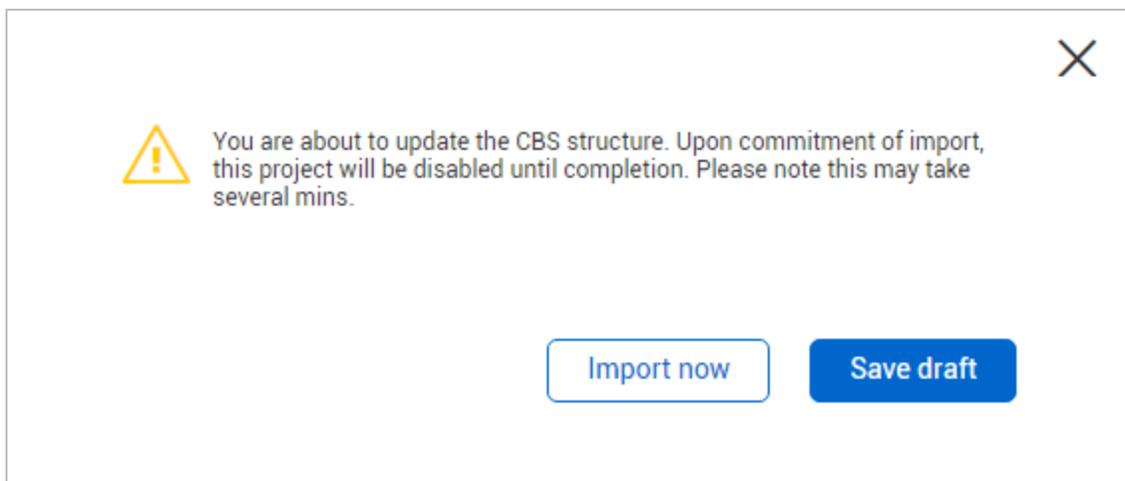


14. Click **Next**.

- A progress bar appears informing you the import is in progress

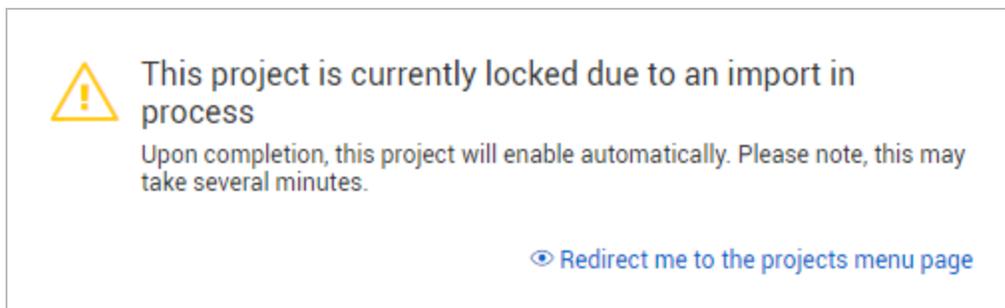


- A prompt appears, indicating the project will be disabled from use during the importing process

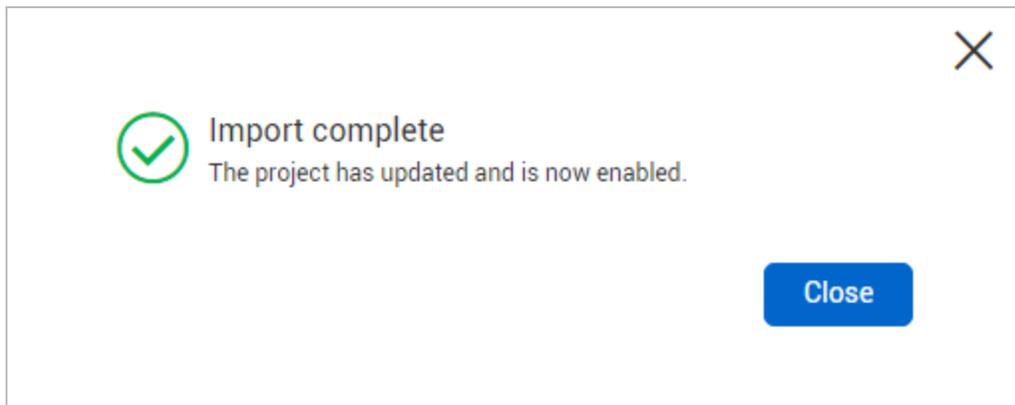


15. Click **Import now**.

- A prompt appears informing you that the project is currently locked for the importing process

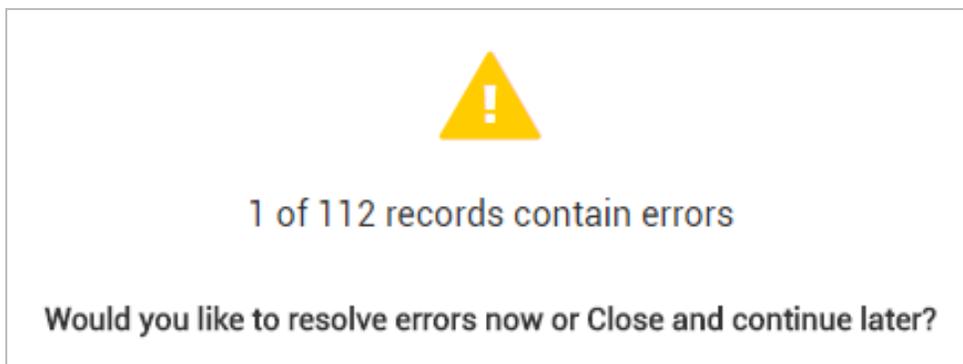


- Once completed, you will receive the following prompt, informing you the data imported successfully



3.4.5 Resolving Import Errors

When conducting the import, you may run into errors. This will be indicated when you attend to run the import routine by the following prompt:



The prompt window includes a Review errors and items for import link, which you can click on to resolve any issues prior to final import. An error resolution page opens where you can identify and resolve your errors.

Audit log > Import history > CBS Import File.xlsx

Find previous error 1 errors remain... Find next error Cancel import Import

Status Details (🔗 CBS position)		Import Columns ⚠️				
Import status	CBS match status	Import method	CBS position	Description	WBS phase code	CE final Mhrs
Pending	No match found, new item	Add new items and upd...		Bolted Connections		1000
Pending	No match found, new item	Add new items and upd...		Module 01 - Erect Steel...		16000
Pending	No match found, new item	Add new items and upd...		Structural Steel		0
Pending	No match found, new item	Add new items and upd...		Structural Steel		0
Pending	No match found, new item	Add new items and upd...		Module 001 - Erect Ste...		0
Error	No match found, new item	Add new items and upd...		Structural Steel		0
Pending	No match found, new item	Add new items and upd...		Materials		0
Pending	No match found, new item	Add new items and und...		Equipment		0

There can be situations where the cost item Excel import process will successfully process some cost items, but fail to import other cost items. In this situation the process will show as failed. For example, you imported 100 cost items, and 90 of the cost items import successfully. There are 10 cost items that did not import successfully. In this scenario you would need to resolve the import errors.

3.4.6 Excel Import for committed cost

Importing committed cost mainly helps to keep track of subcontract cost items where you would have a purchase order that would drive all of your cost.

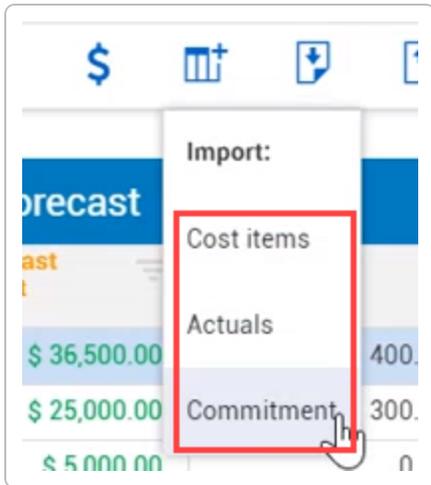
You can import two types of committed cost:

- Open/Remaining Committed Cost
- Total committed cost

Open/Remaining Committed Cost is the cost you still have left to pay on the purchase order. Total committed cost is the total purchase order amount for the purchase order.

Committed cost were previously located in different areas of Control. You can have Open and Total committed cost columns in your CBS. The same columns are also in the Commitments tab of the Actual Details Slideout where you can make manual edits to the committed costs. Columns in CBS for Open and Total committed costs only reflects the manual edits you made in the Actual Details Slideout. Open and Total committed costs are also shown in cost item details slideout cost categories tab.

You can import committed costs using the import icon on the CBS and selecting **Commitment**.



3.4.6.2 Generating the commitment cost Excel spreadsheet

To bring in committed cost from the excel import, you first need an existing value in your CBS that matches the Excel Spreadsheet value. This can be one of two options:

- WBS phase code
- CBS position

You will also need the **Type** of committed cost you want to import, either Open/Remaining Committed Cost or Total commitment.

A screenshot of an Excel spreadsheet with the following data:

	A	B	C	D	E	F
1	WBS phase code		Cost	Category	Type	
2	1003		100	Undefined	Open commitment	
3	1003		100	Undefined	Total commitment	
4	1004		450	Undefined labor	Open commitment	
5	1004		750	Undefined labor	Total commitment	

Open/Remaining Committed Cost and Total commitment types need to be spelled exactly word for word as it is written in the screenshot. If you shorten any of the wording in the Type column, the system will not accept the import and you will receive an error.

Each Type of committed cost has to be its own line item on the Excel spreadsheet. You can do multiple transactions for one cost item, but only one commitment type per line item. If they are different types, you need to separate them out into different line items.

	A	B	C	D	E	F
1	WBS phase code		Cost	Category	Type	
2	1003		100	Undefined	Open commitment	
3	1003		100	Undefined	Total commitment	
4	1003		100	Undefined labor	Total commitment	
5	1004		450	Undefined labor	Open commitment	
6	1004		750	Undefined labor	Total commitment	

Each column needs to be created and defined if you are to do a Commitment Excel Import. You must include a Cost column and a Category column as shown in the above image.

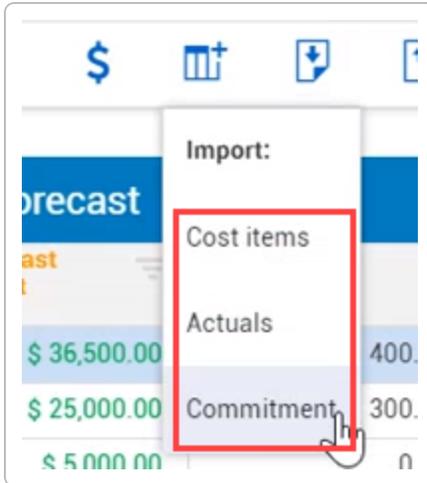
Open/Remaining Committed Cost should never be greater than your total. Open/Remaining Committed Cost cost should either be equal or less than the Total commitment cost.

3.4.6.3 Importing commitment data

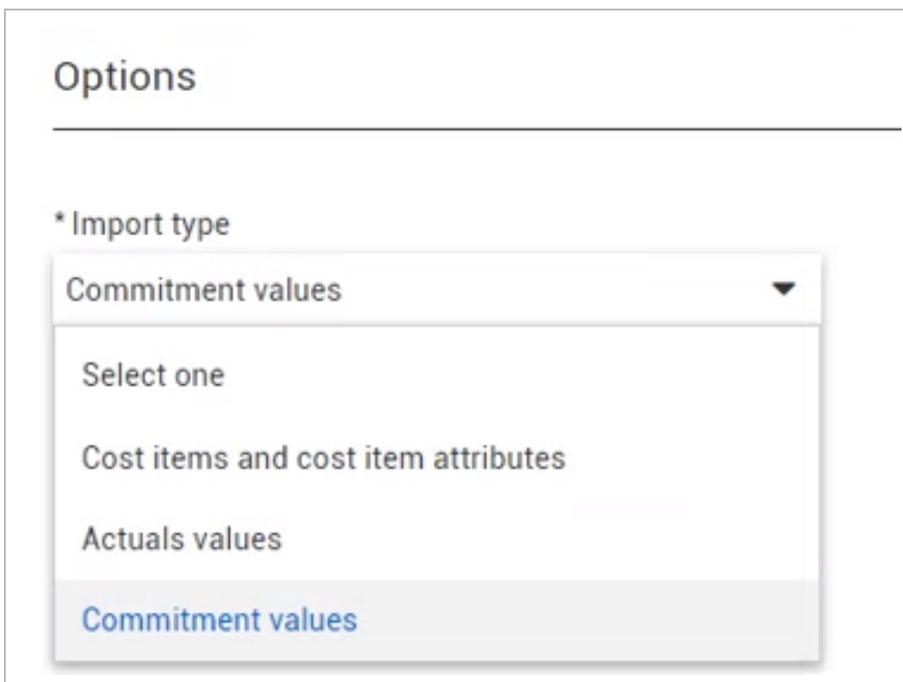
Follow the step by step to Import commitment data.

Import Commitment Costs

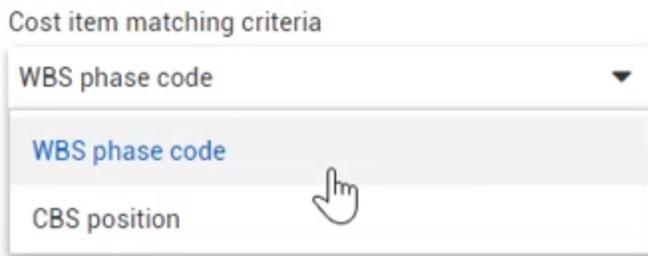
1. From Control's CBS tab, select the import icon. Then select **Commitment**.



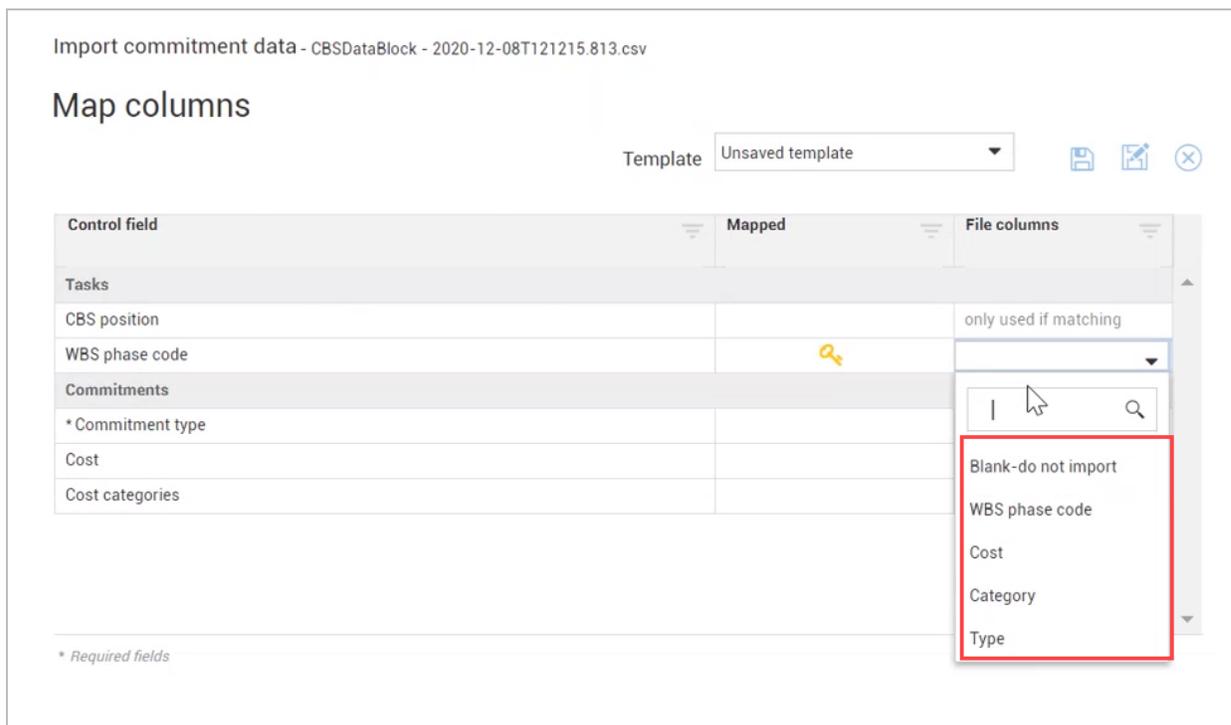
2. After you have created your Excel spreadsheet with your commitment costs, select **Browse** from the Import from Excel window. Then select the Excel file name you saved.
3. After you return to the Import commitment data window, under the Options section, select the **Import type** drop down arrow. If it is not already selected, select the **Commitment values** option.



4. Select the Cost item matching criteria drop down and choose either WBS phase code or CBS position.



5. After selecting the drop down options, select **Next** in the bottom right corner.
6. From the Map columns screen, select the columns you are importing from your Excel spreadsheet.



7. The Control field should match the File columns. For example, Commitment type in Control field should match Type in File columns as shown below. Once done, select **Next**.

Map columns

Template: Unsaved template

Control field	Mapped	File columns
Tasks		
CBS position		only used if matching
WBS phase code	✓	WBS phase code
Commitments		
* Commitment type	✓	Type
Cost	✓	Cost
Cost categories	✓	Category

* Required fields

- 8. If there are no errors in the mapping stage, you should see a green check mark on the next screen, indicating everything is ready to be imported.



Document contains no errors
5 record(s) ready for import

Select next to continue with import steps.

If you receive any errors in the mapping stage, you will receive an error with a download option to download a word document that shows you all the errors.

```

Import commitments CBS data: CBSDataBlock - 2020-12-08T121215.813.csv
File Import attempted on: 12/8/2020 9:04:55 PM

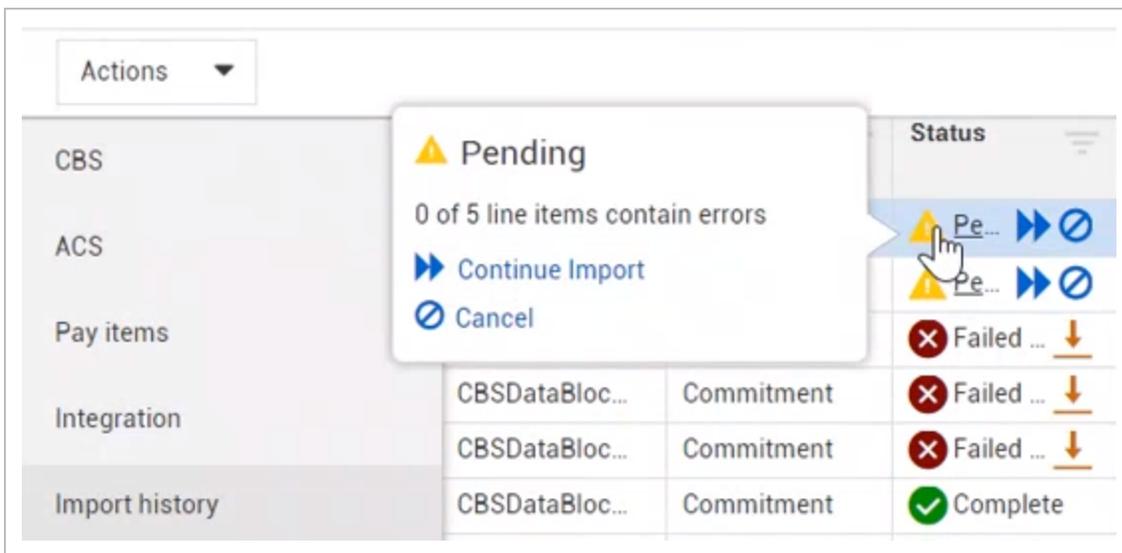
The following errors were detected while attempting to import commitment
values into control.
Review the errors below, once all the errors have been resolved,
reattempt the import to Control.

Error 1: Invalid commitment type. (this error affects 2 WBS/CBS items out
of 2 total attempted imported WBS/CBS items and 4 rows out of 4 total
attempted imported rows)

    WBS: 1003
    CBS: 1.3
    Row: 1, 2

    WBS: 1004
    CBS: 1.4
    Row: 3, 4
    
```

9. Click **Next** and then select **Import now**. This will create a line item in the Import history section of the Audit Log tab.
10. From Control, go to the Audit Log tab. Then select **Import history**. Hover over the yellow triangle to view the information on the pending import item.



After the pending import is Complete, the committed costs populate in the Cost Categories Details tab, as well as the CBS. It the costs also appear in the Commitments tab from the Actuals Details Slideout and populates into the new Open and Total cost committed columns.

If the imported commitment costs fail to import, the Audit Log Import history would show that the import failed completely.

Review

1. Which of the following is how can you identify a terminal cost item on the CBS register page? (Select all that apply.)
 - a. The row is highlighted a different color
 - b. A symbol displays on certain cost item fields
 - c. The row is indented
 - d. The 'Is Terminal' column is checked

2. When moving a cost item to be above another cost item at the same level, which icon should display when you drag and drop the cost item?
 - a. The one with a subordinate bar
 - b. The one with three equal bars
 - c. The one with an equal sign
 - d. The one with a plus sign

3. If you make changes to your spreadsheet, you must _____ the spreadsheet prior to importing it into Control.
 - a. close
 - b. copy
 - c. save
 - d. refresh

Summary

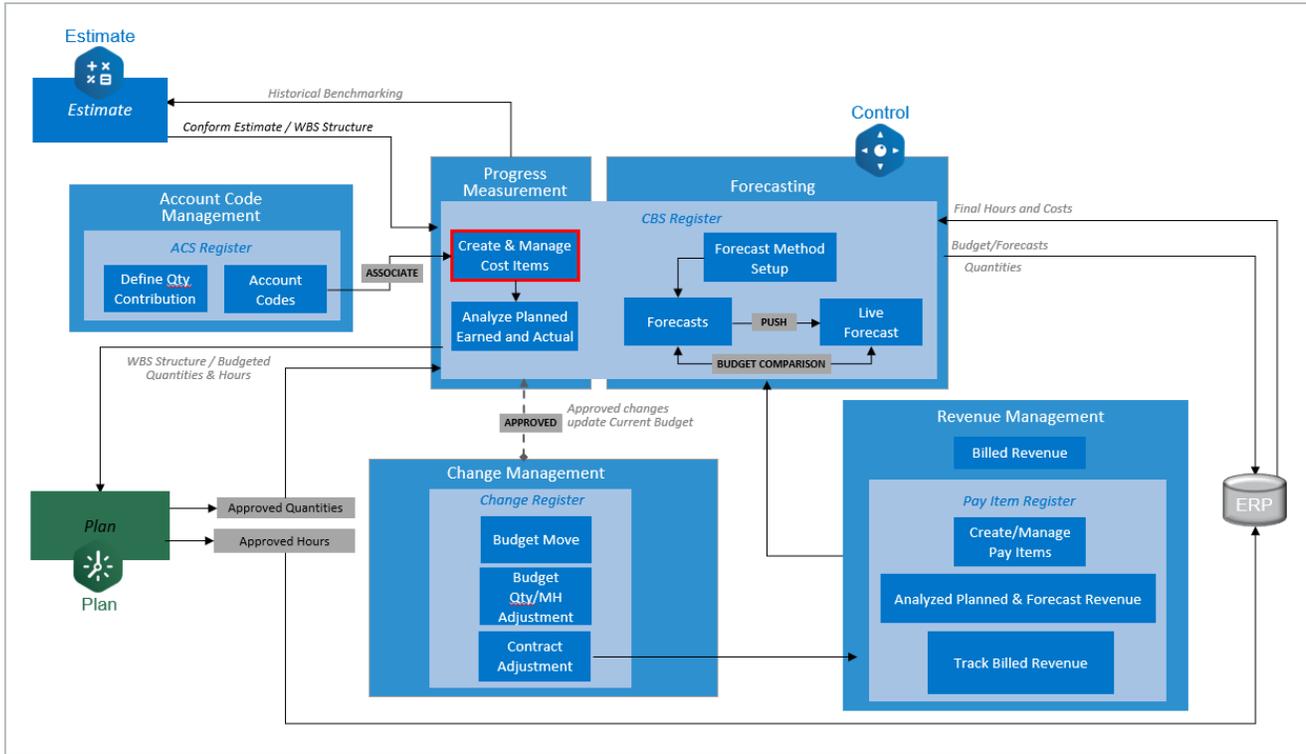
As a result of this lesson, you can:

- Explain the Cost Breakdown Structure and its purpose
- Create, arrange and delete cost items
- Import cost items

CHAPTER 4 – COST ITEM MANAGEMENT

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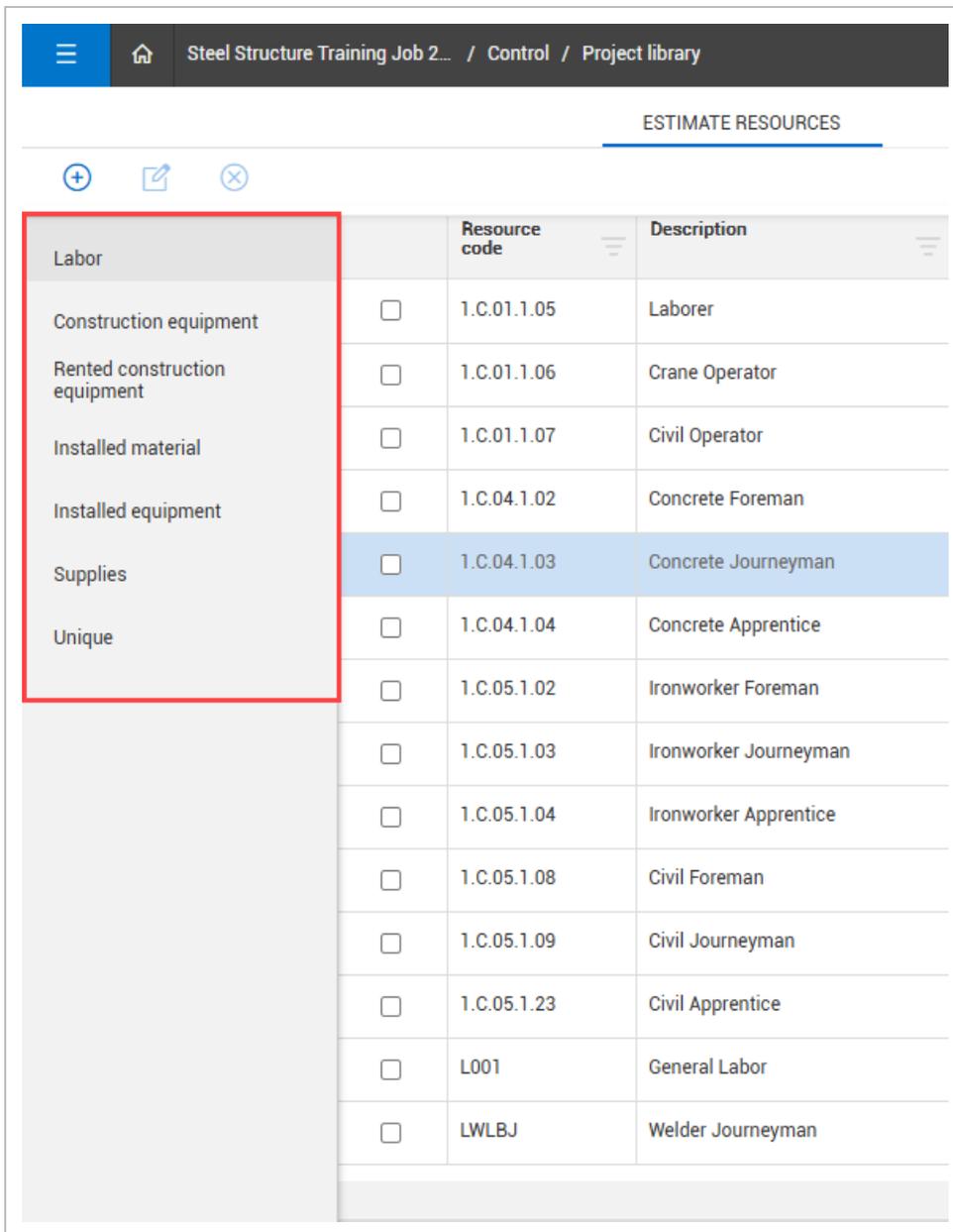
4.1 COST ITEM MANAGEMENT WORKFLOW



4.2 ESTIMATE RESOURCES

InEight Control refers to labor, equipment, materials, installed equipment, and supplies as resources. These resources are used as the basic building blocks for detailing the estimated costs which create your budget.

The Project library includes all resources used to estimate costs for the cost items in the cost breakdown structure (CBS).



The screenshot shows the 'ESTIMATE RESOURCES' interface. At the top, there is a navigation bar with a home icon, a hamburger menu icon, and the text 'Steel Structure Training Job 2... / Control / Project library'. Below this is a sub-header 'ESTIMATE RESOURCES' with three icons: a plus sign, a pencil, and a close sign. The main content is a table with three columns: 'Resource code', 'Description', and an unlabeled column on the left. The left column is highlighted with a red box and contains the following categories: Labor, Construction equipment, Rented construction equipment, Installed material, Installed equipment, Supplies, and Unique. The table rows are as follows:

	Resource code	Description
<input type="checkbox"/>	1.C.01.1.05	Laborer
<input type="checkbox"/>	1.C.01.1.06	Crane Operator
<input type="checkbox"/>	1.C.01.1.07	Civil Operator
<input type="checkbox"/>	1.C.04.1.02	Concrete Foreman
<input type="checkbox"/>	1.C.04.1.03	Concrete Journeyman
<input type="checkbox"/>	1.C.04.1.04	Concrete Apprentice
<input type="checkbox"/>	1.C.05.1.02	Ironworker Foreman
<input type="checkbox"/>	1.C.05.1.03	Ironworker Journeyman
<input type="checkbox"/>	1.C.05.1.04	Ironworker Apprentice
<input type="checkbox"/>	1.C.05.1.08	Civil Foreman
<input type="checkbox"/>	1.C.05.1.09	Civil Journeyman
<input type="checkbox"/>	1.C.05.1.23	Civil Apprentice
<input type="checkbox"/>	L001	General Labor
<input type="checkbox"/>	LWLBJ	Welder Journeyman

Most of the CBS cost detail is imported directly from InEight Estimate, but you might need to create additional cost item detail for conforming your budget and creating change orders.

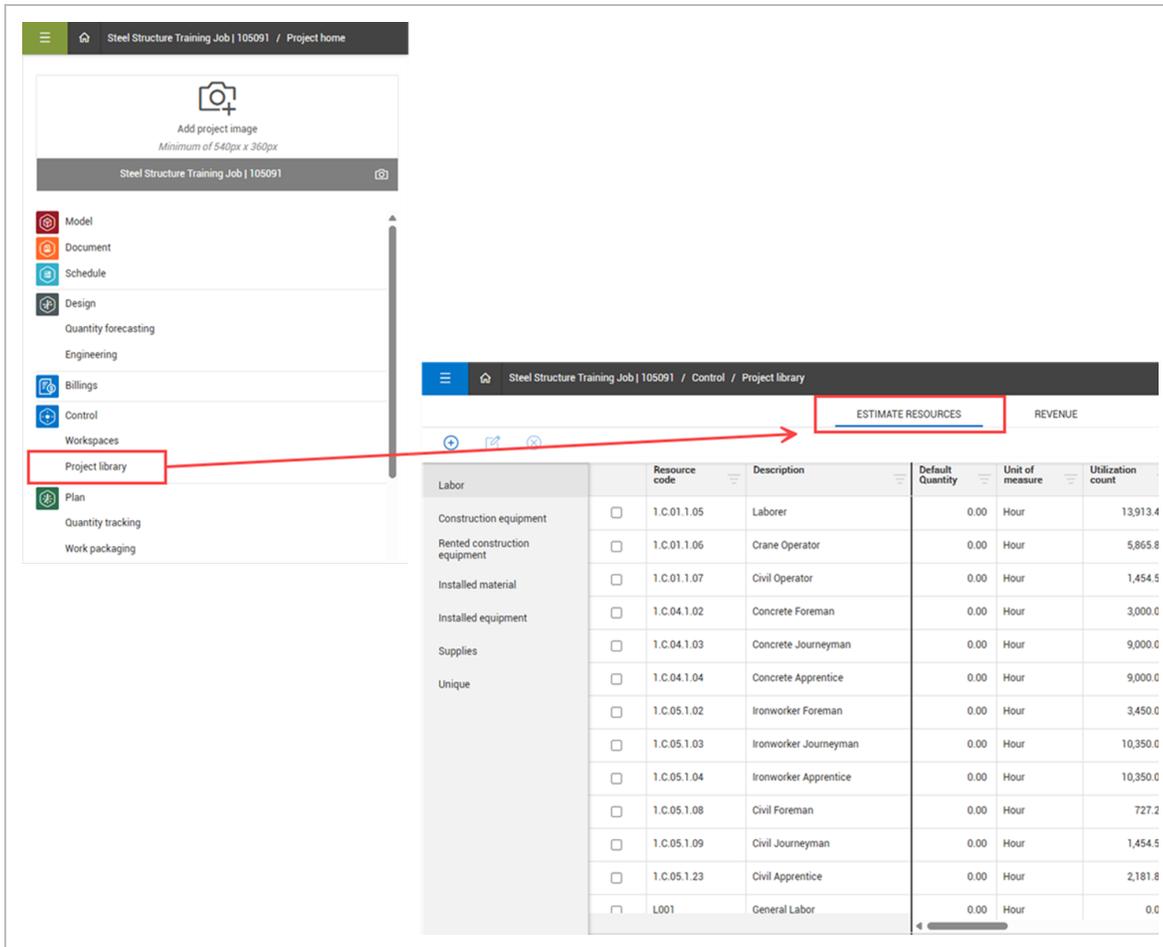
Estimate resources in the Project library are organized into seven resource types:

Resource	Description
Labor	Human resources that perform the work, classified by trade (e.g., pipefitters, electricians, iron workers).
Construction Equipment	Owned construction equipment.
Rented Construction Equipment	Construction equipment rented from a third party.
Installed Material	Materials that remains installed on site after the project is completed, (e.g., concrete, piping, aggregate).
Installed Equipment	Equipment that remains installed on site after the project is completed, (e.g., boilers, heat exchangers, vessels, cooling towers).
Supplies	Expendable items that are not permanently installed (e.g., small tools, consumables).
Unique	Resources of a unique nature which cannot be associated with other resource types (e.g., dump fees, hauling charges and equipment rented by the month, and subcontracted work).

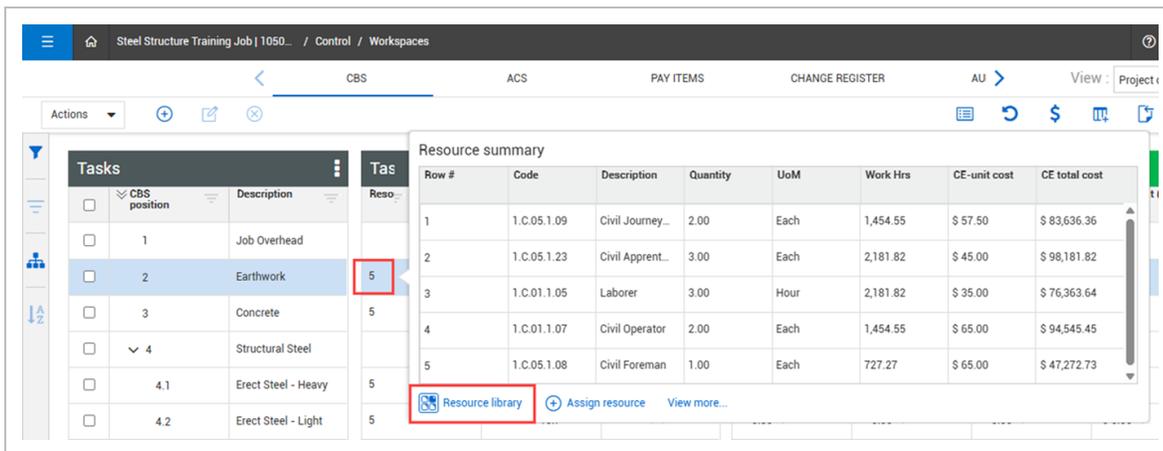
Estimate resources are the equivalent of the Resource Rate Register in InEight Estimate.

4.2.1 Navigate to Estimate Resources

To access the Estimate resources page, go to the project home page, and then click **Project library**. The Project library page opens and shows the **Estimate Resources** tab.

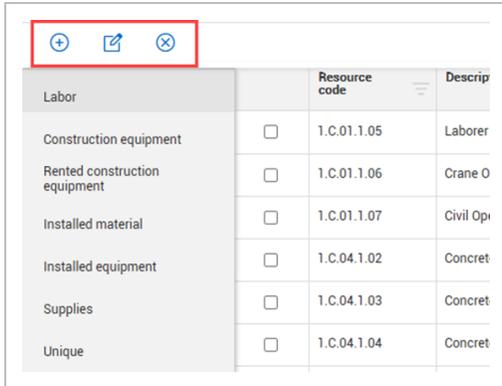


You can also access Estimate Resources from the CBS page. In the CBS page, select a line item and then hover over the resource number in the Resources column of the Task details data block. In the Resource Summary dialog box, click **Resource library** to open the Project library.



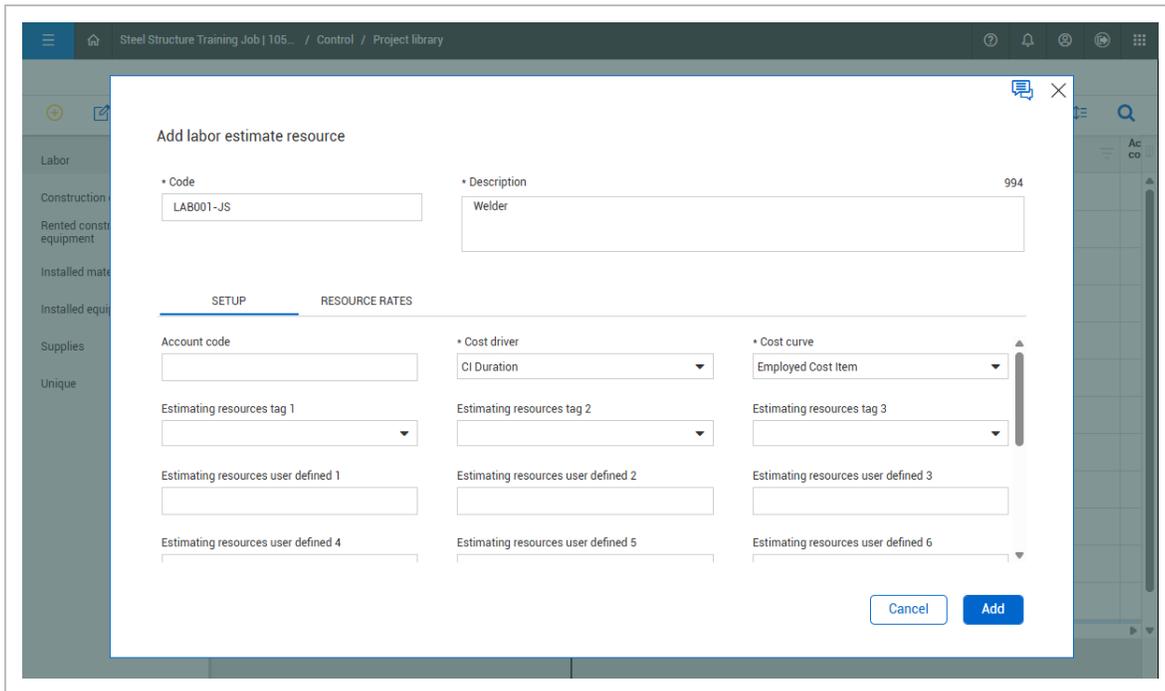
4.2.2 Manage estimate resources

You can manage estimate resources by adding, deleting, or editing estimate resources.



		Resource code	Descrip
Labor			
Construction equipment	<input type="checkbox"/>	1.C.01.1.05	Laborer
Rented construction equipment	<input type="checkbox"/>	1.C.01.1.06	Crane O
Installed material	<input type="checkbox"/>	1.C.01.1.07	Civil Op
Installed equipment	<input type="checkbox"/>	1.C.04.1.02	Concret
Supplies	<input type="checkbox"/>	1.C.04.1.03	Concret
Unique	<input type="checkbox"/>	1.C.04.1.04	Concret

To add an estimate resource to the Estimate Resources library, you must first choose the resource type in the left-side section (Labor, Construction equipment, etc.), and then click the **Add estimate resource** icon. In the Add estimate resource dialog box, enter the applicable required and optional resource data, and then click **Add** to add the estimate resource.



Add labor estimate resource

* Code: LAB001-JS * Description: Welder 994

SETUP **RESOURCE RATES**

Account code: [] * Cost driver: CI Duration * Cost curve: Employed Cost Item

Estimating resources tag 1: [] Estimating resources tag 2: [] Estimating resources tag 3: []

Estimating resources user defined 1: [] Estimating resources user defined 2: [] Estimating resources user defined 3: []

Estimating resources user defined 4: [] Estimating resources user defined 5: [] Estimating resources user defined 6: []

Cancel Add

You can add your own notes to review later and to communicate with other users information about the estimate resource. Click the **Show notes** icon at the top right to open the Conversation notes and add additional notes.

To edit or delete an estimate resource, select the estimate resource, and then click the **Edit estimate resource** or **Delete estimate resource** icon. If an estimate resource has been assigned to a project, it cannot be deleted.

4.2.3 Resource rates

In the Resource Rates tab, you can import, modify, and add billable rates to estimate resources. This is particularly helpful for time and material or cost plus contracts to drive accurate invoicing.

Resource billing rates are also used for Forecast final revenue, as it will rely on the billing rates of the resources on the cost items that are assigned to pay items. These values generate revenue forecast for cost items that are associated to a cost plus or time and material (billing method) pay item.




Add labor estimate resource

* Code

* Description 994

SETUP
RESOURCE RATES

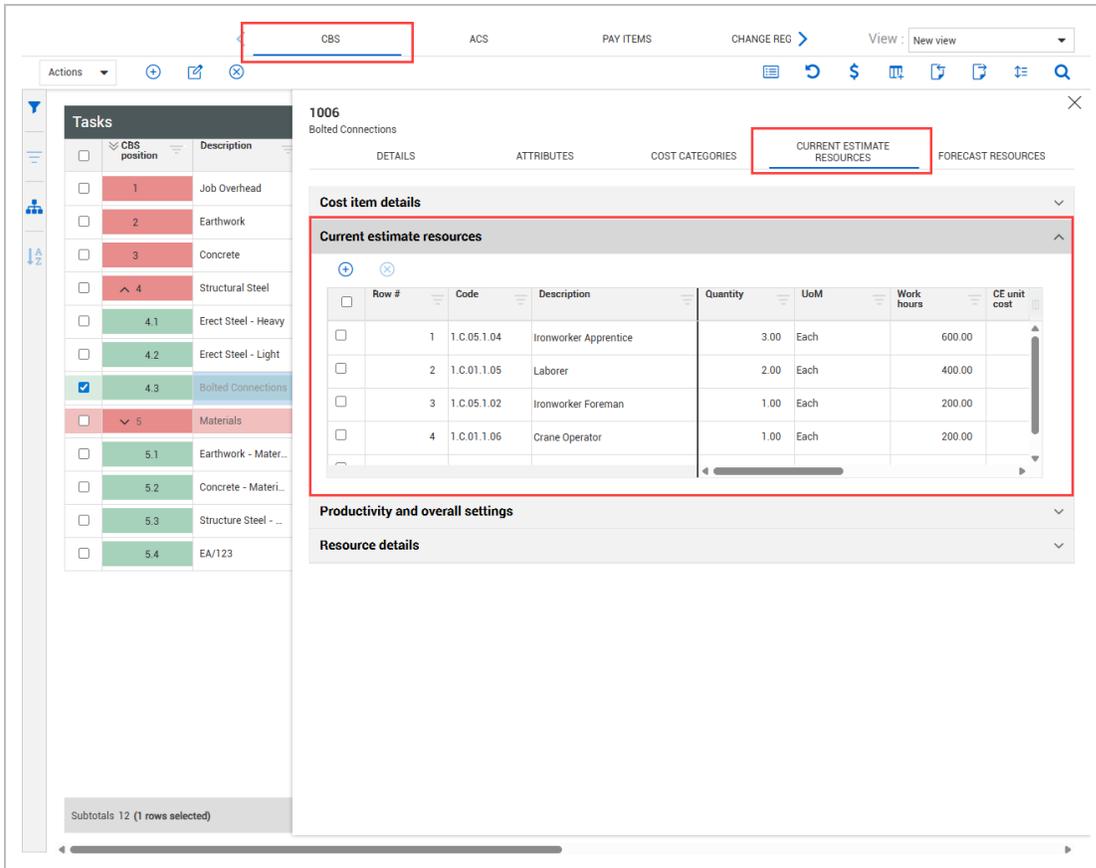
Billing rate	\$ 50.00 	\$ 0.00	\$ 0.00 
Billing rate markup	\$ 50.00	\$ 0.00 	\$ 0.00 
Billing rate markup %	0.00 %	0.00 %	0.00 % 
Charge rate	\$ 50.00	\$ 0.00	\$ 0.00 

4.2.4 Add estimate resources to a job

After resources are created, you can add them to a job.

Add estimate resources

1. Go to Workspaces > **CBS** register.
2. Right-click a cost item, and then in the context menu, select **Cost item details**.
3. On the Cost item details slide-out, select the **Current Estimate Resources** tab.
4. Expand the Current estimate resources section, and then click the **Add resource** button.



5. In the Add a resource dialog box, select the resources to add to the cost item, and then click **Add**.

Add a resource

LABOR CONSTRUCTION EQUIPMENT RENTED CONSTRUCTION EQ... INSTALLED MATERIAL INSTALLED EQUIPMENT SUPPLIES UNIQUE

Search...

<input type="checkbox"/>	Resource code	Description	Default Quantity	Unit of measure	Utilization count	C E-unit cost (Scale 1)	Cost driver
<input type="checkbox"/>	1.C.01.1.07	Civil Operator	0.00	Hour	1,454.55	\$ 65.00	Cl Duration
<input type="checkbox"/>	1.C.04.1.02	Concrete Foreman	0.00	Hour	3,000.00	\$ 65.00	Cl Duration
<input type="checkbox"/>	1.C.04.1.03	Concrete Journey...	0.00	Hour	9,000.00	\$ 55.00	Cl Duration
<input type="checkbox"/>	1.C.04.1.04	Concrete Apprentice	0.00	Hour	9,000.00	\$ 45.00	Cl Duration
<input checked="" type="checkbox"/>	1.C.05.1.02	Ironworker Foreman	0.00	Hour	600.00	\$ 65.00	Cl Duration
<input checked="" type="checkbox"/>	1.C.05.1.03	Ironworker Journe...	0.00	Hour	1,800.00	\$ 55.00	Cl Duration
<input type="checkbox"/>	1.C.05.1.04	Ironworker Appren...	0.00	Hour	1,800.00	\$ 45.00	Cl Duration
<input type="checkbox"/>	1.C.05.1.08	Civil Foreman	0.00	Hour	727.27	\$ 65.00	Cl Duration
<input type="checkbox"/>	1.C.05.1.09	Civil Journeyman	0.00	Hour	1,454.55	\$ 57.50	Cl Duration
<input type="checkbox"/>	1.C.05.1.23	Civil Apprentice	0.00	Hour	2,181.82	\$ 45.00	Cl Duration
<input checked="" type="checkbox"/>	L001	General Labor	0.00	Hour	0.00	\$ 50.00	Cl Duration

3 items selected

Cancel Add

4.2.5 Data columns

You can view, add, and remove columns on the Estimate Resources page. To view all available columns, click the **Column chooser** icon at the right of the column headers. In the Column chooser, you can select and deselect columns from your view.

The following image and table show key columns available in the Resource library.

Labor	Resource code	Description	Default Quantity	Unit of measure	Utilization count	C E-unit cost (Scale 1)	Cost driver	Account code
Construction equipment	<input type="checkbox"/> 1.C.01.1.05	Laborer	0.00	Hour	13,913.42	135.00	CI Duration	
Rented construction equipment	<input type="checkbox"/> 1.C.01.1.06	Crane Operator	0.00	Hour	5,865.80	210.00	CI Duration	
Installed material	<input type="checkbox"/> 1.C.01.1.07	Civil Operator	0.00	Hour	1,454.55	210.00	CI Duration	
Installed equipment	<input type="checkbox"/> 1.C.04.1.02	Concrete Foreman	0.00	Hour	3,000.00	210.00	CI Duration	
Supplies	<input type="checkbox"/> 1.C.04.1.03	Concrete Journeyman	0.00	Hour	9,000.00	180.00	CI Duration	
Unique	<input type="checkbox"/> 1.C.04.1.04	Concrete Apprentice	0.00	Hour	9,000.00	150.00	CI Duration	
	<input type="checkbox"/> 1.C.05.1.02	Ironworker Foreman	0.00	Hour	3,450.00	210.00	CI Duration	
	<input type="checkbox"/> 1.C.05.1.03	Ironworker Journeyman	0.00	Hour	10,350.00	180.00	CI Duration	
	<input type="checkbox"/> 1.C.05.1.04	Ironworker Apprentice	0.00	Hour	10,350.00	150.00	CI Duration	
	<input type="checkbox"/> 1.C.05.1.08	Civil Foreman	0.00	Hour	727.27	210.00	CI Duration	
	<input type="checkbox"/> 1.C.05.1.09	Civil Journeyman	0.00	Hour	1,454.55	188.00	CI Duration	
	<input type="checkbox"/> 1.C.05.1.23	Civil Apprentice	0.00	Hour	2,181.82	150.00	CI Duration	

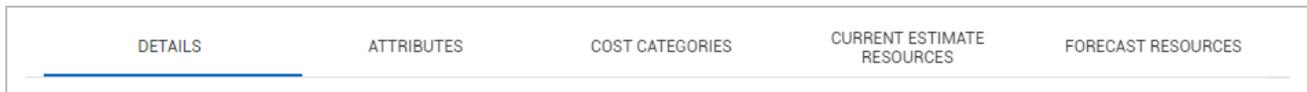
Column	Description
Resource code	Alphanumeric label to quickly identify resources.
Description	Additional label to provide more resource detail.
Default Quantity	The quantity the resource will have by default when it is assigned to a cost item.
Unit of measure	The unit the resource is measured by.
Utilization count	The number of units of that resource being used in the project.
C E -Unit cost (Scale 1)	The resource’s rate per unit.
Cost driver	Shows what drives the cost for that resource when it is assigned to a cost item (cost, quantity, or fixed).
Account code	Code assigned to resources for accounting and benchmarking purposes.

4.3 COST ITEM DETAILS

4.4 COST ITEM DETAILS OVERVIEW

The cost item detail slide out panel contains many different fields to edit and enter cost item-related information. To access the cost item slide-out panel, select the cost item, and then right-click the selected cost item. In the context menu, select **Cost item details**. In the Cost item details slide-out, there are four tabs to select from:

- Details tab
- Attributes tab
- Cost Categories tab
- Current Estimate Resources
- Forecast Resources tab



All editable cells in the cost item detail slide-out panel are single click.

4.5 DETAILS TAB

The Details tab contains the values and settings related to the cost detail of the item.

1069
Earthwork

DETAILS	ATTRIBUTES	COST CATEGORIES	CURRENT ESTIMATE RESOURCES	FORECAST RESOURCES
Forecast T/O qty 10,000.00	UoM CY	CE unit cost \$ 40.00	CE total cost \$ 400,000.00	CBS position 2
Last changed on 07/02/2025 06:51 AM		Last changed by InEight Service Account		

Description Earthwork	Account code 51	* Cost source Detail
* Forecast T/O qty 10,000.00	* UoM CY	⊕ Live forecast method Current estimate
CE total cost \$ 400,000.00	CE unit cost \$ 40.00	Average performance settings
CE total MHrs 8,000.00	CE total equipment Hrs 0.00	CE labor cost/MHrs \$ 50.00
CE MHR/Unit 0.80	CE Units/MHrs 1.25	* Cost segment Direct Cost
* Allow as-built All	Pay item assignment 001	* Currency USD \$
<input type="checkbox"/> As-built lock	* Quantity driver	<input type="checkbox"/> CBS contribute qty
<input type="checkbox"/> Hide in Plan, Progress, and Design	<input type="checkbox"/> Pay item contribute qty	

Below is an explanation of some of the key settings on the Details tab.

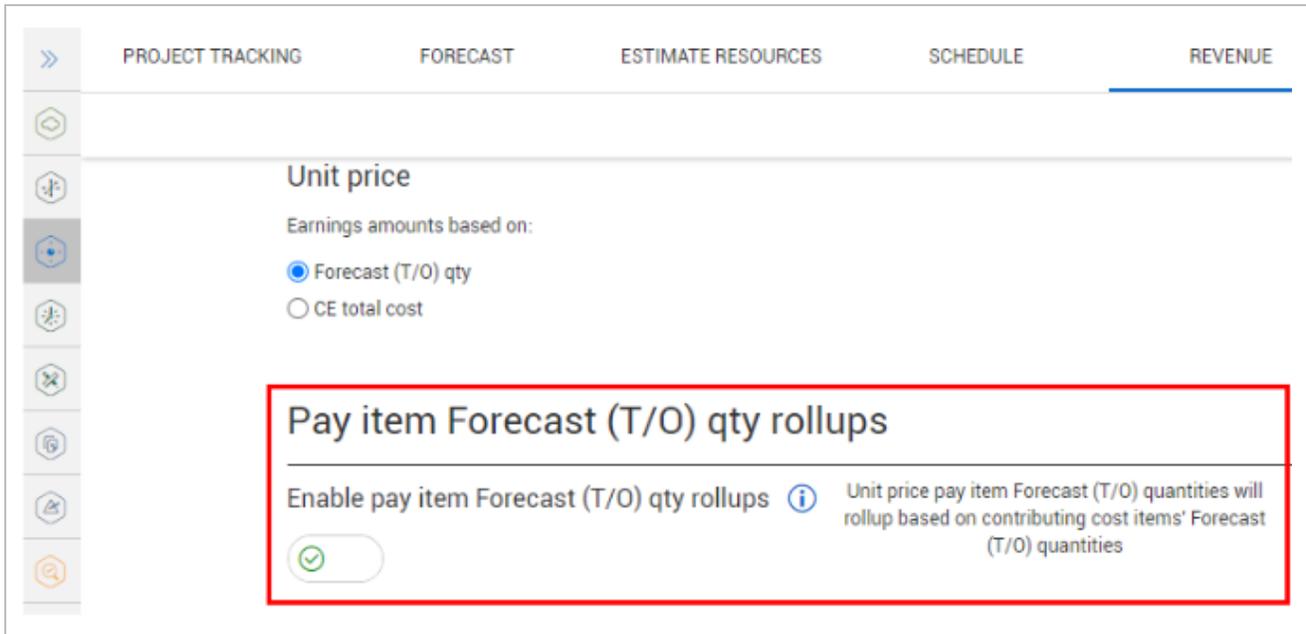
Term	Function
Cost source	Indicates how costs are entered on the cost item. <ul style="list-style-type: none"> Detail - Resources and duration defined to determine costs Plug - Unit and total costs entered at the cost category level
Live Forecast method	Determines the Forecast Method for the cost item. For more information, see Forecasting overview .
Cost segment	Categorizes whether the cost item is a direct or indirect cost. <ul style="list-style-type: none"> Direct Cost - costs that directly pertain to the deliverables (pay items) of

Term	Function
	<p>the job</p> <ul style="list-style-type: none"> • Job Overhead - Overhead costs associated with running and managing the job (e.g., management, jobsite facilities) • Business Overhead - Overhead costs associated with running the business (not directly related to running the job) • Subcontract - subcontract associated costs
Allow as-built	<p>Determines whether you can enter actual costs and quantities for a cost item.</p> <ul style="list-style-type: none"> • None - Cost item does not accept cost or quantities. This is typically seen in Superior cost items • All - Allows a cost item to accept both direct costs and quantities • Quantities - Cost item only accepts quantities • Cost - Cost item only accepts costs, man hours, and equipment hours.
Quantity driver	<p>Superior cost item will have the Forecast T/O qty update when the superior cost item (parent cost item) receives an update. The change to the qty will be the original value multiplied by the same multiplier that was applied to the superior cost item.</p> <p>For example: if the superior cost item qty doubles, the item with Superior CI will double as well. Cost items with Fixed as the selection will not be affected by changes to the parent cost item.</p>
Cost item contribute quantity	<p>Checked cost items will have the Forecast T/O qty roll-up to the parent cost item if the UoM on both of the items are the same.</p>
Hide in Plan, Progress, and Design	<p>Select this feature to make the cost item unavailable for claiming in InEight Plan, Progress, and Design. For more information, see Hide in Plan, Progress, and Design.</p>
Pay item contribute quantity	<p>Checking this box lets you choose which cost items contribute to the Pay item's forecast (T/O) quantity and can affect earnings rules for the associated pay item. This field is only visible if you have the Enable Pay item Forecast (T/O) quantity rollups setting turned on in Settings > Control > Revenue.</p>

4.5.1 Pay item contribute quantity

The Pay item contribute qty function works only when the Pay item Forecast (T/O) qty rollups toggle is set to *On* in Settings > Control > **Revenue**. If you have a unit price pay item, its forecast (T/O) quantity is the sum of all the contributing cost items forecast (T/O) quantities.

This function lets you define which cost items roll up their quantities to a pay item.



In the CBS, you can quickly modify the pay item contribute quantity either in bulk or by selecting a single cost item.

Multiple cost items selected

DETAILS ATTRIBUTES COST CATEGORIES CURRENT ESTIMATE RESOURCES

Last changed on: 05/23/2022 11:49 PM Last changed by: rakesh.gunda-ptr@inei...

Description	Account code	* Cost source
(Varies)		Detail
* Forecast T/O qty: 1.00000000000	* UoM: PLS	<input type="checkbox"/> As-built lock
CE total cost: \$ 0.00000000000	CE unit cost: \$ 0.00000000000	<input checked="" type="checkbox"/> Live forecast method
CE total MHRs: 0.00000000000	CE total equipment Hrs: 0.00000000000	Rollup
CE MHR/Unit: 0.00000000000	CE Units/MHrs: 0.00000000000	CE labor cost/MHrs: \$ 0.00000000000
* Allow as-built: None	Pay item assignment: 2	* Cost segment: (Varies)
* Quantity driver: Superior CI	<input type="checkbox"/> CBS contribute qty	* Currency: CAD \$
<input checked="" type="checkbox"/> Pay item contribute qty	<input type="checkbox"/> Hide in plan/Progress	

Selecting the Pay item contribute qty check box updates both the Current forecast (T/O) and the Update earning rules, only if Earnings rules are set to calculate based on Forecast (T/O) qty value in Pay items.

Pay item position	Pay item number	Descri...	Line num...	Row num...	Current price	Current forecast (T/O) qty
1	2	2	2	2	\$ 100.00000000...	3.0000000000
2	4	D4	4	4	\$ 1,000.000000...	
2.1	1		1	1	\$ 1,000.000000...	0.0000000000

Pay item ID: 2, Description: 2

Calculate earning amounts by:
 Forecast (T/O) qty
 CE total cost

CBS Position	Descri...	Pay item contrib. quantity	Earning %
3	Misc. Rev Ext...	<input checked="" type="checkbox"/>	5.0000000000 %
3.1	Misc. Rev Ext...	<input checked="" type="checkbox"/>	0.0000000000 %
3.1.6	B/C 8888 Osle...	<input checked="" type="checkbox"/>	0.0000000000 %
3.1.6.5		<input type="checkbox"/>	0.0000000000 %
3.1.6.1	8888 Osler La...	<input type="checkbox"/>	15.0000000000 %
3.1.6.4	Bowen Island ...	<input type="checkbox"/>	0.0000000000 %
3.1.6.2	8888 Osler Eq...	<input type="checkbox"/>	0.0000000000 %
3.1.6.3	8888 Osler 3rd...	<input type="checkbox"/>	0.0000000000 %
			20.0000000000 %

Default Earning Rules

Deselecting the Pay item contribute qty check box in the CBS also updates both the Current forecast (T/O) and the Update earning rules.

Pay item position	Pay item number	Descri...	Line num...	Row num...	Current price	Current forecast (T/O) qty
1	2	2	2	2	\$ 100.00000000...	0.0000000000
2	4	D4	4	4	\$ 1,000.000000...	
2.1	1		1	1	\$ 1,000.000000...	0.0000000000

Pay item ID: 2, Description: 2

Calculate earning amounts by:
 Forecast (T/O) qty
 CE total cost

CBS Position	Descri...	Pay item contrib. quantity	Earning %
3	Misc. Rev Ext...	<input type="checkbox"/>	5.0000000000 %
3.1	Misc. Rev Ext...	<input type="checkbox"/>	0.0000000000 %
3.1.6	B/C 8888 Osle...	<input type="checkbox"/>	0.0000000000 %
3.1.6.5		<input type="checkbox"/>	0.0000000000 %
3.1.6.1	8888 Osler La...	<input type="checkbox"/>	15.0000000000 %
3.1.6.4	Bowen Island ...	<input type="checkbox"/>	0.0000000000 %
3.1.6.2	8888 Osler Eq...	<input type="checkbox"/>	0.0000000000 %
3.1.6.3	8888 Osler 3rd...	<input type="checkbox"/>	0.0000000000 %
			20.0000000000 %

Default Earning Rules

4.6 ATTRIBUTES TAB

The Attributes tab allows you to tag the new cost item with user-defined entries.

1. **User-Defined Fields** –free text fields that you can type values into manually
2. **Tags** – Many of these fields are validated fields (known as tags), meaning you can choose from options in a drop-down list

Some of these tags and their drop-down values are defined at the organizational level and others are customizable via the Project Settings under the Configure tag list value.

4.7 COST CATEGORIES TAB

The Cost Categories tab allows you to view your current budget, actuals, live forecast and forecast remaining cost, broken down into more detailed cost categories (e.g., labor, construction equipment, supplies, materials, etc.).

The header in the Cost Categories tab shows the **% Complete**, **Live forecast method**, and the **Latest actuals in forecast values**.

DETAILS		ATTRIBUTES		COST CATEGORIES		RESOURCES
% Complete	★ Live forecast method	Latest actuals in forecast values				
297.77777778 %	Committed cost	08/21/2020				
		TOTAL		PER UNIT		
Cost category	Current budget	Total cost (to date)	Current estimate	★ Live forecast	★ Forecast remaining cost	
^ Total	\$ 100.00000	\$ 30,565.15556	\$ 100.00000	\$ 31,565.15556	\$ 1,000.00000	
∨ Labor	\$ 0.00000	\$ 44,111.00000	\$ 0.00000	\$ 45,111.00000	\$ 1,000.00000	
∨ Construction...	\$ 0.41477	\$ 0.02304	\$ 0.41477	\$ 0.02304	\$ 0.00000	
∨ FOM Rented ...	\$ 0.04148	\$ 0.00230	\$ 0.04148	\$ 0.00230	\$ 0.00000	
∨ Supplies	\$ 0.00000	(\$ 14,000.00000)	\$ 0.00000	(\$ 14,000.00000)	\$ 0.00000	
∨ Materials	\$ 0.00000	(\$ 51.40000)	\$ 0.00000	(\$ 51.40000)	\$ 0.00000	
∨ Subcontract	\$ 0.00000	\$ 0.00000	\$ 0.00000	\$ 0.00000	\$ 0.00000	
∨ Fees	\$ 99.54376	\$ 5.53021	\$ 99.54376	\$ 5.53021	\$ 0.00000	

If you have the correct permissions, you can change the Live forecast method. You can also change the view of the Cost Categories values to show either **Total** or **Per Unit** cost.

The screenshot shows the 'COST CATEGORIES' tab for a permit (1004). A dropdown menu is open for the 'Committed cost' field, listing several options. A red box highlights the dropdown menu, and a mouse cursor is pointing at the 'Average performance' option. The table below shows cost data for various categories, with columns for 'TOTAL' and 'PER UNIT'.

Cost category	Total cost (to date)	Current estimate	★ Live forecast	★ F
^ Total	\$ 30,565.15556	\$ 100.00000	\$ 31,565.15556	
∨ Labor	\$ 44,111.00000	\$ 0.00000	\$ 45,111.00000	
∨ Construction...	\$ 0.02304	\$ 0.41477	\$ 0.02304	

This is also where you enter the estimated cost into the different cost categories for the plug cost source.

You can expand the labor category and enter your cost at the appropriate level (e.g., Labor Base wages). You need to enter the cost under the appropriate level of the category. For example, if you

enter the cost at the Labor category level, the cost will appear in Undefined Labor level because you did not enter it at a specific sub-category level.

DETAILS	ATTRIBUTES	COST CATEGORIES	RESOURCES		
4.1 - Erect Steel - Heavy					
Cost category	Current Budget	Total Cost (To Date)	Current Estimate	★ Live Forecast	★ Forecast Remaining Cost
▲ Total	\$800,000.00	\$0.00	\$800,000.00	\$800,000.00	\$800,000.00
▲ Labor	\$800,000.00	\$0.00	\$800,000.00	\$800,000.00	\$800,000.00
Labor Base	\$800,000.00	\$0.00	\$800,000.00	\$800,000.00	\$800,000.00
▶ Labor Burden	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Undefined Labor		\$0.00	\$0.00	\$0.00	\$0.00
▶ Construction Equipment	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

The following Step by Step walks you through adding costs to the Cost Categories tab of the Cost item details slide out panel.

Enter Costs in Cost Categories

1. Within the InEight Control main page, on the CBS tab, right click on the cost item you created.
2. Select **Cost Item Details** to open the Cost item details slide out panel.
3. Click on the **Cost Categories** sub tab.
4. Under the Current Estimate column, expand the **Labor** cost category.
5. In the Current Estimate column, enter a value in the Current Estimate column for Labor Base, then press the **Tab** key.

4.8 CURRENT ESTIMATE RESOURCES TAB

The Current Estimate Resources tab is where you can view and manage the CE resources for terminal cost items.

From the Current Estimate Resources tab you can view and manage:

- Cost item details
- Current estimate resources
- Productivity and overall settings

- Resource details

DETAILS
ATTRIBUTES
COST CATEGORIES
CURRENT ESTIMATE RESOURCES
FORECAST RESOURCES

Cost item details

Forecast T/O qty	UoM	CE total cost	CE remaining cost	CBS position	Cost source
10,000.00	CY	\$ 1,000,000.00	\$ 1,000,000.00	5.2	Detail

Current estimate resources

Row #	Code	Description	Quantity	UoM	Work hours	CE unit cost
1	C01.04	Concrete Bulk Commodities	10000	CY		0

Productivity and overall settings

	Remaining	Total
Remaining hours	0.00	
Remaining units/hour	0.00	
Remaining hours/unit	0.00	
Remaining man hours	0.00	
Remaining units/man hour	0.00	
Remaining man hours/unit	0.00	

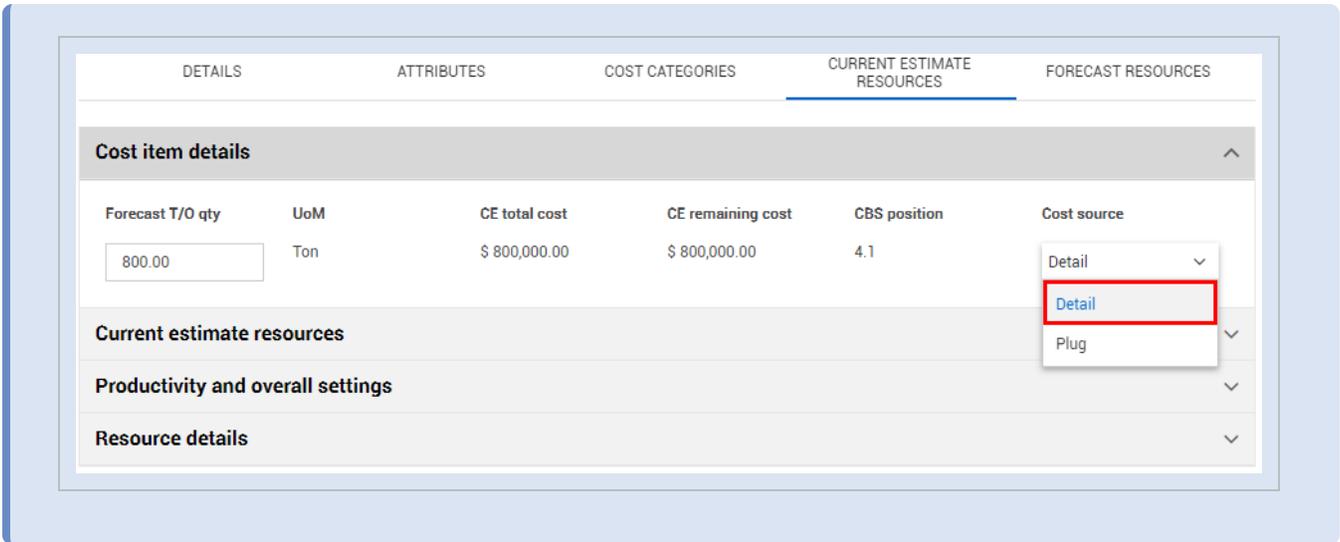
Resource details

C01.04
Concrete Bulk Commodities

When

Cost category	Amount
▼ Total	\$ 100.00
Billing rate	\$ 100.00
Billing rate markup	\$ 0.00
Billing rate markup %	0.00 %
Charge rate	\$ 100.00
Markup amount	\$ 0.00
Markup %	0.00 %

To see a total sum of the resources in Current estimate resources, you must have the Cost Source set to **Detail**.



When the cost item’s cost source is set to **Plug**, you will not use the Current Estimate Resources tab. Instead, costs are “plugged” or entered directly into cost categories on the Cost Categories tab of the cost item.

4.8.1 Cost Driver

Each type of resource has a default cost driver. For example, Labor resources are duration driven so their default cost driver is CI Duration, meaning their costs are driven by the duration of the cost item. If you want a resource to only be assigned to a specific cost item or work activity for half the time, you can change its quantity to .5 and it will be driven by half of the cost item’s hours.

1005
Erect Steel - Light

DETAILS ATTRIBUTES COST CATEGORIES **CURRENT ESTIMATE RESOURCES** FORECAST RESOURCES

Cost item details

Forecast T/O qty	UoM	CE total cost	CE remaining cost	CBS position	Cost source
200.00	Ton	\$ 155,000.00	\$ 155,000.00	4.2	Detail

Current estimate resources

<input type="checkbox"/>	Row #	Code	Description	Quantity	UoM	Work hours	CE unit cost
<input type="checkbox"/>	1	1.C.01.1.05	Laborer	2	Each	800	
<input type="checkbox"/>	2	1.C.05.1.04	Ironworker Apprentice	0.5	Each	200	
<input type="checkbox"/>	3	1.C.01.1.06	Crane Operator	1	Each	400	
<input type="checkbox"/>	4	1.C.05.1.03	Ironworker Journeyman	3	Each	1200	
<input type="checkbox"/>	5	1.C.05.1.02	Ironworker Foreman	1	Each	400	

Updating the total quantity of a resource with CI quantity as the cost driver will not auto-update the hours.

To enter work hours manually for the employed resource, you can change the Cost Driver option to CI Quantity or Fixed.

DETAILS	ATTRIBUTES	COST CATEGORIES	CURRENT ESTIMATE RESOURCES	FORECAST RESOURCES		
Cost item details						
Forecast T/O qty	UoM	CE total cost	CE remaining cost	CBS position		
800.00	Ton	\$ 800,000.00	\$ 800,000.00	4.1		
Cost source: Detail						
Current estimate resources						
<input type="checkbox"/>	Row #	Code	Description	CE total cost	Cost driver	Cost curve
<input checked="" type="checkbox"/>	1	1.C.05.1.04	Ironworker Apprentice	45.00	\$ 216,000.00	CI Duration
<input type="checkbox"/>	2	1.C.05.1.02	Ironworker Foreman	65.00	\$ 104,000.00	
<input type="checkbox"/>	3	1.C.05.1.03	Ironworker Journeyman	55.00	\$ 264,000.00	
<input type="checkbox"/>	4	1.C.01.1.05	Laborer	35.00	\$ 112,000.00	
<input type="checkbox"/>	5	1.C.01.1.06	Crane Operator	65.00	\$ 104,000.00	

If you change the Cost Driver to CI Quantity, the fields below will not be editable. It causes the adjusted duration to become zero or read-only. However, it can be editable if it does make a cost impact.

With CI Quantity as your cost driver for your resources, you can adjust the Work Hours manually, where previously that column was read-only. For example, perhaps you want your Laborer to work specifically 80 hours. The Forecast (T/O) Qty is very significant when it comes to quantity driven resources. It determines how the cost is driven and what affects the cost of that specific line item.

For example, perhaps there is a scope change and you need to change the Forecast (T/O) Qty from 900 to 350.

1074
Erect Steel - Heavy

DETAILS ATTRIBUTES

Forecast T/O qty	UoM	CE unit cost
900.00	Ton	\$ 1,000.00

Last changed on: 07/02/2025 06:51 AM
Last changed by: Toby Stow

Description: Erect Steel - Heavy Account code: 62.03.02.00

• Forecast T/O qty: 900.00 • UoM: Ton

A dialog box shows to choose whether it will affect the CE unit cost or CE total cost. Typically, you keep the unit cost constant and adjust the total cost.

⚠ Proportionally adjust CE unit cost or CE total cost ?

You can modify Forecast T/O qty by proportionally adjusting CE unit cost or CE total cost. Specify the value you would like to modify:

CE unit cost
\$1,000.00

CE total cost
\$350,000.00

Cancel OK

Note that the Welder’s work hours adjust because they are driven by the Forecast (T/O) quantity of the cost item.

When the Cost Driver is set on Fixed, you can only update the resource’s hours by typing into the resource itself and updating the work hours directly.

Many of the numbers are tied to equations under the Productivity resources below. If you edit the numbers, it will have an impact on the resources depending on the cost driver.

4.8.2 Productivity and overall settings

On the Current Estimate Resources tab, you can manage duration and quantities for the following calculations:

	Calculation
1	Remaining hours/units
2	Remaining man hours/units
3	Remaining equipment hours/units

1069
Earthwork
✕

DETAILS
ATTRIBUTES
COST CATEGORIES
CURRENT ESTIMATE RESOURCES
FORECAST RESOURCES

Cost item details

Forecast T/O qty	UoM	CE total cost	CE remaining cost	CBS position	Cost source
<input type="text" value="10,000.00"/>	CY	\$ 400,000.00	\$ 400,000.00	2	<input type="text" value="Detail"/>

Current estimate resources

Row #	Code	Description	Quantity	UoM	Work hours	CE unit cost
1	1.C.05.1.09	Civil Journeyman	2.00	Each	1,454.55	
2	1.C.05.1.23	Civil Apprentice	3.00	Each	2,181.82	
3	1.C.01.1.05	Laborer	3.00	Each	2,181.82	
4	1.C.01.1.07	Civil Operator	2.00	Each	1,454.55	

Productivity and overall settings

		Remaining	Total
1 Remaining hours	Remaining units/hour	<input type="text" value="727.27"/>	<input type="text" value="13.75"/>
		<input type="text" value="0.07"/>	
2 Remaining man hours	Remaining units/man hour	<input type="text" value="8,000.00"/>	<input type="text" value="1.25"/>
		<input type="text" value="0.80"/>	
3 Remaining equipment hours	Remaining units/equipment hour	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>
		<input type="text" value="0.00"/>	<input type="text" value="0.00"/>

When updating the quantity of duration driven labor resources

Proportionally update Units\Man hours
 Proportionally update Hours

Resource details

Total duration hours (Remaining hours) are used to calculate labor and equipment resource work hours where:

- Work Hours (resource) = Hours (total duration) x Quantity (resource)
- Total Remaining man hours = Sum (Labor Resource Work Hours)
- Total Remaining equipment hours = Sum (Equipment resource Work hours)

Total remaining duration hours are calculated using either the total value or one of the following unit rate options in the Productivity and overall settings section:

- Remaining hours (Duration)
 - Unit rates are proportionate to total value based on Forecast T/O qty.
 - Total man hours and equipment hours are proportionate to total hours based on labor and equipment resource quantity.
- Remaining man hours
 - Unit rates are proportionate to total value based on Forecast T/O qty.
 - Total duration Remaining hours are proportionate to total Man hours based on Labor resource quantity.
 - Total Remaining equipment hours are proportionate to total duration hours based on Equipment qty.
- Remaining equipment hours
 - Unit rates are proportionate to total value based on Forecast T/O qty.
 - Total duration hours are proportionate to total Remaining man hours based on Equipment resource quantity.
 - Total Labor hours are proportionate to total remaining duration hours based on Labor Resource qty.

When one value is entered, all other totals and unit rates in the Productivity and overall settings section are calculated based on that entry.

4.8.2.1 Updates to resource quantities

The options for the setting When updating the quantity of duration driven labor resources, control how work hours are calculated when a resource quantity is updated:

- **Proportionally update Units/Man hours** – When you update quantities in the Quantity column, this option changes the resource work hours in the Work hours column and re-calculates the total remaining man hours and corresponding unit rates in the Productivity and overall settings

section.

Current estimate resources

Row #	Code	Description	Quantity	UoM	Work hours	CE unit cost
1	1.C.05.1.09	Civil Journeyman	2.00	Each	1,454.55	
2	1.C.05.1.23	Civil Apprentice	3.00	Each	2,181.82	
3	1.C.01.1.05	Laborer	3.00	Each	2,181.82	
4	1.C.01.1.07	Civil Operator	2.00	Each	1,454.55	

Productivity and overall settings

Remaining Total

Remaining hours	Remaining units/hour	Remaining hours/unit
727.27	13.75	0.07
Remaining man hours	Remaining units/man hour	Remaining man hours/unit
8,000.00	1.25	0.80
Remaining equipment hours	Remaining units/equipment hour	Remaining equipment hours/unit
0.00	0.00	0.00

When updating the quantity of duration driven labor resources

Proportionally update Units\Man hours

Proportionally update Hours

Resource details

- **Proportionally update Hours** – When you update quantities in the Quantity column, this option redistributes proportionally across the labor resources in line with the new quantities and does

not re-calculate but maintains the total remaining man hours.

Current estimate resources

	Row #	Code	Description	Quantity	UoM	Work hours	CE unit cost
<input type="checkbox"/>	1	1.C.05.1.09	Civil Journeyman	2.00	Each	1,454.55	
<input type="checkbox"/>	2	1.C.05.1.23	Civil Apprentice	3.00	Each	2,181.82	
<input type="checkbox"/>	3	1.C.01.1.05	Laborer	3.00	Each	2,181.82	
<input type="checkbox"/>	4	1.C.01.1.07	Civil Operator	2.00	Each	1,454.55	

Productivity and overall settings

Remaining		Total
Remaining hours	Remaining units/hour	Remaining hours/unit
<input type="text" value="727.27"/>	<input type="text" value="13.75"/>	<input type="text" value="0.07"/>
Remaining man hours	Remaining units/man hour	Remaining man hours/unit
<input type="text" value="8,000.00"/>	<input type="text" value="1.25"/>	<input type="text" value="0.80"/>
Remaining equipment hours	Remaining units/equipment hour	Remaining equipment hours/unit
<input type="text" value="0.00"/>	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>

When updating the quantity of duration driven labor resources

Proportionally update Units\Man hours
 Proportionally update Hours

Resource details

4.9 FORECAST RESOURCES TAB

The Forecast Resources tab is where you can view and manage estimate resources assigned to a cost item.

From the Resources tab you can view and manage the:

- Forecast details live forecast method
- Add new resources and adjust duration-driven resources by changing their productivity
- View and adjust resource rates of assigned resources

Forecast details

Forecast total cost	Forecast remaining cost	Forecast total MHours	Forecast remaining MHours	Live forecast method
\$ 0.00	\$ 0.00	0.00	0.00	Manual (ETC)

Resources

Row #	Code	Description	Estim...	Remaini... qty	UOM	Remaini... work hrs
1	1.C.01.1.05	Laborer	Labor	0.00	Hour	

Productivity and overall settings

Remaining hours: 0.00
 Remaining units/hour: 0.00
 Remaining hours/unit: 0.00

Remaining man hours: 0.00
 Remaining units/man hour: 0.00
 Remaining man hours/unit: 0.00

Remaining equipment hours: 0.00
 Remaining units/equipment hour: 0.00
 Remaining equipment hours/unit: 0.00

Resource details

Cost category	Scale 1 unit cost	Scale 2 unit cost	Scale 3 unit cost	
Total		\$ 35.00	\$ 30.00	\$ 40.00

Like the Details, Attributes, and Cost Categories tabs, you access the Forecast Resources tab from the Cost Item Details slide out panel.

Tasks

- Copy
- Paste
- Insert copied cost items
- New cost item
- New subordinate cost item
- Delete cost item(s)
- Adjust CBS position
- Cost item details**
- Actuals details

1074 Erect Steel - Heavy

FORECAST RESOURCES

Forecast T/O qty	UoM	CE unit cost	CE total cost	CBS position
800.00	Ton	\$ 1,000.00	\$ 800,000.00	4.1

Last changed on: 02/22/2022 02:17 PM
 Last changed by: Service Account

Description: Erect Steel - Heavy
 Account code: 62.03.02.004.06
 Cost source: Detail

* Forecast T/O qty: 800.00
 * UoM: Ton

CE total cost: \$ 800,000.00
 CE unit cost: \$ 1,000.00
 CE total MHours: [blank]
 CE total equipment Hrs: [blank]

The Forecast Resources tab shows as an accordion menu where you can select a specific drop down menu you want to view.

The screenshot displays the 'Forecast Resources' tab in an application. The interface features a tabbed menu at the top with the following tabs: DETAILS, ATTRIBUTES, COST CATEGORIES, CURRENT ESTIMATE RESOURCES, and FORECAST RESOURCES. The 'FORECAST RESOURCES' tab is active. Below the tabs is an accordion menu with the following sections: Forecast details, Resources (highlighted with a red border), Productivity and overall settings, and Resource details. The 'Resources' section contains a table with the following data:

Row #	Code	Description	Estim...	Remaini... qty	UOM	Remaini... work hrs
1	1.C.01.1.05	Laborer	Labor	0.00	Hour	
2	1.C.01.1.06	Crane Operator	Labor	0.00	Hour	

4.9.1 Productivity and overall settings

If the resource's cost driver is set to CI Duration, you can change any of the values on the Productivity tab under Adjusting duration driven resources below, and it will change the work hours of your resources without you having to do the math yourself.

DETAILS	ATTRIBUTES	COST CATEGORIES	CURRENT ESTIMATE RESOURCES	FORECAST RESOURCES
Cost item details ∨				
Current estimate resources ∨				
Productivity and overall settings ∧				
Remaining Total				
Remaining hours	Remaining units/hour	Remaining hours/unit		
<input type="text" value="1,600.00"/>	<input type="text" value="0.50"/>	<input type="text" value="2.00"/>		
Remaining man hours	Remaining units/man hour	Remaining man hours/unit		
<input type="text" value="16,000.00"/>	<input type="text" value="0.05"/>	<input type="text" value="20.00"/>		
Remaining equipment hours	Remaining units/equipment hour	Remaining equipment hours/unit		
<input type="text" value="0.00"/>	<input type="text" value="0.00"/>	<input type="text" value="0.00"/>		
When updating the quantity of duration driven labor resources				
<input checked="" type="radio"/> Proportionally update Units\Man hours				
<input type="radio"/> Proportionally update Hours				
Resource details ∨				

4.9.2 Resource Details

Resource Details shows the unit cost category breakdown of the selected resource listed above. The Resource rates tab expands to a unit breakdown on a selected item under resources. It is fully editable if you have the right permissions to do so.

Row #	Code	Description	Quantity	UOM	Work Hours	CE - Unit Cost	CE - Total Cost
2	lab1	lab1	1	Each	27.78	60.00	10
3	lab1	lab1	1	Each	41.67	\$60.00	\$1,5

Cost category	Scale 1 unit cost	Scale 2 unit cost	Scale 3 unit cost
Total	\$70.00	\$0.00	\$0.00
Labor	\$0.00	\$0.00	\$0.00

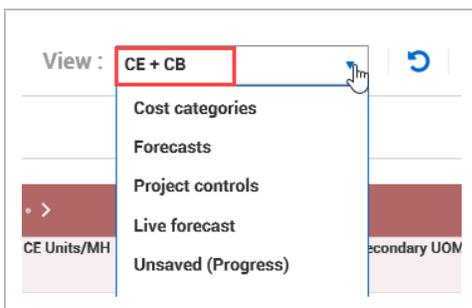
This is shown in case you want to change the values back to match the library. If you change the values back to match the library, the triangle will disappear.

4.9.3 Cost Item Man-Hours

Aside from on the Cost Estimate Resources tab, you can also define productivity on the CBS register page. The following steps walk you through how to add the planned man-hours for a cost item from the CBS register page.

Define Cost Item Man-Hours

1. On your CBS register tab, make sure the Current estimate data block is displayed on the page, by selecting the **CE + CB** viewset.



2. Under the CE Total Mhrs column, enter **16,000** for a cost item, then press the **Tab** key. Note – If the cost item is a “detail” cost source you will not be able to manually adjust this field.

▼ Steel Structure Training Job
105099

Actions CBS ACS PAY ITEMS CHANGE REGISTER AUDIT LOG

Tasks			Task Details			Current estimate	
☐	CBS Position	Description	Resource	Forecast (TQ) Quantity	UOM	CE total Mhrs	CE total cost
☐	3	Concrete	1	10,000.00	CY	30,000.00	\$1,500,000.00
☐	4	Structural Steel		1,000.00	Ton	20,000.00	\$1,050,000.00
☐	4.1	Erect Steel - Heavy	1	800.00	Ton	16,000.00	\$800,000.00

4.10 ISSUE TAGGING IN THE CBS

You can associate an issue to a cost item in the CBS. Issue Ids in Change have a hierarchy of issues and subordinate issues. Associated an issue to a cost item applies to parent-level issues. Child issues take on the cost item of the parent issue.

CBS ACS PAY ITEMS CHANGE REGISTER

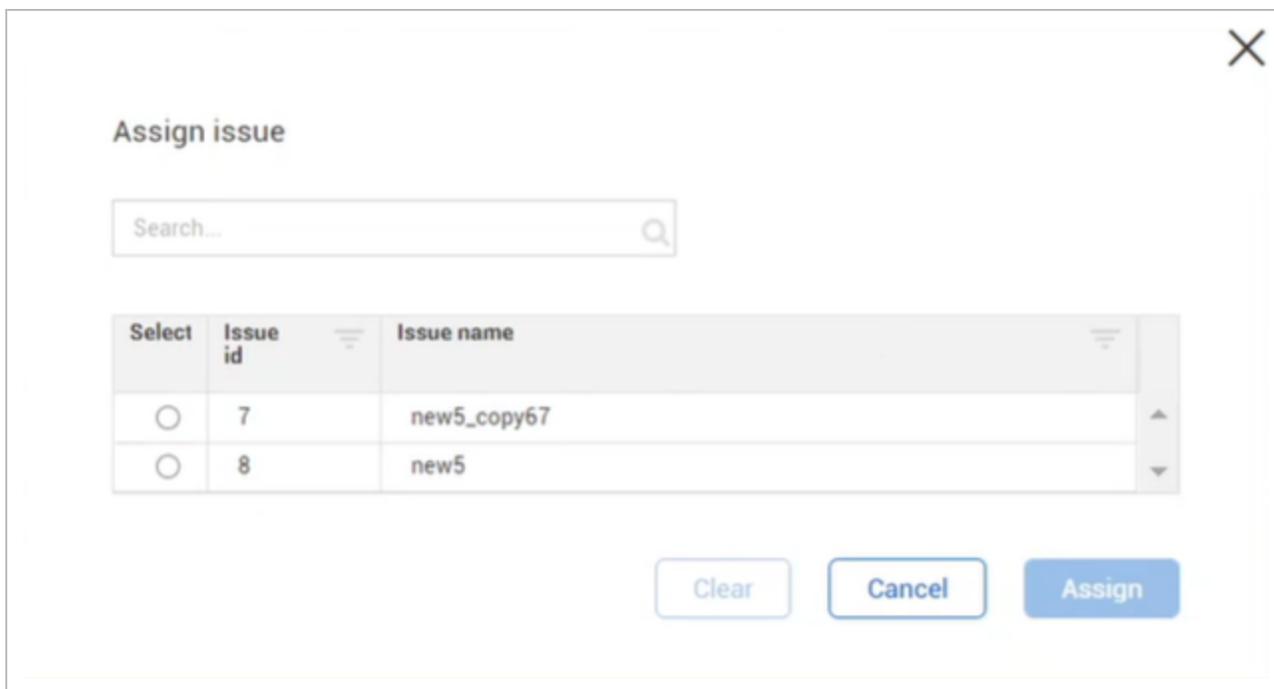
Actions + ✎ ✕

Tasks	nt-	Last estimated actual man hours reversal	Last estimated actual equip hours reversal	Issue
☐ CBS position				
☐ 30	0.00			
☐ 31	0.00			
☐ 32	0.00			
☐ 33	0.00			
☐ 34	0.00			
☐ 35	0.00			
☐ 36	100.00			
☐ 37	0.00			
☐ 38	10.00			
☐ 39	0.00			
☐ 40	0.00			
☐ 41	0.00			
☐ 42	0.00			
☐ 43	1.00	04/06/2021 1:18:1...	03/29/2021 3:08:7...	
☐ 44	0.00			
☑ 45	0.00			

Subtotals 804 (1 rows selected)

Formula description: Document issue: N/A

When you click in the Issue column, the Assign issue dialog box is shown. The list of issues originates from the list of the issues in Change.



The Assign issue dialog box does not contain the full list of Issues that Change contains.

	Issue ID	PCO ID	Client CO ID	Issue name	Issue start date	Issue stat...	Assign
<input type="checkbox"/>	^ 12			G Testing 2/1...	02/17/2021	Open	
<input type="checkbox"/>	12.2			G Testing 2/1...	02/17/2021	New	
<input type="checkbox"/>	12.1			G Testing 2/1...	02/17/2021	New	
<input type="checkbox"/>	11 B			new6 (B)	11/05/2020	New	
<input type="checkbox"/>	11 A			new6 (Original)	11/05/2020	New	
<input type="checkbox"/>	^ 10			new6	11/05/2020	Open	
<input type="checkbox"/>	10.1			new6	11/05/2020	New	
<input type="checkbox"/>	9		new1	new5cj	11/04/2020	Executed	
<input type="checkbox"/>	^ 8			new5	11/04/2020	Open	

If a parent issue in Change becomes a subordinate while you already have that issue assigned to a cost item in the CBS, the cost item then changes Issue ID to match the parent item that the linked issue was then relocated under. For example, if the parent issue ID was a 2 in Change and it was moved under the parent issue ID 1, then the cost item previously linked to the parent 2 changes to the parent issue 1.

4.11 LOCK BUDGET

4.11.1 Budgets vs Estimate

You can maintain an Original Budget, a Current Budget, and a Current Estimate, as is shown from the CBS tab of the Control main page, using a custom data block.

Tasks		Task Det... < + + + >			BM Budget View < + >		
CBS Position	Description	WBS Phase Code	Forecast TO Qty	UOM	O B - Total Cost	C B - Total Cost	C E - Final Cost
1	Job Overhead	1002	1.00	Lump Su.	\$250,000.00	\$250,000.00	\$250,000.00
2	Earthwork	1069	10,000.0.	CY	\$400,000.00	\$400,001.00	\$400,000.00
3	Concrete	1071	10,000.0.	CY	\$0.00	\$8,000.00	\$5,000.00
3.1	Concrete Footings	1089	1,000.00	CY	\$0.00	\$8,000.00	\$5,000.00
3.1.1	Place/Strip Footing Forms	1090	500.00	SF	\$0.00	\$8,000.00	\$5,000.00
3.1.2	Pour Footings	1091	0.00	CY	\$0.00	\$0.00	\$0.00

4.11.1.1 Original Budget

The Original Budget (OB) is a snapshot of the project plan in its original state, prior to execution. It is a baseline used for comparison as the project progresses. You cannot edit your Original Budget values; they are read-only in the CBS register, available for reference only.

Once set, the Original Budget never changes.

In the CBS register, you can find the OB values for man-hours, quantities, and costs.

Tasks		Task Det... < + + + >			BM Budget View < + >		
CBS Position	Description	WBS Phase Code	Forecast TO Qty	UOM	O B - Total Cost	C B - Total Cost	C E - Final Cost
1	Job Overhead	1002	1.00	Lump Su.	\$250,000.00	\$250,000.00	\$250,000.00
2	Earthwork	1069	10,000.0.	CY	\$400,000.00	\$400,001.00	\$400,000.00
3	Concrete	1071	10,000.0.	CY	\$0.00	\$8,000.00	\$5,000.00
3.1	Concrete Footings	1089	1,000.00	CY	\$0.00	\$8,000.00	\$5,000.00

4.11.1.2 Current Budget

The **Current Budget (CB)** is the project’s operational budget, including only project changes approved through a controlled process. The Current Budget is therefore the sum of your Original Budget, plus or minus any approved changes.

See the Change Management section for more details on managing and approving budget changes.

In the CBS register, you can find CB values for planned, earned and forecasted costs, hours and productivity.

Tasks		Task Det...			BM Budget View			
CBS Position	Description	WBS Phase Code	Forecast TO City	UOM	O B-Total Cost	C B-Total Cost	Descr: Current Budget Total Cost Formula: N/A	C E-Final Cost
1	Job Overhead	1002	1.00	Lump Su.		\$250,000.00	\$250,000.00	\$250,000.00
2	Earthwork	1069	10,000.0.	CY		\$400,000.00	\$400,001.00	\$400,000.00
3	Concrete	1071	10,000.0.	CY		\$0.00	\$8,000.00	\$5,000.00
3.1	Concrete Footings	1089	1,000.00	CY		\$0.00	\$8,000.00	\$5,000.00
3.1.1	Place/Strip Footing Forms	1090	500.00	SF		\$0.00	\$8,000.00	\$5,000.00
3.1.2	Pour Footings	1091	0.00	CY		\$0.00	\$0.00	\$0.00

4.11.1.3 Current Estimate

The **Current Estimate (CE)** represents the most up to date estimate of your work. You can update your Current Estimate quantities, hours, and costs at any time in the CBS register, with no required approval process or work flow.

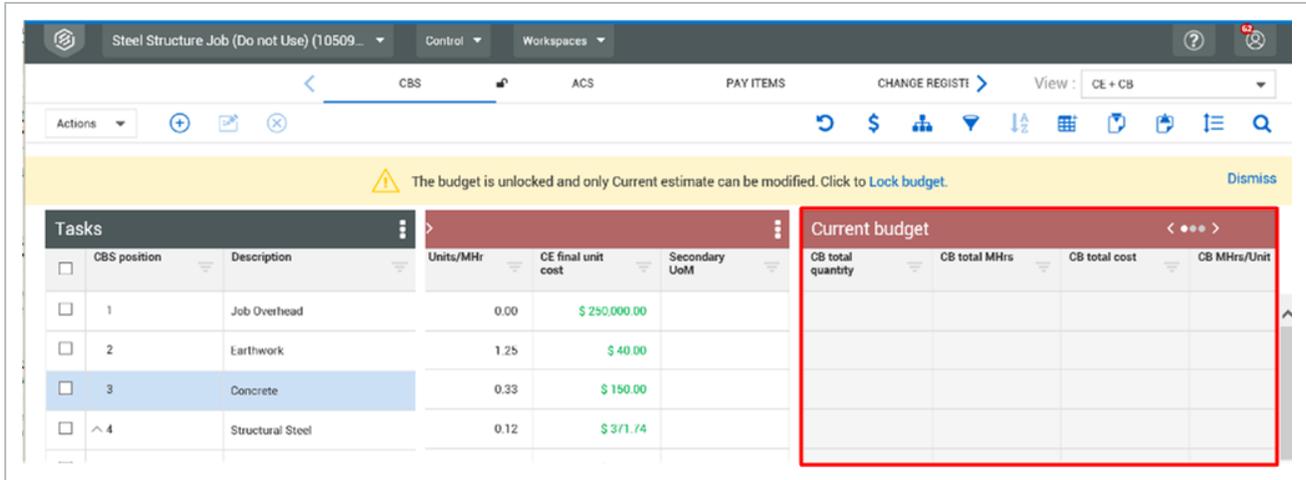
You can use the Current Estimate as a sand box to build out change orders and do what-if analysis to plan for potential changes, without worrying about affecting the Current or Original Budgets.

Tasks		Task Det...			BM Budget View			
CBS Position	Description	WBS Phase Code	Forecast TO City	UOM	O B-Total Cost	C B-Total Cost	Descr: Current Estimate Final Cost Formula: N/A	C E-Final Cost
1	Job Overhead	1002	1.00	Lump Su.		\$250,000.00	\$250,000.00	\$250,000.00
2	Earthwork	1069	10,000.0.	CY		\$400,000.00	\$400,001.00	\$400,000.00
3	Concrete	1071	10,000.0.	CY		\$0.00	\$8,000.00	\$5,000.00
3.1	Concrete Footings	1089	1,000.00	CY		\$0.00	\$8,000.00	\$5,000.00
3.1.1	Place/Strip Footing Forms	1090	500.00	SF		\$0.00	\$8,000.00	\$5,000.00
3.1.2	Pour Footings	1091	0.00	CY		\$0.00	\$0.00	\$0.00

All editable cells in the Current Estimate CBS grid are single click.

4.11.2 Lock Budget and Price

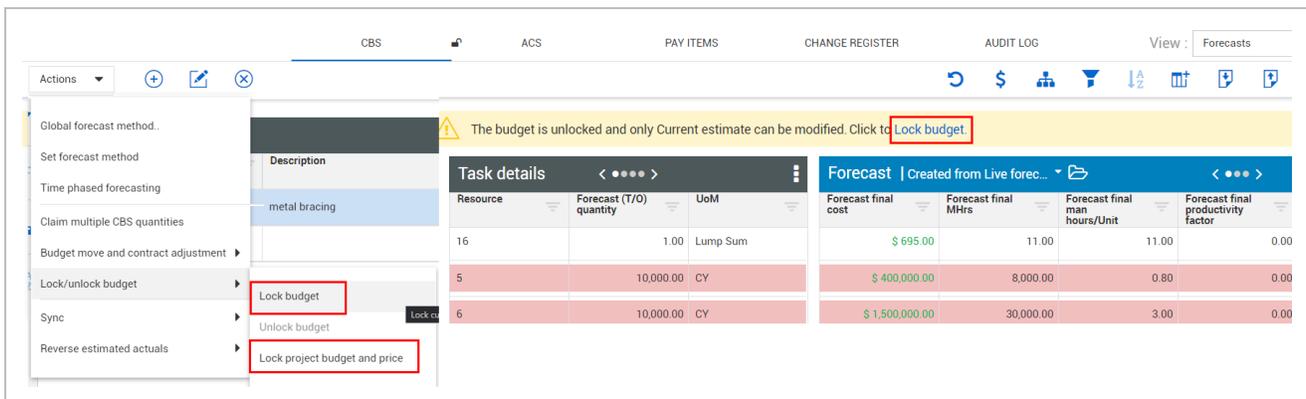
When you first create your project, your cost breakdown structure is unlocked, meaning you can make changes to your current estimate, but there is no locked down budget for tracking purposes. Your Original Budget and Current Budget data blocks therefore contains no values.



Locking your budget creates an Original and Current Budget based on your Current Estimate values. Keep in mind that:

- Your Original Budget cannot change
- Your Current Budget can only change via approved change orders. For more information, see [Change Management Overview](#).
- During project execution, you can compare your actual costs and man-hours to your Original and Current Budgets to track you progress

In the CBS you can lock the budget by selecting Actions > Lock/unlock budget > **Lock Budget** or **Lock project budget and price**.



The Budget Lock Status columns then changes to a locked symbol.

<input type="checkbox"/>	Pay item number	Description	Current forecast (T/O) qty	Price lock status
<input type="checkbox"/>	001	Earthwork - Lab...	1.00	
<input type="checkbox"/>	002	Concrete - Lab...	1.00	
<input type="checkbox"/>	003	Steel - Labor & ...	1.00	

In Pay Items, you can also lock your price and budget for pay items by selecting Actions > Lock/unlock price>**Lock Price** or **Lock project budget and price**.

The screenshot shows the 'Actions' dropdown menu with the following options:

- Lock/unlock price (selected)
 - Lock price (highlighted with a red box)
 - Unlock price
- Sync
- Budget move and contract adjustment
 - Lock project budget and price (highlighted with a red box)

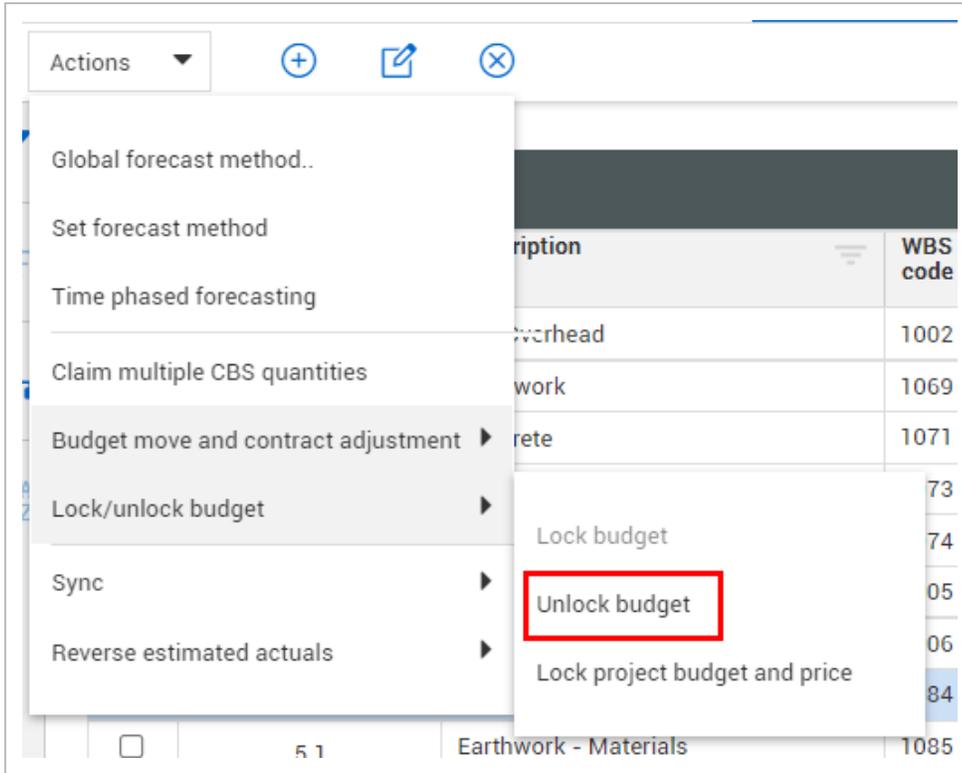
The Price Lock Status columns then changes to locked.

<input type="checkbox"/>	Pay item number	Description	Current forecast (T/O) qty	Price lock status
<input type="checkbox"/>	001	Earthwork - Lab...	1.00	
<input type="checkbox"/>	002	Concrete - Lab...	1.00	
<input type="checkbox"/>	003	Steel - Labor & ...	1.00	

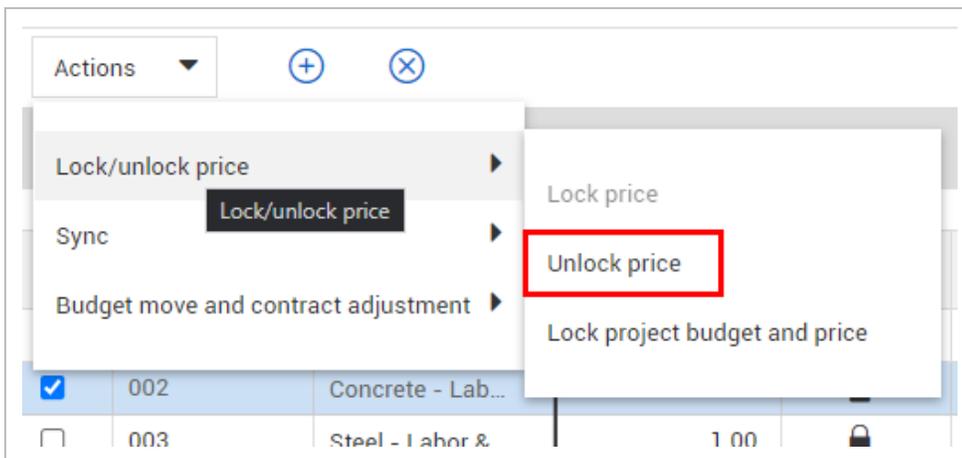
4.11.3 Unlock Budget and Price

After you lock your budget, in rare instances, it might be necessary to unlock your Original and Current Budgets, though this is typically not recommended. For example, after initial import of your estimate into Control, you might need to make further adjustments to your cost breakdown structure to

conform your estimate to the working plan for the project. Normally, unlocking your budget is the exception, not the rule.



In Pay Items, like locking the budget for cost items, you unlock the price from the Actions menu.



4.12 ASSIGNED VENDORS

You can assign a vendor to a cost item, and also view the assigned vendors from InEight Contract. A cost item with a vendor assigned serves two purposes. The first purpose is informative, letting the product team know a vendor is related to that cost item, either as a material supplier or as a subcontractor doing the work. The second purpose is functional, as it controls what tasks a vendor can view when logged into a daily plan in InEight Progress. The vendor will only view tasks related to the cost items/WBS phase codes with that vendor assigned to them in Control.

If a vendor is assigned via a contract, the vendor name is automatically assigned to a cost item and cannot be removed.

Tasks		
<input type="checkbox"/>	CBS position	Description
<input type="checkbox"/>	1	Financial Results Analysis
<input type="checkbox"/>	2	Misc. Rev Internal
<input type="checkbox"/>	2.1	Misc. Rev Internal
<input type="checkbox"/>	2.2	Escalation/Contingency
<input type="checkbox"/>	2.2.1	General Project Risk
<input type="checkbox"/>	2.3	Directs
<input type="checkbox"/>	2.3.1	Direct Labour
<input type="checkbox"/>	2.3.1.1	Grading Work
<input type="checkbox"/>	2.3.1.1.1	Resurface Existing Access road
<input type="checkbox"/>	2.3.1.1.2	Maintain Access Road
<input type="checkbox"/>	2.3.1.1.3	Clear & Grub Bench B & West Layd...
<input type="checkbox"/>	2.3.1.1.4	Type D Excavation LD/PL/CP to E...
<input type="checkbox"/>	2.3.1.1.5	Road Subgrade Prep/Place/Finish...

Assigned Vendors	
Assigned vendor	
Finance Group Inc.	
Mining Grou... Midwest Aviation	
Power Cons... Engineering ... Finance Gro...	
Plaza Building Co... Finance Gro... Construction Kiewi... Infrastructur...	
Mexico LLC	
Canada Inc	
Enterprises Inc	

Clicking in an Assigned vendor field lets you add new vendors. Vendors originate from the master data library for the entire organization.

The screenshot shows a web application interface with a sidebar on the left titled "Assigned Vendors" and a main content area. The sidebar lists various vendors, including "Kiewit Finance Group Inc.", "Kiewit Mining Grou...", "Kiewit Power Cons...", "Plaza Building Co...", "Kiewit Mexico LLC", "Kiewit Canada Inc", and "Barrons Enterprises Inc".

The main content area displays a "Vendor assignment" dialog box. At the top of the dialog is a search bar labeled "Search...". Below the search bar is a table with the following columns: a checkbox, "Vendor ID", and "Vendor name". The table lists 12 vendors, each with an unchecked checkbox, a unique Vendor ID, and a name. At the bottom of the dialog are three buttons: "Clear", "Cancel", and "Assign".

<input type="checkbox"/>	Vendor ID	Vendor name
<input type="checkbox"/>	0000001003	Mining Group Inc.
<input type="checkbox"/>	0000001008	Aviation
<input type="checkbox"/>	0000001013	Management Co.
<input type="checkbox"/>	0000001014	Infrastructure Co.
<input type="checkbox"/>	0000001022	Infrastructure Engineer...
<input type="checkbox"/>	0000001035	Engineering (NC) Co
<input type="checkbox"/>	0000001037	Power Constructors Co.
<input type="checkbox"/>	0000001039	Finance Group Inc.
<input type="checkbox"/>	0000001042	Construction Cie
<input type="checkbox"/>	0000001044	Infrastructure South Co.
<input type="checkbox"/>	0000001049	Building Company

Review

1. When you first import or create your cost breakdown structure, by default your budget is:
 - a. Locked
 - b. Unlocked
 - c. Suspended
 - d. Auto-filled

2. Under the Cost Details tab, what are the three types of cost segments that you can choose from?
 - a. Direct Cost, Job Overhead, Business Overhead
 - b. Detail, Plug, Quote
 - c. Superior, Subordinate, Terminal
 - d. Fixed, Superior CI

3. The Resources tab is where you can:
 - a. Adjust the unit rate of your project's resources
 - b. Adjust Man-Hours
 - c. Adjust and add equipment costs
 - d. All of the above
 - e. None of the above

Summary

As a result of this lesson, you can:

- Manage estimate resources
- Gain visibility into resource billing rates
- Manage cost item details
- Lock the budget

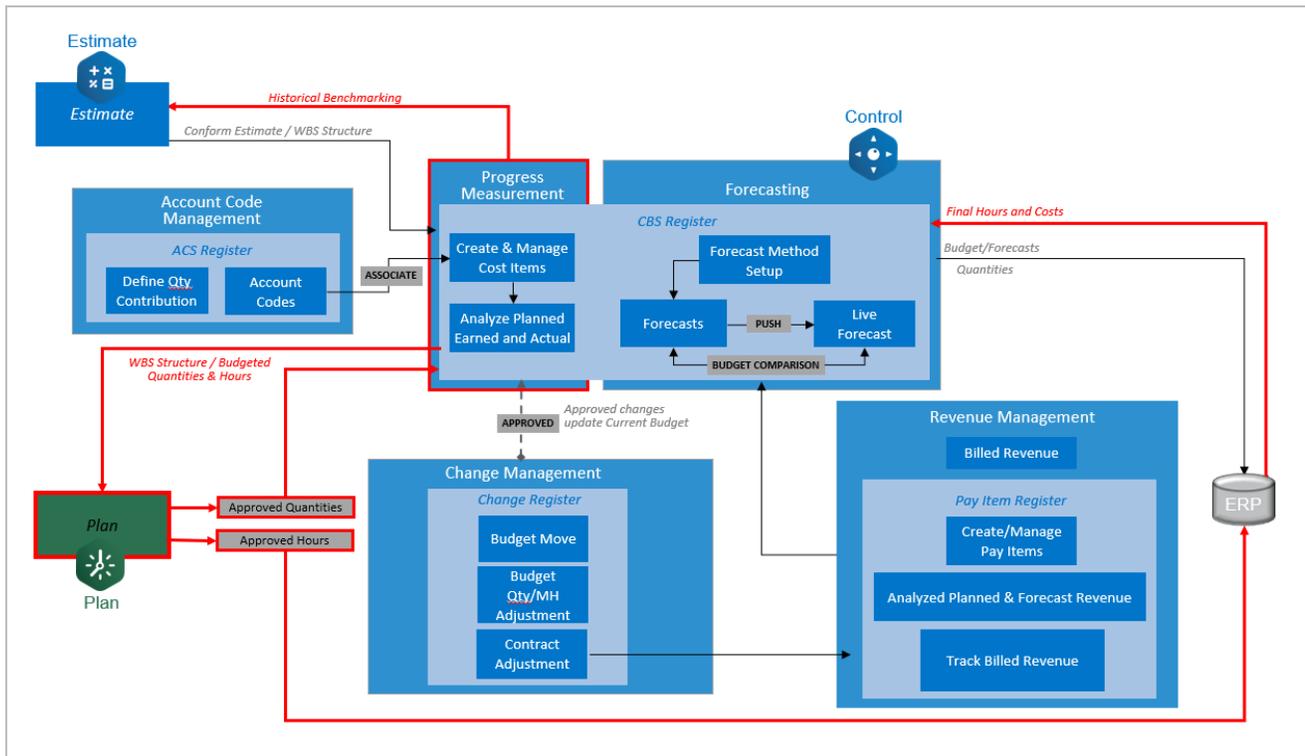
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CHAPTER 5 – PROGRESS MEASUREMENT

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5.1 PROGRESS MEASUREMENT WORKFLOW



5.2 PROGRESS MEASUREMENT OVERVIEW

Progress measurement plays a key role in tracking how much work has been completed and how it aligns with contract deliverables. Payment terms are often tied to the value of work performed, making it essential to measure progress accurately. A clear and consistent approach to progress tracking helps teams manage performance, support billing, and maintain visibility throughout the life of the project.

To measure progress effectively, it's important to understand a few key terms and how they relate to budget and performance tracking.

5.2.1 Budgets vs Estimate

InEight Control, you can maintain an original budget, a current budget, and a current estimate. These values can be referenced in preset data blocks, or in a custom data block like the one shown

below.

Tasks				Budgets			
CBS position	Description	WBS phase code	OB total cost	CB total cost	CE total cost	% complete	
6	Electrical Systems Installation	1088	\$ 83,930.00	\$ 86,275.00	\$ 97,537.00	44.03 %	
6.1	Install Electrical Conduit	1089	\$ 37,400.00	\$ 37,400.00	\$ 44,880.00	60.00 %	
6.2	Pull Wire	1090	\$ 32,160.00	\$ 33,165.00	\$ 36,180.00	40.00 %	
6.3	Install Light Fixtures	1091	\$ 10,050.00	\$ 11,390.00	\$ 11,725.00	20.00 %	
6.4	Test Electrical Systems	1092	\$ 4,320.00	\$ 4,320.00	\$ 4,752.00	0.00 %	

5.2.1.1 Original Budget

The original budget (OB) is a snapshot of the project plan in its original state prior to execution. It is a baseline used for comparison as the project progresses. You cannot edit your original budget values; they are read-only in the CBS register, available for reference only. After the original budget is set, it will not change unless you unlock it.

In the Control CBS register, you can see the OB values for man-hours, quantities, and costs.

Original budget			
OB total cost	OB total MHrs	OB total qty	OB unit cost
\$ 83,930.00	2,480.00	1.00	\$ 83,930.00
\$ 37,400.00	1,100.00	1,000.00	\$ 37.40
\$ 32,160.00	960.00	800.00	\$ 40.20
\$ 10,050.00	300.00	150.00	\$ 67.00
\$ 4,320.00	120.00	20.00	\$ 216.00

5.2.1.2 Current Budget

The current budget (CB) is the project’s operational budget, including only project changes approved through a controlled process. The current budget is therefore the sum of your original budget, plus or minus any approved changes.

See [Change Management](#) for more details on managing and approving budget changes.

In the CBS register, you can access the Current budget data block and view CB values for planned, earned and forecasted costs, hours, and productivity.

Current budget					
Bud... lock status	CB total quantity	CB total MHrs	CB total cost	CB MHrs/Unit	CB units/Mhr
🔒	1.00	2,550.00	\$ 86,275.00	2,550.00	0.00
🔒	1,000.00	1,100.00	\$ 37,400.00	1.10	0.91
🔒	825.00	990.00	\$ 33,165.00	1.20	0.83
🔒	170.00	340.00	\$ 11,390.00	2.00	0.50
🔒	20.00	120.00	\$ 4,320.00	6.00	0.17

5.2.1.3 Current Estimate

The current estimate (CE) represents the most up-to-date estimate of your work. You can update your current estimate quantities, hours, and costs at any time in the CBS register, with no required approval process or workflow.

You can use the current estimate as a sand box to build out change orders and do what-if analysis to plan for potential changes, without worrying about affecting the current or original budgets.

In the CBS register, you can access the Current estimate data block to view a variety of columns for measuring and analyzing the progress of your project.

Current estimate				
CE total MHrs	CE total cost	CE MHrs/unit	CE units/MHr	CE unit cost
2,783.29	\$ 97,537.00	2,783.29	0.00	\$ 97,537.00
1,275.00	\$ 44,880.00	1.06	0.94	\$ 37.40
1,042.65	\$ 36,180.00	1.16	0.86	\$ 40.20
337.90	\$ 11,725.00	1.93	0.52	\$ 67.00
127.74	\$ 4,752.00	5.81	0.17	\$ 216.00

5.2.2 Earned value management terms

5.2.2.4 Planned Value (PV)

Planned Value (PV) is the costs and hours you have estimated and scheduled for the project. Think of PV as your approved budget of scheduled items. In Control, your PV includes the following columns:

- CE total Cost
- CE total MHrs
- CB total cost
- CB total MHrs

Planned Value 03/24/2025 to 08/27/2025					
CE total cost	CE total MHrs	CB total MHrs	CB total cost	Start	Finish
\$ 97,537.00	2,783.29	2,550.00	\$ 86,275.00	03/01/2025	11/05/2025
\$ 44,880.00	1,275.00	1,100.00	\$ 37,400.00	07/01/2025	07/31/2025
\$ 36,180.00	1,042.65	990.00	\$ 33,165.00	08/01/2025	08/25/2025
\$ 11,725.00	337.90	340.00	\$ 11,390.00	08/25/2025	09/15/2025
\$ 4,752.00	127.74	120.00	\$ 4,320.00	09/15/2025	09/25/2025

5.2.2.5 Earned Value (EV)

Earned Value (EV) measures the amount of money you merit in return for the work performed up to that point. You can use EV to measure how much of your planned costs and hours you should have spent so far, according to the percent of work completed. Earned Value uses formula *Planned Value × % of work completed = Earned Value*.

In InEight Control, your EV includes the following columns:

- CE cost earned
- CE MHrs earned
- CB cost earned
- CB MHrs earned

Earned Value 03/24/2025 to 08/27/2025				
CE cost earned	CE MHrs earned	CB cost earned	CB MHrs earned	% complete
\$ 43,745.00	1,249.64	\$ 37,984.00	1,124.00	44.03 %
\$ 26,928.00	765.00	\$ 22,440.00	660.00	60.00 %
\$ 14,472.00	417.06	\$ 13,266.00	396.00	40.00 %
\$ 2,345.00	67.58	\$ 2,278.00	68.00	20.00 %
\$ 0.00	0.00	\$ 0.00	0.00	0.00 %

5.2.2.6 Schedule Performance Index

Schedule performance index (SPI) measures how close the work is being completed according to the designated schedule. It uses the formula $CB\ cost\ earned \div CB\ planned\ value\ (to\ date)$.

SPI			
SPI	CB cost earned	CB planned value (to date)	
0.60	\$ 37,984.00	\$ 62,978.39	
0.74	\$ 22,440.00	\$ 30,161.29	
0.61	\$ 13,266.00	\$ 21,785.81	
0.28	\$ 2,278.00	\$ 8,104.84	
0.00	\$ 0.00	\$ 2,926.45	

The SPI calculation uses the time-phased budget values as planned values. To accommodate the time-phased budget values, the planned value includes the cumulative time-phased budget planned value to date.

5.2.2.7 Actual Cost (AC)

Actual cost (AC) refers to the costs you incur when you perform the work. You can view AC in the **Actual cost (to date)** column.

Actuals 03/24/2025 to 09/05/2025						
Actual cost (to date)	Actual Mhrs (to date)	Actual qty (to date)	Actual Mhrs/unit (to date)	CB Mhrs G/L (to date)	CB actual cost G/L (to date)	
\$ 37,680.00	1,236.00	0.44	2,807.39	-112.00	\$ 304.00	
\$ 21,884.00	740.00	720.00	1.03	-80.00	\$ 556.00	
\$ 13,518.00	430.00	360.00	1.19	-34.00	(\$ 252.00)	
\$ 2,278.00	66.00	35.00	1.89	2.00	\$ 0.00	
\$ 0.00	0.00	0.00	0.00	0.00	\$ 0.00	

5.2.2.8 Variance

Variance is the difference between EV and AC and uses formula $Earned\ Value - Actual\ Cost = Variance$.

Variance indicates if you are performing better or worse than planned up to that point. Control uses the term Gain/Loss (G/L) rather than variance, shown in the following columns:

- CE actual cost G/L (to date)
- CE MHrs G/L (to date)
- CB actual cost G/L (to date)
- CB MHrs G/L (to date)

5.2.2.9 Remaining

Remaining is a general finance term for money that is not yet used. Control uses the formula *Planned Value - Actual Cost = Remaining Value* to calculate remaining cost.

In other words, remaining cost is the difference between what you originally planned and what you have spent so far, to help you understand how much cost or how many man-hours you have left.

The table below summarizes each EVM term with its equivalent term in Control and what it measures.

Term	InEight Control Term	What it measures
Planned Value (PV)	CE total cost CE total MHrs CB total cost CB total MHrs	Budget of scheduled values
Earned Value (EV)	CE cost earned CE MHrs earned CB cost earned CB MHrs earned	Planned value × percent complete
Actual Cost (AC)	Actual cost (to date) Actual MHrs (to date)	Actual ÷ expended values
Variance	CE actual cost G/L (to date) CE MHrs G/L (to date) CB actual cost G/L (to date) CB MHrs G/L (to date)	Difference between earned value and actual cost
Remaining	Remaining qty CE remaining cost	Difference between planned value and earned value

Term	InEight Control Term	What it measures
	CB remaining cost CB remaining qty	

The following displays planned vs. earned vs. actual values within a custom data block of the CBS register of InEight Control:

		PV - EV - AC								
Description	WBS phase code	CB total cost	CB cost earned	Actual cost (to date)	CB total Mhrs	CB Mhrs earned	Actual Mhrs (to date)	CB total quantity	CB earned qty	Actual qty (to date)
Electrical Systems Installation	1088	\$ 86,275.00	\$ 37,984.00	\$ 37,680.00	2,550.00	1,124.00	1,236.00	1.00	0.44	0.44
Install Electrical Conduit	1089	\$ 37,400.00	\$ 22,440.00	\$ 21,884.00	1,100.00	660.00	740.00	1,000.00	600.00	720.00
Pull Wire	1090	\$ 33,165.00	\$ 13,266.00	\$ 13,518.00	990.00	396.00	430.00	825.00	330.00	360.00
Install Light Fixtures	1091	\$ 11,390.00	\$ 2,278.00	\$ 2,278.00	340.00	68.00	66.00	170.00	34.00	35.00
Test Electrical Systems	1092	\$ 4,320.00	\$ 0.00	\$ 0.00	120.00	0.00	0.00	20.00	0.00	0.00

5.2.3 Productivity

If you are the contractor building a project, you will need to monitor the performance of your crews, including how productive they are and how much they are being paid.

Productivity is a measure of effectiveness: the rate of output per unit of input. This can be measured with the following equation: *Productivity = Earned MH ÷ Actual MH*.

You can view productivity values in the following columns:

- CB productivity factor
- CE productivity factor

5.2.3.10 Compensation Factor (CF)

Compensation is the amount of money paid to an employee for their hours worked. Compensation factor is a numerical value comparing the budgeted compensation to the actual compensation. For example, if you had budgeted for work to be completed by master electricians, but you actually used 2nd year apprentices (making a lower wage), then that change would be reflected in the compensation factor. In InEight Control, compensation factor is shown as **Compensation factor (to date)**. You can calculate compensation factor using formula *Compensation Factor = Budgeted MH Cost ÷ Actual MH Cost*.

5.2.3.11 Labor Efficiency Index (LEI)

Labor efficiency index (LEI) is a numerical value assigned to indicate the effectiveness of resource utilization. In Control, it is shown as **LEI (to date)**. You can calculate LEI using formula $LEI = Productivity \div Compensation Factor$.

If LEI is greater than 1, it means that you are using your resources effectively. If LEI is lower than 1, it means your resources are being used poorly.

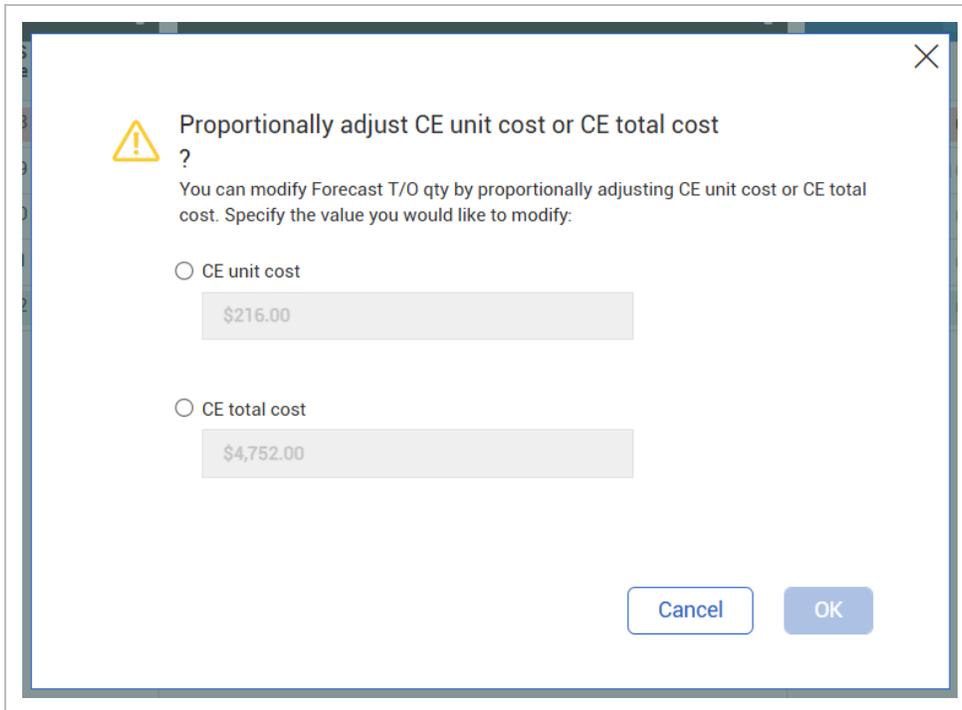
5.2.4 Updating Forecast (T/O) Qty

The Forecast (T/O) qty represents the total amount of work or materials expected to be completed for a cost item by the end of the project. This value can be updated as the project progresses and represents the current estimate of total quantity, comparable to the original or current budget quantity.

There are a number of ways to update the Forecast (T/O) qty:

1. Direct entry in the CBS
2. Rolldown from assigned pay item (need to have this setting enabled)
3. Rolldown from parent cost item (Qty driver is **Superior CI**)
4. Rollup from subordinate cost items (**Contribute qty** is checked)
5. Cost item import
6. Cost item API

When you update the Forecast (T/O) qty, you are prompted to update either the CE unit cost or CE total cost. You can also choose to update either the CE labor cost/Mhr or CE total MHrs, and either CE construction equipment cost/hr or CE total equipment hrs (if applicable).



Updating the Forecast (T/O) qty adjusts the remaining quantity for a cost item, which in turn updates the forecast values. Since forecast is calculated as *Remaining Quantity × Selected Unit Cost*, any change to the Forecast (T/O) qty directly affects the forecasted cost. This also impacts the % Complete, which is calculated as *Quantity Claimed ÷ Forecast (T/O) Qty*. As a result, earned value metrics and forecasted revenue values are updated to reflect the new progress and cost expectations.

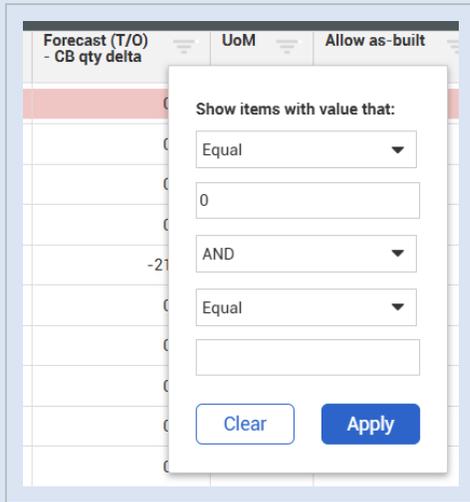
5.2.4.12 Forecast (T/O) - CB qty delta column

The Forecast (T/O) - CB qty delta column shows you the difference between the Forecast (T/O) quantity and the current budget total quantity columns.

The calculation for this formula is *Forecast (T/O) qty - CB total quantity*.

Tasks				Task details - LK	
<input type="checkbox"/>	CBS position	Description	WBS phase code	Forecast (T/O) qty	Forecast (T/O) - CB qty delta
<input checked="" type="checkbox"/>	6	Electrical Systems Installation	1088	1.00	0.00
<input type="checkbox"/>	6.1	Install Electrical Conduit	1089	1,200.00	200.00
<input type="checkbox"/>	6.2	Pull Wire	1090	900.00	75.00
<input type="checkbox"/>	6.3	Install Light Fixtures	1091	175.00	5.00
<input type="checkbox"/>	6.4	Test Electrical Systems	1092	22.00	2.00

You can filter for cost items with a delta greater than 0 when you want to align the Forecast T/O Quantity and CB total quantity.



5.2.5 Update Forecast (T/O) Qty with Plan components

The **Plan component total qty** column represents the planned quantities defined in InEight Plan – essentially, what the team expects to install or complete based on the scope and schedule. Based on details from the field, these planned quantities may differ from the Forecast (T/O) quantity defined in Control.

You can compare planned quantities with the current forecast in the following columns:

- **Plan component total qty**

This allows you to identify discrepancies and make adjustments as needed.

Task details		Actuals 03/24/2025 to 09/05/2025			
Forecast (T/O) qty	UoM	Actual qty (to date)	Plan component total qty	Forecast (T/O) - Plan component qty	Actual Mhrs/unit (to date)
1.00	Ea	0.44			2,807.39
1,200.00	LF	720.00	1,440.00	-240.00	1.03
900.00	LF	360.00	900.00	0.00	1.19

In InEight Plan, cost items from Control are associated to more detailed components. Each component has a planned quantity and can also capture actuals as installed quantities. Multiple components may roll up to a single cost item.

For example, the Install Conduit cost item is assigned to WBS phase code 1139 in the CBS. In Plan, this cost item is represented by two components:

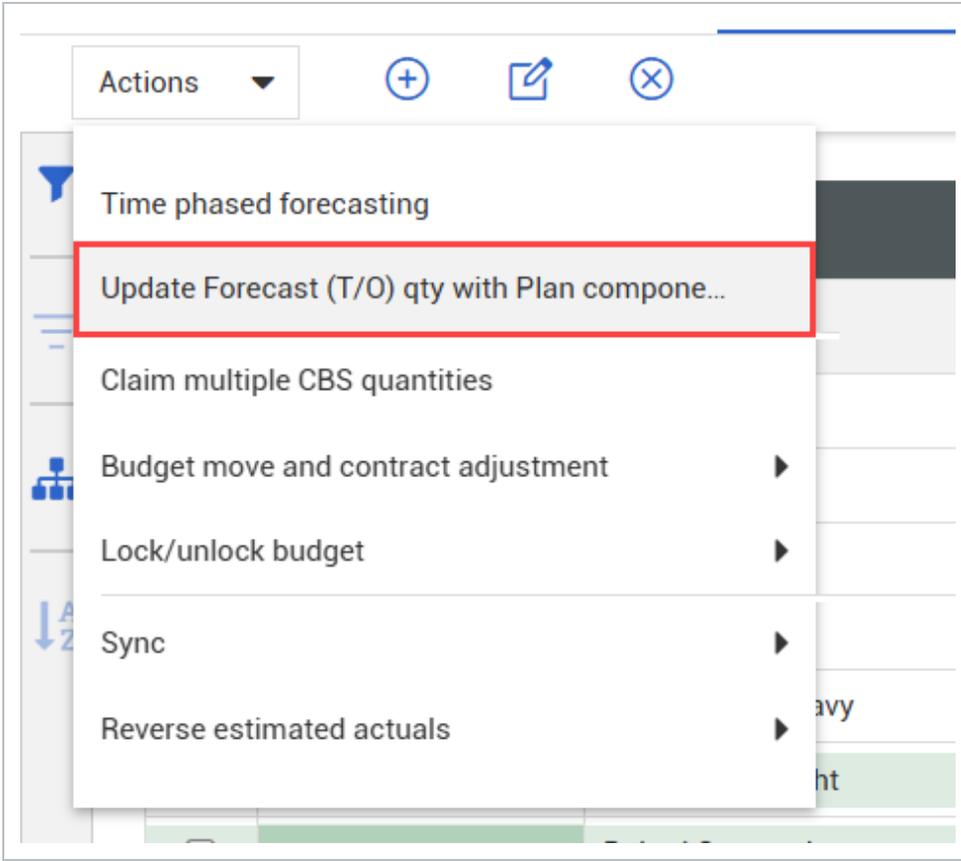
- Conduit Material: 150 units
- Install Conduit: 120 units

Component details				
	Name	Claiming scheme	Quantity	WBS
<input type="checkbox"/>	Road Subgrade	Road Subgrade	293.60000	1008
<input checked="" type="checkbox"/>	Conduit material	Conduit	150.00000	1139
<input checked="" type="checkbox"/>	Install conduit	Electrical	120.00000	1139

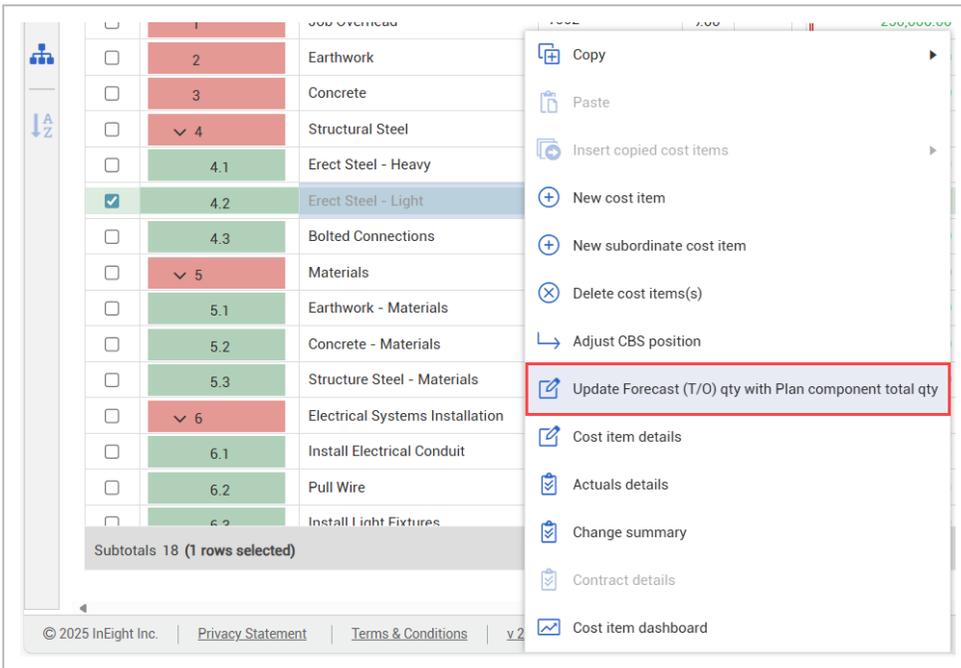
Together, these total 270 units, which appears in Control as the Plan component total quantity for the cost item.

Tasks				Actuals
	CBS position	Description	WBS phase code	11/17/20
<input checked="" type="checkbox"/>	5	Install conduit	1139	Plan component total qty
				270.00

To align the forecast with the planned scope, use the **Update Forecast (T/O) qty with Plan component total qty** option under the Actions drop-down menu. This copies the Plan quantity directly into the Forecast (T/O) qty field.



You can also access this option from the cost item menu.



5.3 DATE RANGE SETUP

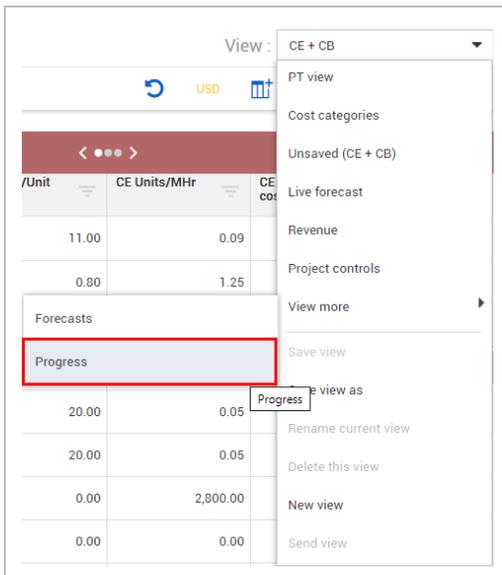
InEight Control gives you flexibility in the form of a Date Range option. The following Step by Step walks through how the Date Range setup feature works.

Date Range Setup

1. Click the **View drop-down** to change your view.



2. Select the **Progress** viewset from the View drop-down list.



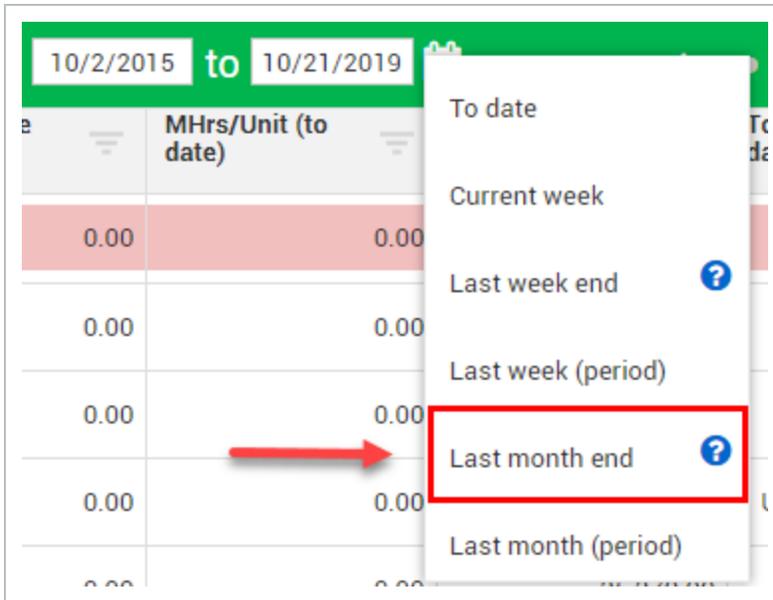
3. In the Actuals data block, select the **left calendar field** on the date range chooser and choose the first day of this month.

Actuals		6/15/2018	to	7/3/2018		< ● ● ● >			
Qty complete (to date)	June 2018				MHrs G/L (to date)	Total cost (to date)			
	Su	Mo	Tu	We	Th	Fr	Sa		
	27	28	29	30	31	1	2	0.00	\$ 0.00
	3	4	5	6	7	8	9	0.00	\$ 0.00
	10	11	12	13	14	15	16	0.00	\$ 0.00
	17	18	19	20	21	22	23	0.00	\$ 0.00
	24	25	26	27	28	29	30	0.00	\$ 0.00
	1	2	3	4	5	6	7	0.00	\$ 0.00
	Tuesday, July 03, 2018								
	0.00			0.00				0.00	\$ 0.00

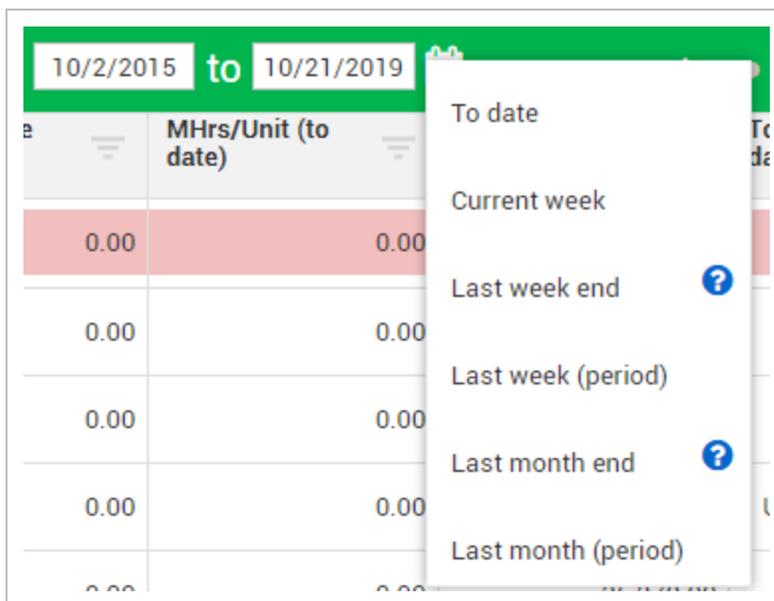
- To manually select your date range, click into the date cells along the header of the Actuals data block and select your desired to and from dates
4. Select the **right calendar field** on the date range chooser and select the last day of this month.
 5. Select the **calendar icon**.

Actuals		6/15/2018	to	7/3/2018		< ● ● ● >
Qty complete (to date)	MHrs/Unit (to date)	CB MHrs G/L (to date)	Total cost (to date)			
0.00	0.00	0.00	\$ 0.00			
0.00	0.00	0.00	\$ 0.00			

6. Select **Last month end** from the calendar.



- To select your date range from the pre-set list, click on the **calendar** icon within the Actuals data block header and select the desired date option



Both week and month end date rules are determined during project setup within the Fiscal Calendar setting. For more information, see the [Fiscal Calendar](#) setting topic.

5.4 MANAGE ACTUALS

In Control, you can choose from four methods for tracking actual values:

- Sync – Lets you connect directly with other systems to update data in real time.
- Import – Allows you to upload spreadsheet data.
- Manual entry – You can input data directly into the system.
- API – Allows you to connect data from external sources, such as an ERP.

These methods help ensure that project records are accurate and up to date. The following topics provide more details on methods for managing actuals:

- [Actuals by Sync](#)
- [Actuals by Import](#)
- [Actuals by Manual Entry](#)
- [Actuals by API](#)

5.5 ACTUALS BY SYNC

Update Control data in real time by connecting with InEight applications and other external systems.

5.5.1 Sync Quantities

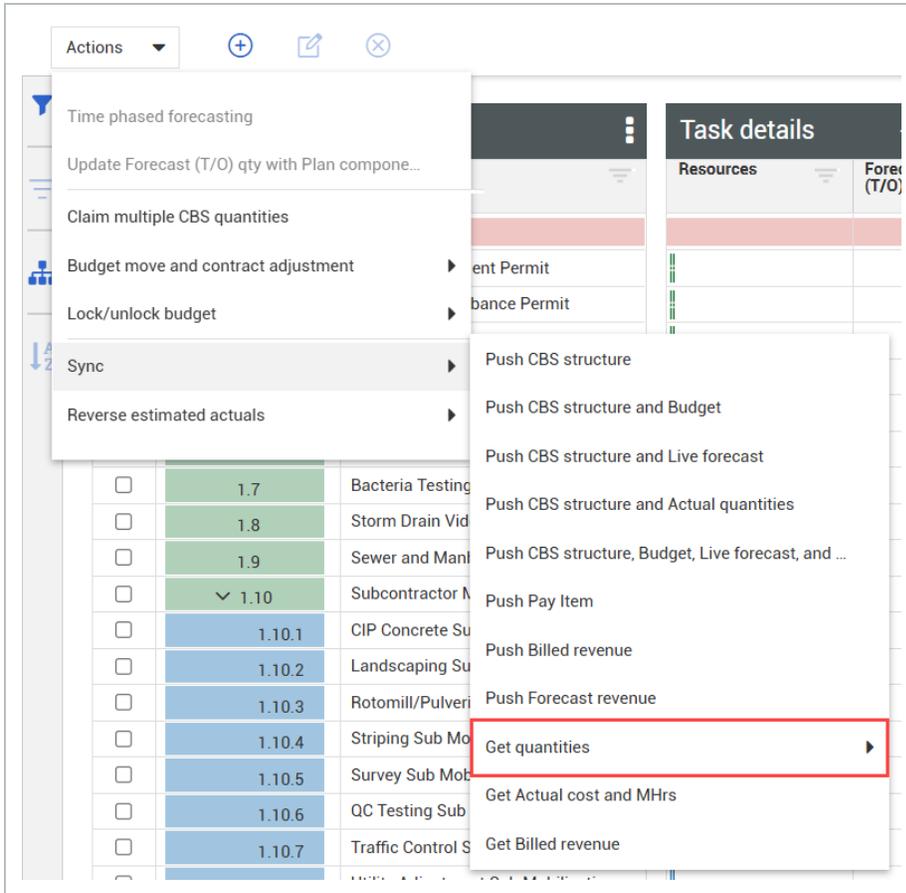
A quantities sync lets you to bring actuals from other InEight applications into Control. Quantities are brought into Control through a Get Quantities sync. The Actual qty (to date) column is updated when the sync is complete.

Actuals 05/30/2025 to 06/26/2025			
Actual qty (to date)	Actual MHrs/unit (to date)	CB MHrs G/L (to date)	
0.17	122.77	0.00	
1.00	0.00	0.00	
0.28	0.00	0.00	
0.53	0.00	0.00	
750.00	0.00	0.00	
200.00	0.00	0.00	
1.00	0.00	0.00	
0.00	0.00	0.00	

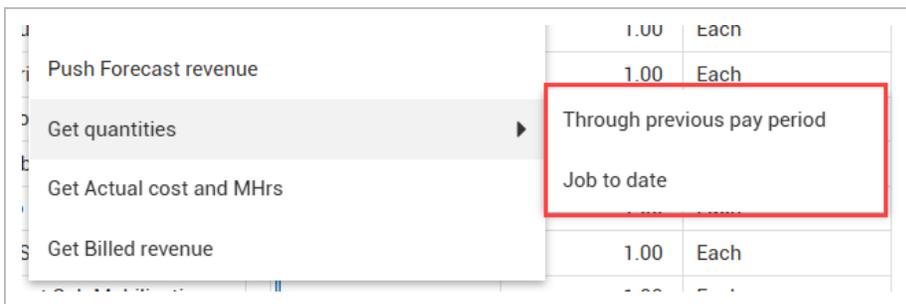
Sync operations are accessed from the Actions menu in the CBS.

Performing a Get Quantities Sync

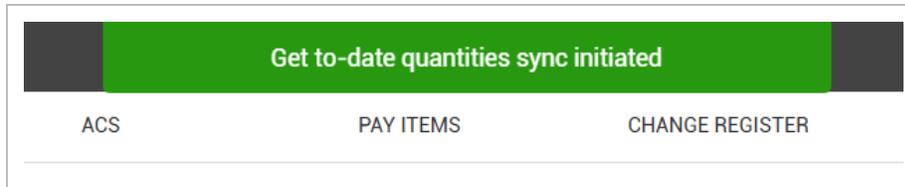
1. From the Actions menu, choose **Sync > Get quantities**.



2. Choose the time period for the sync (Through previous pay period or Job to date).



3. A status message notifies you that the sync has initiated.

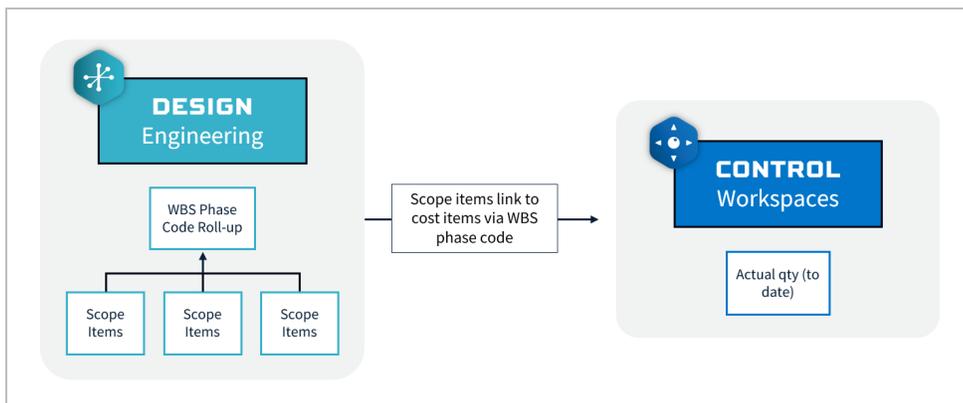


5.5.1.1 Types of Get Quantities Syncs

Depending on your project configurations, the Get Quantities sync can bring in values from InEight Design, InEight Plan, or InEight Contract. Each of these applications tracks quantities differently, depending on its role in the project lifecycle.

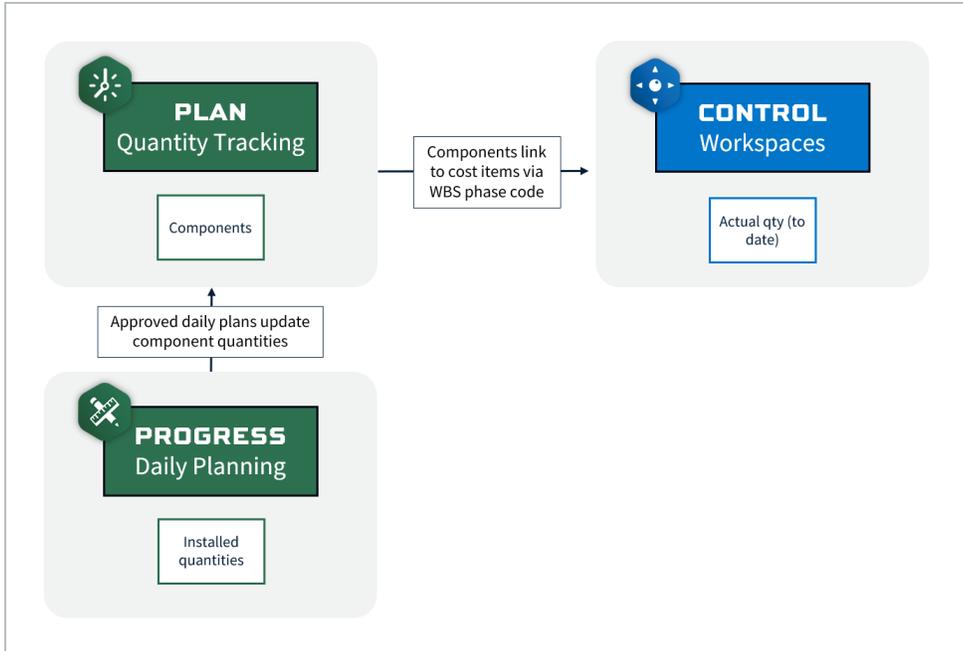
InEight Design

In InEight Design, engineering deliverables are broken down and tracked as scope items. As work on scope items is completed, team members can claim partial or total quantity values. Scope items are linked to cost items through the WBS phase code. As a result of a Get Quantities sync, scope item quantities update the actual quantity for their associated cost items.



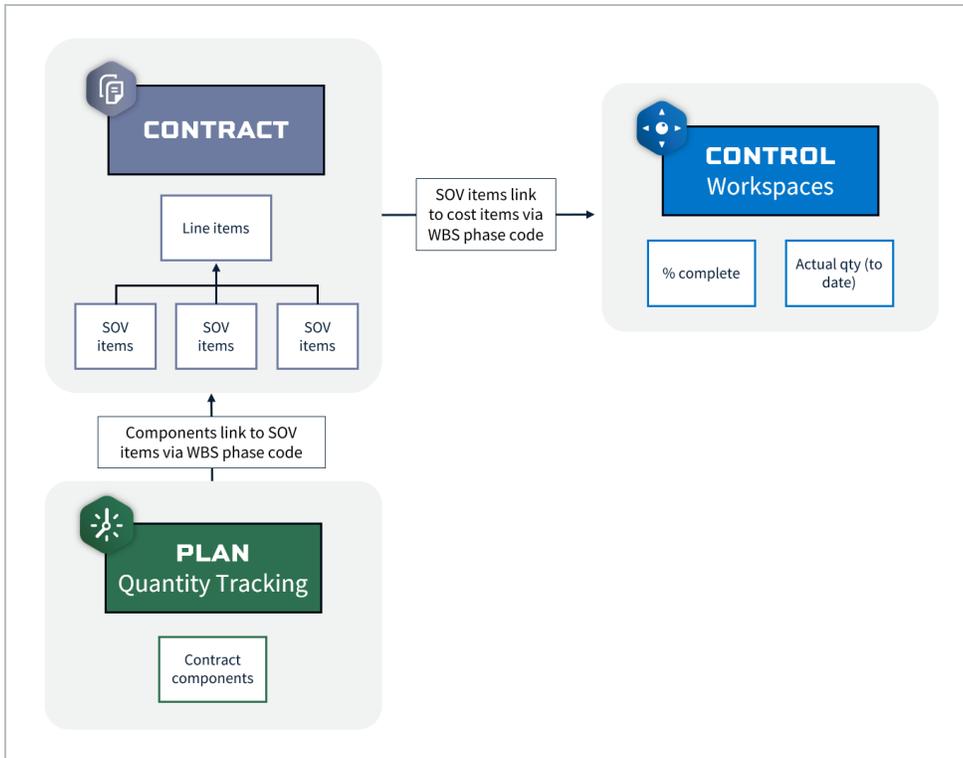
InEight Plan

Quantities from InEight Plan represent completed progress in the field. Quantities can be captured directly in the Quantity Tracking module, or they can be captured through approved daily plans from InEight Progress. Components are linked to cost items through the WBS phase code. As a result of a Get Quantities sync, component quantities update the actual quantity for their associated cost items.

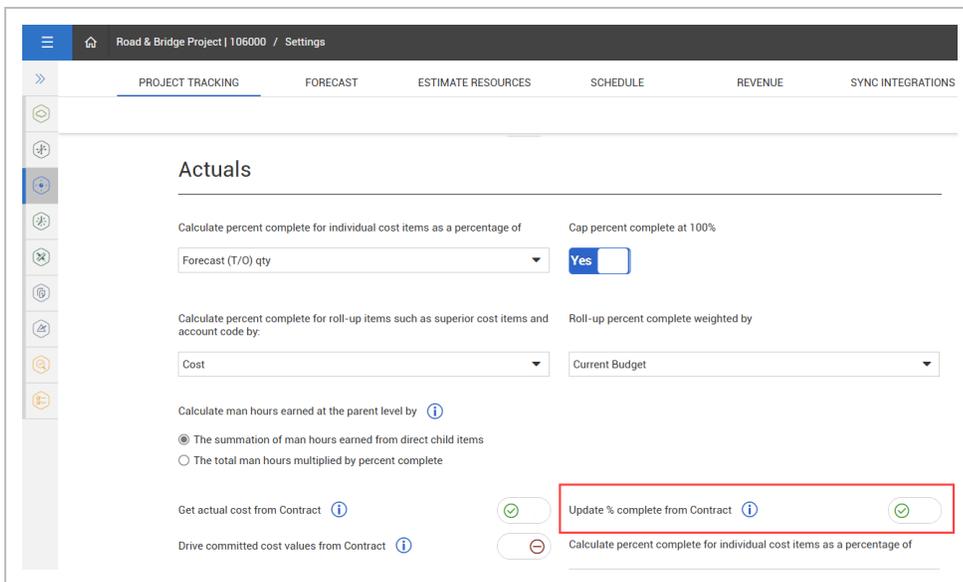


InEight Contract

Quantities from InEight Contract represent completed progress associated with a third-party contract. Contract line items can be broken down into schedule of value items to track field progress. These SOV items can be claimed directly in InEight Contract, or they can be claimed as contract components in InEight Plan. SOV items are linked to cost items through the WBS phase code. As a result of a Get Quantities sync, SOV quantities update the percent complete and actual quantity for their associated cost items.



To update complete from InEight Contract, you must enable the settings for the project in Control > Project Tracking > **Actuals**. Switch the **Update % complete from Contract** toggle to *On*.



After the Update % complete from Contract setting is enabled, select from the **Calculate percent complete for individual cost items as a percentage of** drop-down list to define how you want to calculate the percent complete for cost items.

Update % complete from Contract  

Calculate percent complete for individual cost items as a percentage of

Current budget total cost 

Current budget total cost

Committed total cost

Forecast total cost

Current estimate total cost

The calculation for this option is: (updated % complete on the cost item) = (SOV unit price) x (Claimed qty in Contract or Plan) ÷ (Denominator in settings). Actual qty (to date) = % complete * Forecast (T/O) qty OR CB total qty (depending on settings).

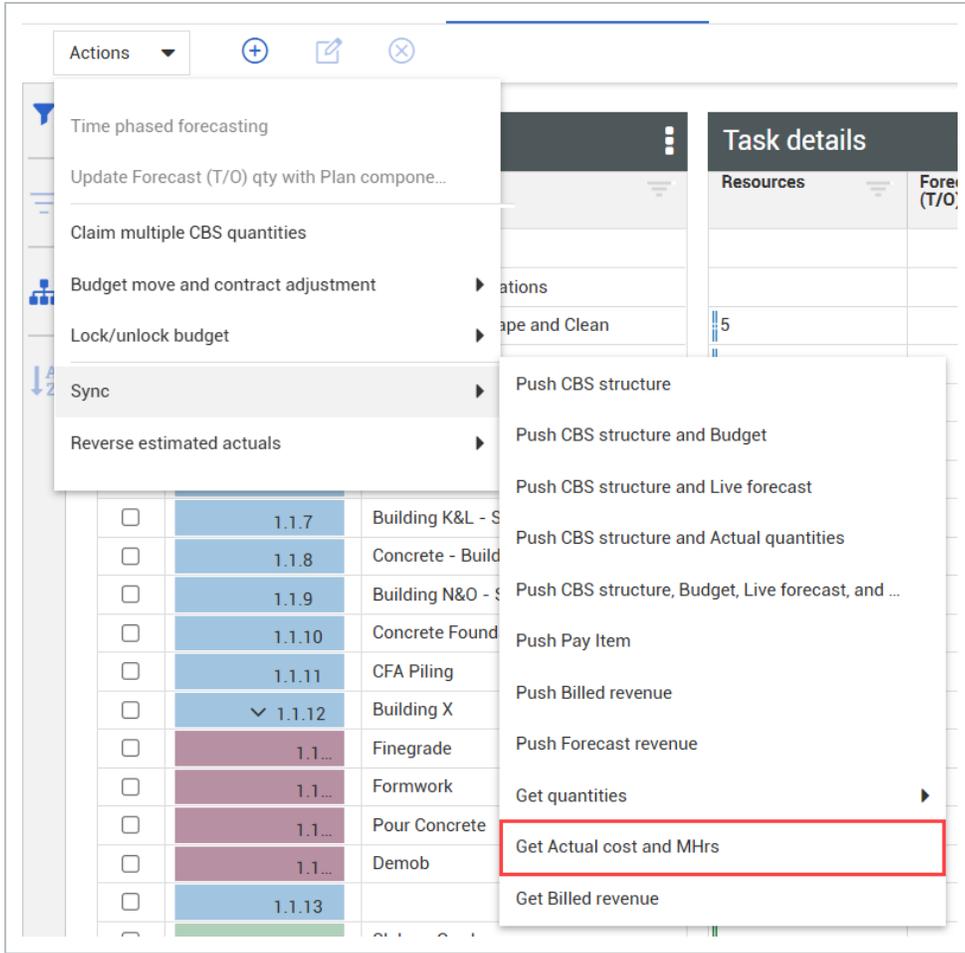
5.5.2 Sync Hours and Costs

If your project uses external systems to capture man-hours and costs, those values can be brought into Control through a sync. If your project uses an ERP system, you can bring in man-hours and costs by performing a Get Actual Cost and Mhrs sync. If you have values tracked through contracts, you can enable project settings to bring those values in from InEight Contract. Hours and costs brought into Control through a sync update which updates the Actual cost (to date) and Actual Mhrs (to date) columns.

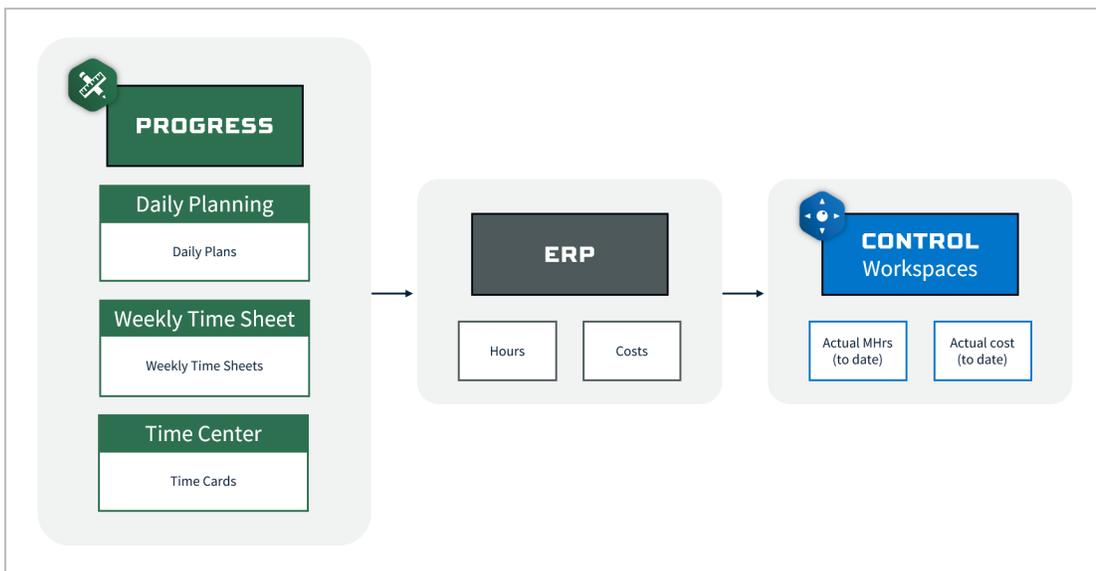
Actuals 05/30/2025 to 06/26/2025	
Actual cost (to date)	Actual Mhrs (to date)
\$ 583,998.84	1,935.50
\$ 524,328.84	1,824.00
\$ 0.00	0.00
\$ 104,100.00	0.00
\$ 12,800.00	0.00
\$ 62,375.00	1,800.00

ERP

After man-hours and costs are verified in your ERP system, you can initiate a sync to bring those values into Control. Similar to the Get Quantities sync, the Get Actual Cost and Mhrs sync is accessed from the Actions menu.



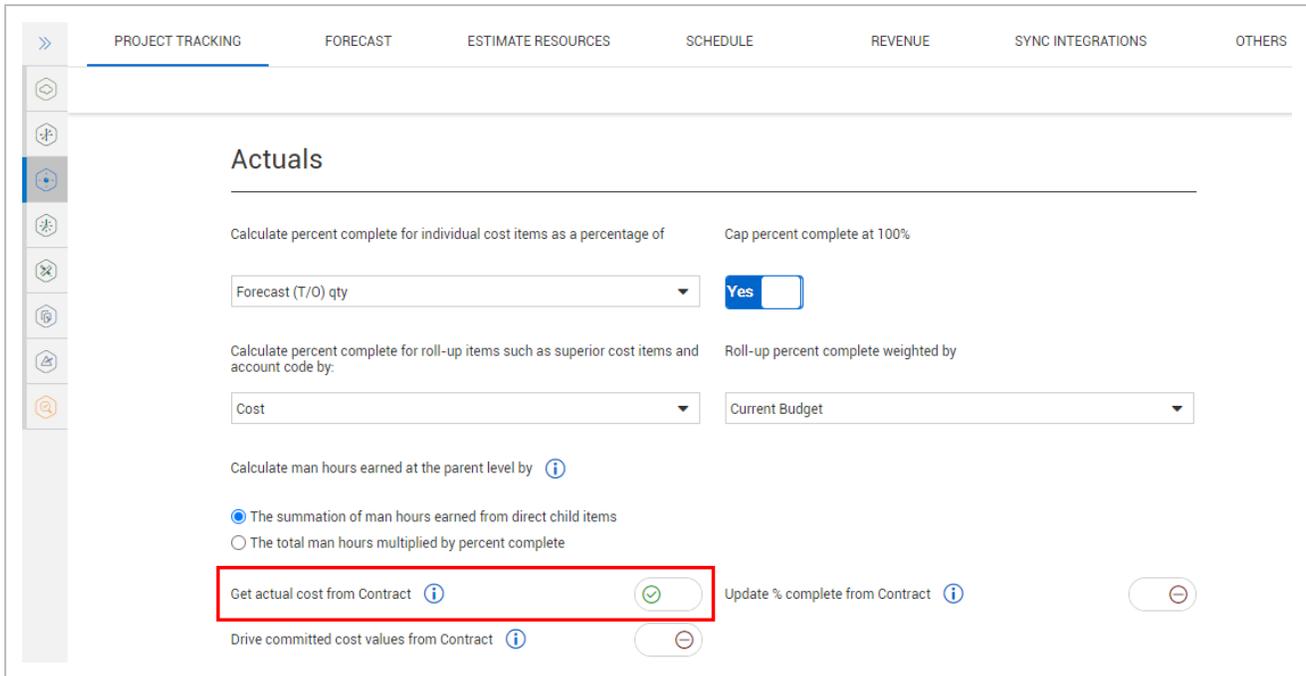
If your project captures work hours through InEight Progress, those hours and their associated costs are approved in Progress before being sent to the ERP.



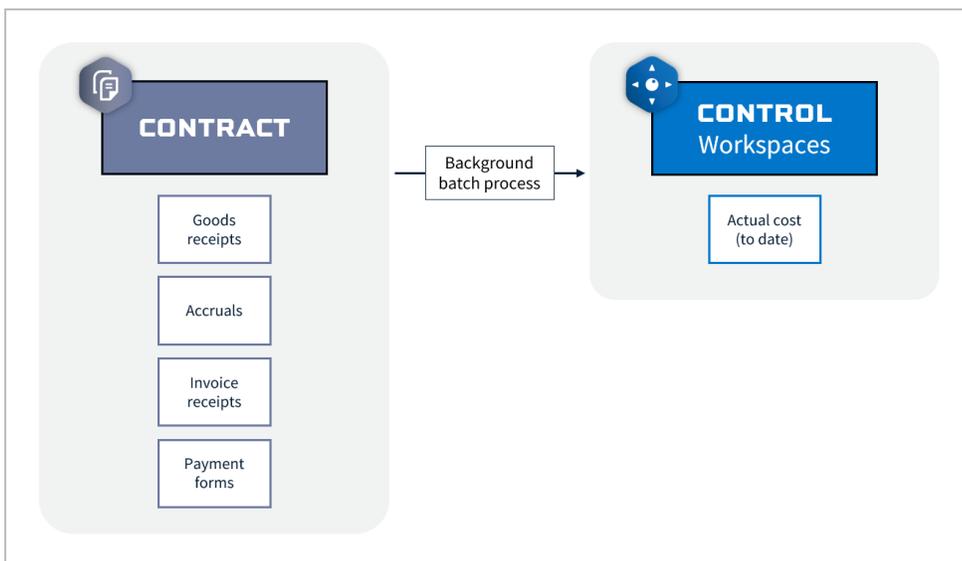
InEight Contract

InEight Contract can record actual costs in the form of goods receipts, accruals, invoice receipts, or payment forms. You can configure your project settings to pull these actual costs into Control through a batch process.

In project settings, under Control > Project Tracking > **Actuals**, switch the **Get actual cost from Contract** toggle to *On*.



After you enable this setting, Contract values update the actual cost for the associated cost items. Note that it may take up to 15 minutes for the background batch process to complete.



5.5.3 Audit Log

You can check the status of a sync in the Audit Log on the Integration tab.

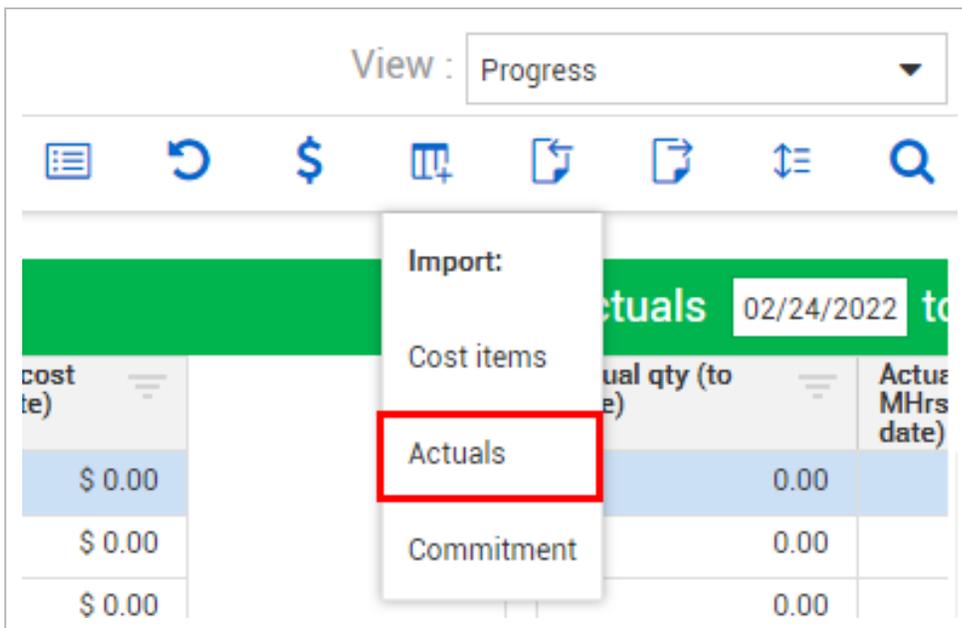
		CBS	ACS	PAY ITEMS	CHANGE REGISTER	AUDIT LOG		
Actions		Audit ID	Interface	Status	Processing details	Start	Finish	Log Handle
CBS	<input type="checkbox"/>	2150	Quantities - Job to date	Succeeded	2 of 2	10/16/2024 12:15 PM	10/16/2024 12:15 PM	3941e926-52ed-461c-bc23-1f48d56f41cb
ACS	<input type="checkbox"/>	1710	Budget	Failed	Failed at 1	03/10/2023 12:33 PM	03/10/2023 12:48 PM	e9316a4f-5ed8-4563-8ed7-7fe1fa37bf3a
Pay items	<input type="checkbox"/>	1709	CBS	Succeeded	4 of 4	03/10/2023 12:33 PM	03/20/2023 05:30 AM	6eae0491-75b8-4f3f-8908-a1bfbb1bfdd4
Integration	<input type="checkbox"/>	1706	Quantities - Job to date	Succeeded	2 of 2	02/23/2023 12:26 PM	02/23/2023 12:26 PM	307397f1-89a-4eeb-b9d5-a14ee876543a
	<input type="checkbox"/>	1705	Quantities - Job to date	Succeeded	2 of 2	02/23/2023 12:04 PM	02/23/2023 12:04 PM	43c1d5ec-d32f-4357-bf70-90edf8d375bf
Import history	<input type="checkbox"/>	1704	Quantities - Job to date	Succeeded	2 of 2	02/23/2023 11:49 AM	02/23/2023 11:49 AM	5f805be3-8d6f-45e1-a269-283a6f43742c
	<input type="checkbox"/>	1661	ActualMHCost	InProcess	0 of 3	12/07/2022 03:26 PM		de1ffe21-8ae0-41f1-8399-e93c29a86b56

5.6 ACTUALS BY IMPORT

You can import actual costs, man-hours and quantities by using an Excel or CSV file.

An actuals import is similar to claiming actuals in Control. After you upload a spreadsheet containing actuals, those values are added to any existing actuals for the specified cost items. Your spreadsheet values should represent new claiming on a cost item rather than the total sum to date.

From the CBS tab in Control Workspaces, you can access the Import function by clicking the **Import** icon, and then selecting **Actuals**.



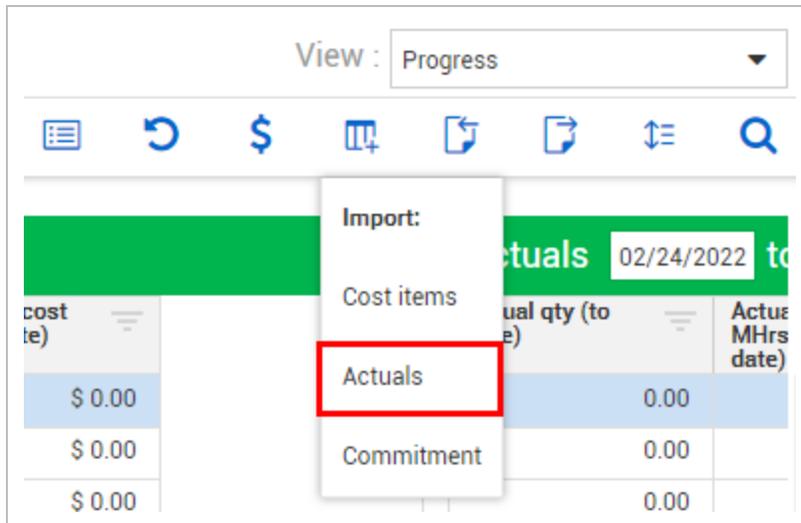
After you add the import file, you can select the matching criteria in the Map columns dialog box. The Map columns dialog box has a select number of Control fields which pertain to actuals. The table below shows details of the available fields.

Control field	Details
WBS phase code	The unique WBS phase code. Can be used as the cost item matching criteria. Required to select this or CBS position as the cost item matching criteria.
CBS position	The position in the CBS hierarchy. Can be used as the cost item matching criteria. Required to select this or WBS phase code as the cost item matching criteria.
Posting date	Required field. Control will prompt you to specify the date format used in your import file.
Notes	Text field for any notes that pertain to this specific claiming update.
Claimed quantities	Quantities in this field will be added to the Actual qty (to date) field for the specified cost items.
Number of man hours	Values in this field will be added to the Actual MHours (to date) field for the specified cost items.
Number of equipment hours	Values in this field will be added to the Actual eqp hrs (to date) field for the specified cost items.
Cost	Values in this field will be added to the Actual cost (to date) field for the specified cost items.
Cost categories	You can download a list of your project's cost categories from the Import actuals data dialog box. The values in the import file must match the Control values exactly.
Actuals user defined 1-2	Use these fields to enter dates based on customized field labels set up in Platform > Suite Administration > Custom labels.
Actuals user defined 3-6	Use these free text fields to enter any variable attribute based on customized field labels set up in Platform > Suite Administration > Custom labels.
Estimate Resource	You can specify estimate resources to be included with this claiming update. Use the resource code for the estimate resource as the value for this field. This update will be visible from the Actuals Details tab in Actuals History.

Follow the steps below to import actuals.

Import Actuals

1. Prepare the import file.
2. From the CBS, click Import > **Actuals**.



3. In the Import actuals data dialog box, add the import file, and then select the cost item matching criteria.

Road & Bridge Project (106000) / Control

Import actuals data - Actuals Import.csv

Import from Excel (.xlsx, .xls) or Comma separated value (.csv)

Drag and drop the file here
or browse

[Browse](#)

Options

* Import type
Actuals values

Cost item matching criteria
WBS Phase Code

[↓ Cost categories list](#)

i Specify a Match key. Once import file header columns are verified, column fields can be mapped. Data from the matched items will be imported. If match is not found, items will be ignored. If your document contains actual cost, then you will need to specify which column contains your cost categories. Cost category naming in you upload file must match what is in Control. Download Control's cost category list to ensure the use of correct naming.

[Cancel](#) [Next](#)

4. Map the Control fields to the file columns.

Import actuals data - Actuals Import.csv

Map columns

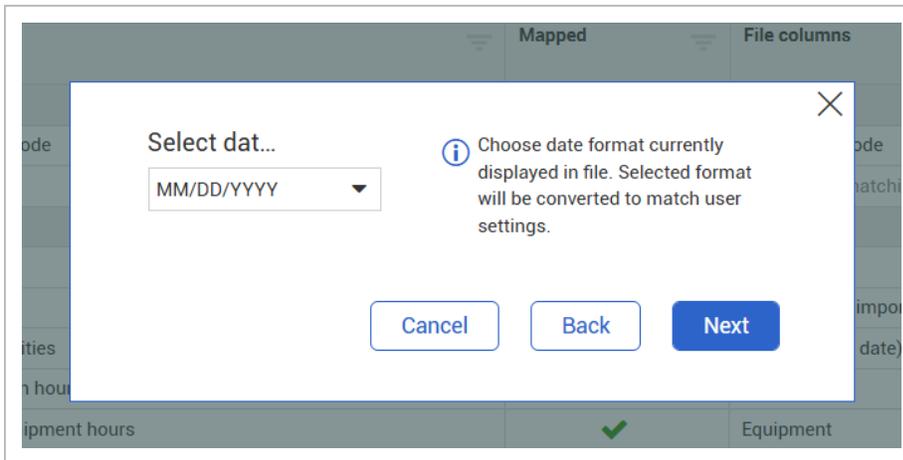
Template: Unsaved template

Control field	Mapped	File columns
Tasks		
* WBS phase code	🔍	WBS phase code
CBS position		only used if matching
Actuals		
* Posting date	✓	Date
Notes		Blank-do not import
Claimed quantities	✓	Actual qty (to date)
Number of man hours	✓	MHrs
Number of equipment hours	✓	Equipment
Cost	✓	Cost

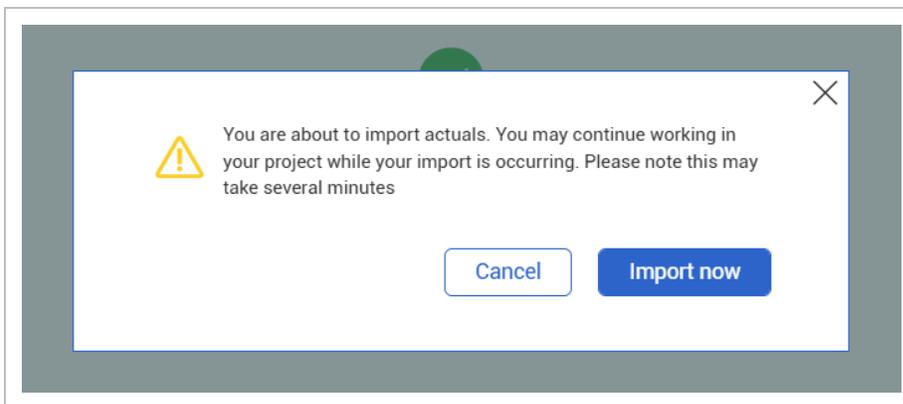
* Required fields

[Reset](#) [Cancel](#) [Back](#) [Next](#)

5. Select the date format used in the import file.



6. The import file will be checked for errors. If the file contains no errors, click **Next**.
If the import contains errors, download the error file for more information.
7. Click **Import now** to complete the import.



Visit [Cost Item Excel Import](#) for more information on performing an import.

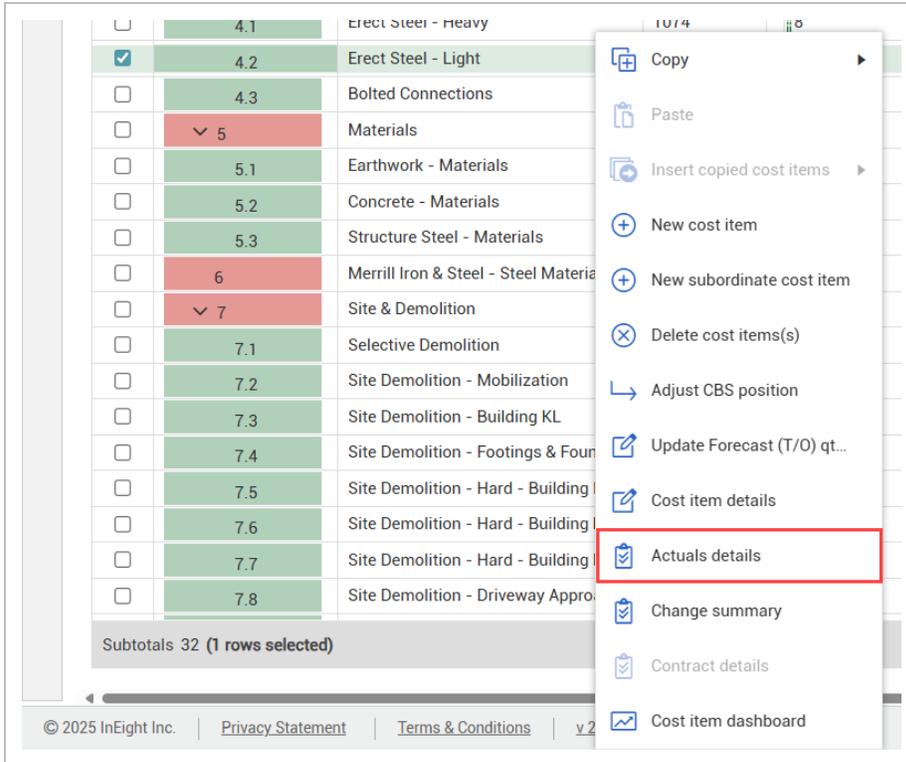
5.7 ACTUALS BY MANUAL ENTRY

In some situations, you may need to enter actuals directly in InEight Control. This can be helpful when field data is delayed, incomplete, or needs correction. Manual entry also gives you greater flexibility when tracking progress tied to lump sum or indirect costs, or when values include confidential or sensitive data.

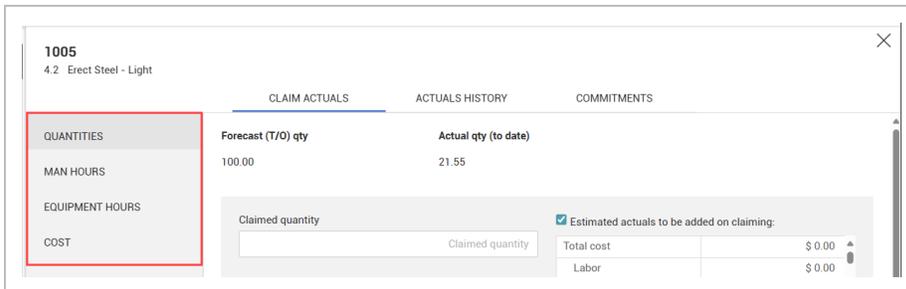
The steps below outline how to claim actuals by manual entry.

Claim Actuals by Manual Entry

1. From the CBS, right-click a cost item, and then select **Actuals details**.



2. On the Claim Actuals tab of the slide-out panel, select the type of actuals from the tabs on the left.



3. Enter the quantity, hours, or cost to be claimed.

	CLAIM ACTUALS	ACTUALS HISTORY	COMMITMENTS
QUANTITIES	Forecast (T/O) qty	Actual qty (to date)	
MAN HOURS	100.00	21.55	
EQUIPMENT HOURS			
COST			

Claimed quantity:

Posted date:

Estimated actuals to be:
 Total cost:
 Labor:
 Construction Equipmen:
 ENM Rented Equipment:

4. Enter additional details as needed.

Posted date:

Start date:

Finish date:

Area:

Actuals user defined 4:

Actuals user defined 5:

Actuals user defined 6:

Estimate resource:

Notes: 4000

5. When finished, click **Apply**.

5.7.1 Claim Quantities

Track completed progress progress on a cost item by entering a claim on the Quantities tab in the Actuals details slide-out panel.

Before claiming quantities for a cost item, make sure the *Hide in Plan, Progress, and Design* column is checked. This option prevents conflicts by making the cost item unavailable for claiming outside of Control.

Tasks				Task details	
<input type="checkbox"/>	CBS position	Description	WBS phase code	Hide in Plan, Progress, and Design	Is terminal
<input type="checkbox"/>	2	Construction	1011	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	2.1	Bridge Work	1012	<input checked="" type="checkbox"/>	<input type="checkbox"/>

See the table below for details on the available fields on the Quantities tab.

	CLAIM ACTUALS	ACTUALS HISTORY	COMMITMENTS
QUANTITIES	Forecast (T/O) qty	Actual qty (to date)	
MAN HOURS	4,331.00	2,576.45	
EQUIPMENT HOURS	Claimed quantity <input type="text"/> Posted date <input type="text" value="07/01/2025"/>		
COST	Actuals user defined 1 <input type="text"/> Actuals user defined 2 <input type="text"/>		
	Actuals user defined 3 <input type="text"/> Actuals user defined 4 <input type="text"/>		
	Actuals user defined 5 <input type="text"/> Actuals user defined 6 <input type="text"/>		
	Estimate resource <input type="text"/>		
	Notes <input type="text"/> 4000		

Field	Details
Forecast (T/O) qty	Shows the forecast takeoff quantity for the cost item.
Actual qty (to date)	Shows the actual quantity claimed to date for the cost item.
Claimed quantity	Required field. Enter the quantity you wish to claim for this entry.
Posted date	Select a posting date for this claiming entry.
Actuals user defined 1-2	Use these fields to enter dates based on customized field labels set up in Platform > Suite Administration > Custom labels .
Actuals user defined 3-6	Use these free text fields to enter any variable attribute based on customized field labels set up in Platform > Suite Administration > Custom labels .

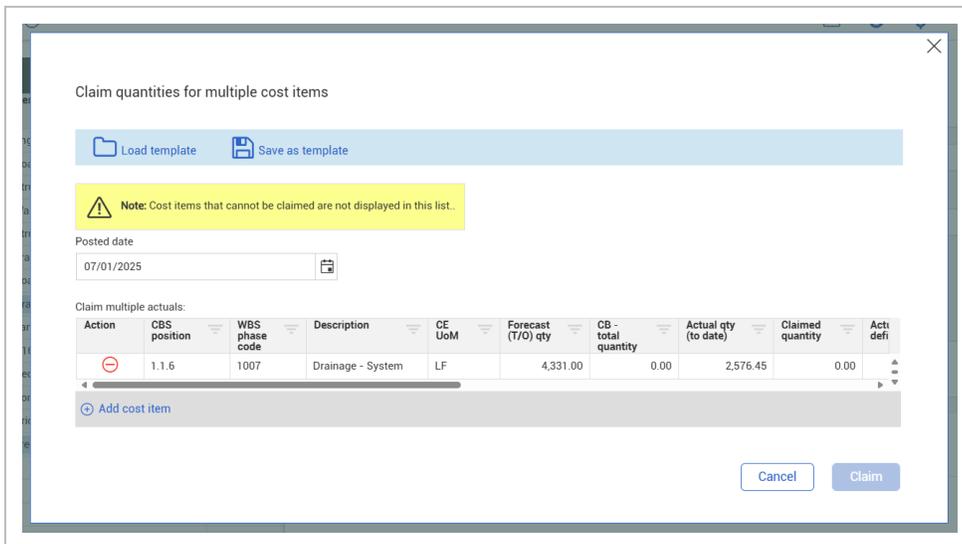
(continued)

Field	Details
Estimate resource	You can select a resource from the Project library. You can only select one resource per entry.
Notes	Enter any notes pertinent to this claiming entry.

You can enter negative quantities when claiming in Control.

5.7.1.1 Claim quantities for multiple cost items

Select Claim quantities for multiple cost items to claim actuals for multiple cost items on the same posting date. The Claim quantities for multiple cost items window shows the same fields that are found on the Quantities claiming tab in a grid format.



Follow the steps below to complete a manual claim for multiple cost items.

Claim Quantities for Multiple Cost Items

1. From Claim Actuals > Quantities of the Actuals Details slide-out panel, click **Claim quantities for multiple cost items**.

Notes 4000

+ Add claimed quantity Claim quantities for multiple cost items

Cancel Apply

2. Select the posting date for this claim.

Claim quantities for multiple cost items

Load template Save as template

⚠ Note: Cost items that cannot be claimed are not displayed in this list.

Posted date
07/01/2025

JULY 2025						
SU	MO	TU	WE	TH	FR	SA
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Sequence	Description	CE UoM	Forecast (T/O) qty	CB - total quantity	Actual qty (to date)
7	Drainage - System	LF	4,331.00	0.00	2,576.45

Cancel Claim

3. Click **Add cost item** to add additional cost items to claim on this posting date.

Claim quantities for multiple cost items

Load template Save as template

⚠ Note: Cost items that cannot be claimed are not displayed in this list.

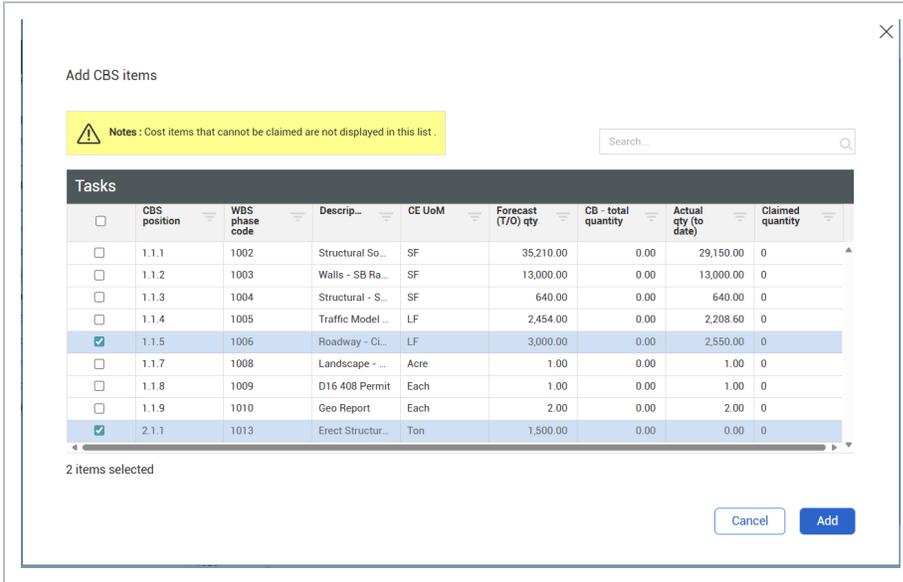
Posted date
07/01/2025

Claim multiple actuals:										
Action	CBS position	WBS phase code	Description	CE UoM	Forecast (T/O) qty	CB - total quantity	Actual qty (to date)	Claimed quantity	Acti	defi
-	1.1.6	1007	Drainage - System	LF	4,331.00	0.00	2,576.45	0.00		

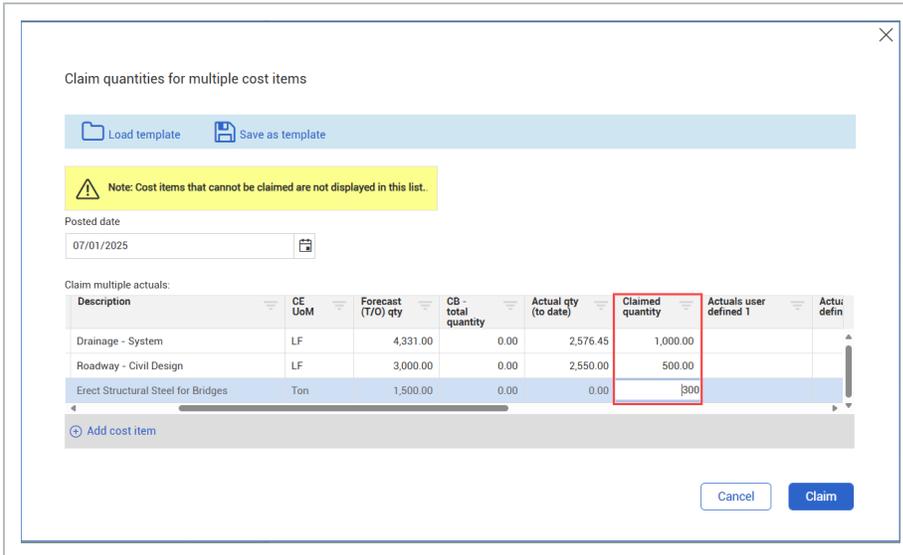
+ Add cost item

Cancel Claim

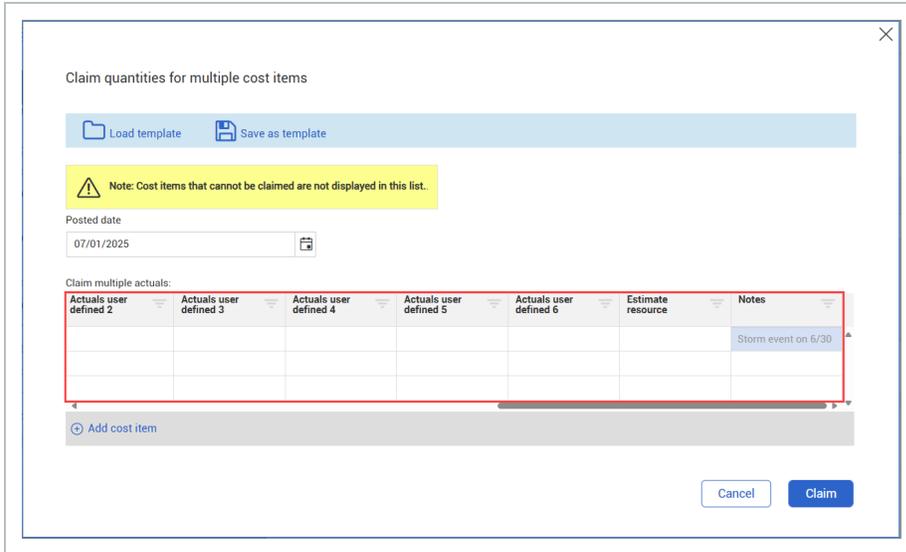
- Click the checkbox to select cost items. When you are finished, click **Add**.



- Click inside the **Claimed quantity** field to enter a quantity for each cost item.

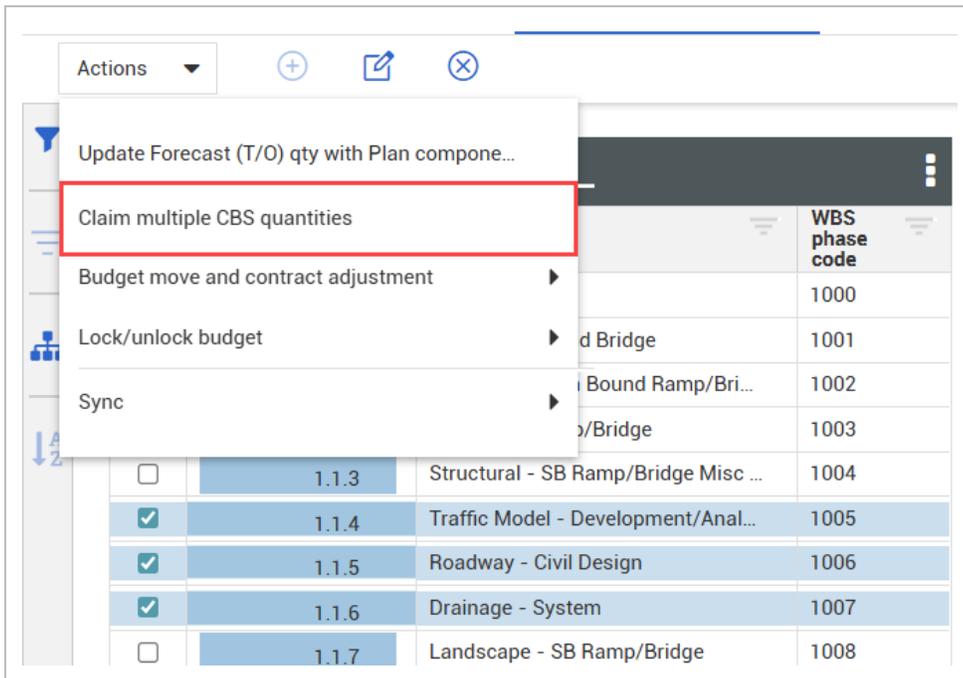


- Enter additional details as necessary.



7. When finished, click **Claim**.

Note that you can also claim quantities for multiple cost items by selecting the cost items in the CBS register, and then opening the Actions menu and choosing **Claim multiple CBS quantities**.



5.7.2 Claim Man-hours

Claim work hours for a specific employee or for a crew on the Man Hours tab in the Actuals details slide-out panel.

To claim hours for a crew, enter the total number of hours worked in the Number of hours field and leave the Employee name and Employee ID number fields blank.

See the table below for details on the available fields on the Man Hours tab.

Field	Details
CE total MHRs	Shows the Current Estimate total man-hours for the cost item.
MHRs (to date)	Shows the actual man-hours claimed to date for the cost item.
Number of hours	Required field. Enter the hours you wish to claim for this entry.
Posted date	Select a posting date for this claiming entry.
Employee name	If entering hours for a single employee, enter the employee name. Make sure that the entry matches the name in the employee record.
Employee ID	If entering hours for a single employee, enter the ID number. Make sure that the entry matches the ID number in the employee record.

Field	Details
Actuals user defined 1-2	Use these fields to enter dates based on customized field labels set up in Platform > Suite Administration > Custom labels .
Actuals user defined 3-6	Use these free text fields to enter any variable attribute based on customized field labels set up in Platform > Suite Administration > Custom labels .
Estimate resource	You can select a resource from the Project library. You can only select one resource per entry.
Notes	Enter any notes pertinent to this claiming entry.

5.7.3 Claim Equipment Hours

Claim hours for an equipment item on the Equipment Hours tab in the Actuals details slide-out panel. See the table below for details on the available fields on the Equipment Hours tab.

Field	Details
CE total equipment Hrs	Shows the Current Estimate total man-hours for the cost item.

Field	Details
Equipment Hrs (to date)	Shows the actual equipment hours claimed to date for the cost item.
Equipment ID #	You can enter the ID for the equipment item. Make sure that the entry matches the ID number in the equipment record.
Posted date	Select a posting date for this claiming entry.
Hours used	Required field. Enter the hours you wish to claim for this entry.
Actuals user defined 1-2	Use these fields to enter dates based on customized field labels set up in Platform > Suite Administration > Custom labels .
Actuals user defined 3-6	Use these free text fields to enter any variable attribute based on customized field labels set up in Platform > Suite Administration > Custom labels .
Estimate resource	You can select a resource from the Project library. You can only select one resource per entry.
Notes	Enter any notes pertinent to this claiming entry.

5.7.4 Claim Cost

Claim cost for a cost item on the Cost tab in the Actuals details slide-out panel. See the table below for details on the available fields on the Cost tab.

	CLAIM ACTUALS	ACTUALS HISTORY	COMMITMENTS																								
QUANTITIES	CE total cost	Actual cost (to date)																									
MAN HOURS	\$ 50,000.00	\$ 5,221.75																									
EQUIPMENT HOURS	<table border="1"> <tr> <td>Claimed cost</td> <td>Cost category</td> </tr> <tr> <td><input type="text" value="Claimed cost"/></td> <td><input type="text" value=""/></td> </tr> <tr> <td>Posted date</td> <td>Actuals user defined 1</td> </tr> <tr> <td><input type="text" value="07/01/2025"/></td> <td><input type="text" value=""/></td> </tr> <tr> <td>Actuals user defined 2</td> <td>Actuals user defined 3</td> </tr> <tr> <td><input type="text" value=""/></td> <td><input type="text" value="Actuals user defined 3"/></td> </tr> <tr> <td>Actuals user defined 4</td> <td>Actuals user defined 5</td> </tr> <tr> <td><input type="text" value="Actuals user defined 4"/></td> <td><input type="text" value="Actuals user defined 5"/></td> </tr> <tr> <td>Actuals user defined 6</td> <td>Estimate resource</td> </tr> <tr> <td><input type="text" value="Actuals user defined 6"/></td> <td><input type="text" value=""/></td> </tr> <tr> <td>Notes</td> <td>4000</td> </tr> <tr> <td><input type="text" value="Notes"/></td> <td></td> </tr> </table>			Claimed cost	Cost category	<input type="text" value="Claimed cost"/>	<input type="text" value=""/>	Posted date	Actuals user defined 1	<input type="text" value="07/01/2025"/>	<input type="text" value=""/>	Actuals user defined 2	Actuals user defined 3	<input type="text" value=""/>	<input type="text" value="Actuals user defined 3"/>	Actuals user defined 4	Actuals user defined 5	<input type="text" value="Actuals user defined 4"/>	<input type="text" value="Actuals user defined 5"/>	Actuals user defined 6	Estimate resource	<input type="text" value="Actuals user defined 6"/>	<input type="text" value=""/>	Notes	4000	<input type="text" value="Notes"/>	
Claimed cost	Cost category																										
<input type="text" value="Claimed cost"/>	<input type="text" value=""/>																										
Posted date	Actuals user defined 1																										
<input type="text" value="07/01/2025"/>	<input type="text" value=""/>																										
Actuals user defined 2	Actuals user defined 3																										
<input type="text" value=""/>	<input type="text" value="Actuals user defined 3"/>																										
Actuals user defined 4	Actuals user defined 5																										
<input type="text" value="Actuals user defined 4"/>	<input type="text" value="Actuals user defined 5"/>																										
Actuals user defined 6	Estimate resource																										
<input type="text" value="Actuals user defined 6"/>	<input type="text" value=""/>																										
Notes	4000																										
<input type="text" value="Notes"/>																											
COST																											

Field	Details
CE total cost	Shows the Current Estimate total cost for the cost item.
Actual cost (to date)	Shows the actual cost claimed to date for the cost item.
Claimed cost	Required field. Enter the cost you wish to claim for this entry.
Cost category	Required field. Select the cost category for this entry.
Posted date	Select a posting date for this claiming entry.
Actuals user defined 1-2	Use these fields to enter dates based on customized field labels set up in Platform > Suite Administration > Custom labels .
Actuals user defined 3-6	Use these free text fields to enter any variable attribute based on customized field labels set up in Platform > Suite Administration > Custom labels .
Estimate resource	You can select a resource from the Project library. You can only select one resource per entry.
Notes	Enter any notes pertinent to this claiming entry.

5.7.5 Add Additional Claiming entries

You can record separate claiming entries for a single cost item from the Actuals Details slide-out panel. Click the Add icon from the bottom of the slide-out panel to add additional entry fields.

The screenshot shows a slide-out panel with a 'Notes' field at the top, containing the text 'Notes' and a character count of '4000'. Below the notes field, there is a red-bordered button labeled '+ Add claimed quantity'. To its right is a link that says 'Claim quantities for multiple cost items'. At the bottom right of the panel are two buttons: 'Cancel' and 'Apply'.

5.7.6 User-Defined Fields

There are 6 user-defined fields you can use when you claim actuals in Control. These field labels can be customized to fit your business practices. Examples of custom labels include “Start Date”, “Area”, or “Category”. An additional field is available to select a resource from the Project library.

The screenshot shows a slide-out panel with several input fields. At the top, there are 'Number of hours' (with a placeholder 'Number of hours') and 'Posted date' (with the value '07/01/2025' and a calendar icon). Below these are 'Employee name' (with a placeholder 'Employee name') and 'Employee ID number' (with a placeholder 'Employee ID number'). A red-bordered box highlights a section containing six 'Actuals user defined' fields, labeled 'Actuals user defined 1' through '6'. Each of these fields has a placeholder 'Actuals user defined [number]' and a calendar icon. Below this section is an 'Estimate resource' field with a placeholder 'Estimate resource'. At the bottom of the panel is a 'Notes' field with the text 'Notes' and a character count of '4000'.

Custom labels for the user-defined fields can be set up in Platform > Suite Administration > **Custom labels**.

User-defined field	Type	Description
Actuals user defined 1-2	Date	Use this field to enter dates, such as start and finish dates.
Actuals user defined 3-6	Free text	Use these fields to enter any variable attribute based on your business processes.
Estimate resource	Choice	Select a resource from the Project library. You can only select one resource per transaction.

5.8 ACTUALS BY API

Your organization can set up API integrations to synchronize actuals between InEight Control and an ERP or other external system. Refer to the [Control Integration Specification](#) document for more details.

5.9 ESTIMATED ACTUALS

Estimated actuals lets you track costs, quantities, man-hours, and equipment hours on a cost item before these values are validated through the ERP system. This provides more up-to-date visibility on progress and increases forecast accuracy. Estimated actuals can be generated in Control through quantity claims, or brought in from approved daily plans in Progress. After actuals are validated in the ERP system, you can reverse the estimated actuals and maintain the confirmed actuals.

To view estimated actuals in Control, you must first enable the feature in Control's project settings. To enable, go to the Project Tracking tab in settings, and under Estimated actuals, switch the **Turn on estimated actuals** toggle to *ON*, and then select the applicable cost categories under Control and Progress.

For each cost category, we recommend enabling the setting for either Control or Progress only. We don't recommend enabling the setting for both applications at the same time.

Turn on estimated actuals:

Actual type	Enable estimated actuals for:	
	Control	Progress
Labor cost	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Labor man hours	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction Equipment cost	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Construction equipment hours	<input type="checkbox"/>	<input checked="" type="checkbox"/>
FOM Rented Equipment cost	<input type="checkbox"/>	
Supplies cost	<input checked="" type="checkbox"/>	
Materials cost	<input checked="" type="checkbox"/>	
Subcontract cost	<input checked="" type="checkbox"/>	
Fees cost	<input type="checkbox"/>	
Allowance cost	<input type="checkbox"/>	
G & A cost	<input type="checkbox"/>	
Undefined cost	<input type="checkbox"/>	

When you enable estimated actuals, you can add relevant columns to a data block to view estimated actuals.

Estimated Actuals											
Confirmed actual cost	Confirmed actual equipment	Confirmed actual man hours	Confirmed actual qty	Estimated actual cost	Estimated actual equipment	Estimated actual man hours	Estimated actual qty	Last estimated actual cost	Last estimated actual eqp hours reversal	Last estimated actual man hours reversal	
\$ 0.00	0.00	0.00	0.00	\$ 0.00	0.00	0.00	0.00				
\$ 92,300.00	0.00	2,030.00	2,150.00	\$ 0.00	0.00	0.00	0.00				
\$ 103,500.00	0.00	1,890.00	695.00	\$ 0.00	0.00	0.00	0.00				
\$ 76,300.00	0.00	1,620.00	0.00	\$ 33,537.35	151.00	580.50	0.00				
\$ 51,300.00	0.00	1,060.00	80.00	\$ 26,761.60	120.00	500.00	0.00				
\$ 20,500.00	0.00	400.00	21.00	\$ 6,054.00	11.00	0.00	0.55	05/14/2025 3:...		05/14/2025 3:13.5...	
\$ 4,500.00	0.00	160.00	44.00	\$ 721.75	20.00	80.50	0.00	05/06/2025 1:...			

The following table shows columns related to estimated actuals.

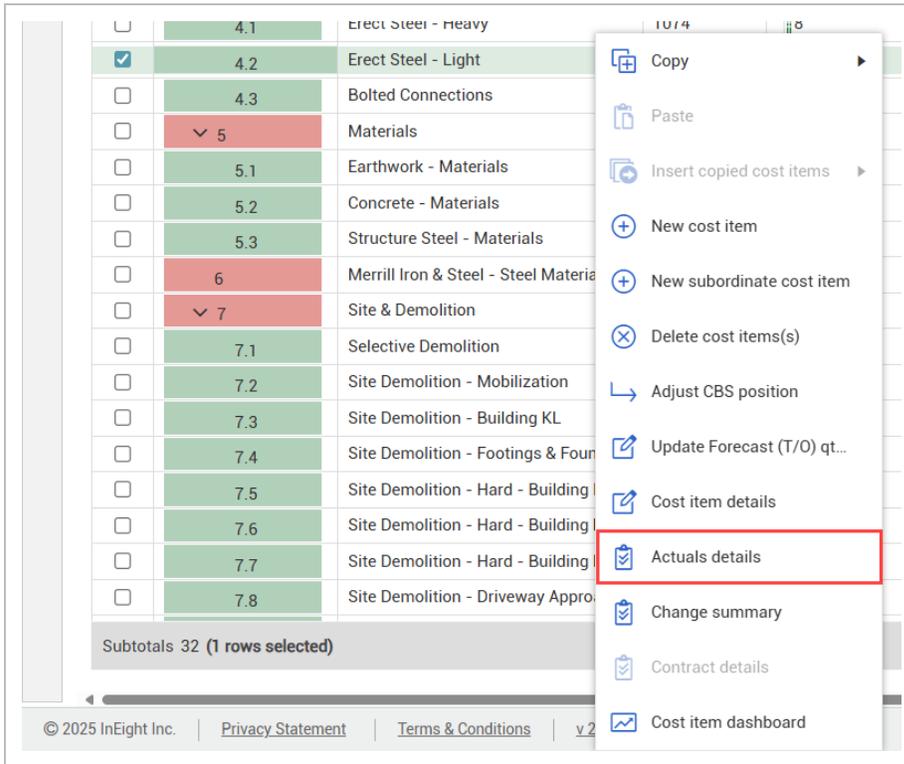
Column	Description
Confirmed actual cost	The expended cost verified through the ERP system.
Confirmed actual equipment	The expended equipment cost verified through the ERP system.
Confirmed actual man hours	The number of labor hours verified through the ERP system.
Confirmed actual qty	The cost item quantity verified through the ERP system.
Estimated actual cost	Recorded actual cost that has not yet been confirmed through

Column	Description
	the ERP system.
Estimated actual equipment	Recorded equipment cost that has not yet been confirmed through the ERP system.
Estimated actual man hours	Recorded labor hours that have not yet been confirmed through the ERP system.
Estimated actual qty	Recorded cost item quantity that has not yet been confirmed through the ERP system.
Last estimated actual cost reversal	The date and time the last Reverse estimated actuals > Reverse estimated actual cost action was performed.
Last estimated actual man hours reversal	The date and time the last Reverse estimated actuals > Reverse estimated actual man-hours and labor cost action was performed.
Last estimated actual eqp hours reversal	The date and time the last Reverse estimated actuals > Reverse estimated actual equipment hours and construction cost action was performed.

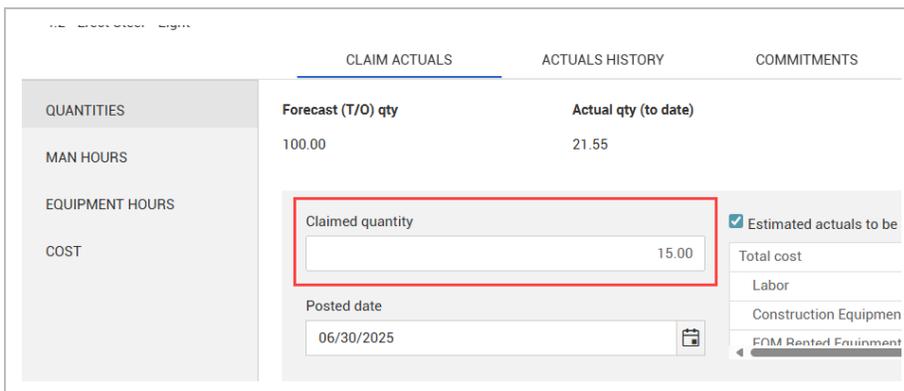
5.9.1 Claim Estimated Actuals in Control

Claim Estimated Actuals

1. From the CBS, right-click a cost item, and then select **Actuals details**.



2. From the Quantities tab, enter a claimed quantity.



- When you select Estimated actuals to be added on claiming, cost category values automatically populate based on the claimed quantity entered using Current Estimate unit rates.

- Click **Apply** when you are done.

The estimated values for the cost item can now be viewed in the relevant columns.

Estimated Actuals						
Confirmed actual cost	Confirmed actual man hours	Confirmed actual qty	Estimated actual cost	Estimated actual equipment	Estimated actual man hours	Estimated actual man hours
\$ 0.00	0.00	0.00	\$ 0.00	0.00	0.00	0.00
\$ 92,300.00	2,030.00	2,150.00	\$ 0.00	0.00	0.00	0.00
\$ 103,500.00	1,890.00	695.00	\$ 0.00	0.00	0.00	0.00
\$ 0.00	0.00	0.00	\$ 0.00	0.00	0.00	0.00
\$ 76,300.00	1,620.00	0.00	\$ 28,703.85	140.00	610.50	610.50
\$ 51,300.00	1,060.00	80.00	\$ 26,761.60	120.00	500.00	500.00
\$ 20,500.00	400.00	21.00	\$ 1,220.50	0.00	30.00	30.00
\$ 4,500.00	160.00	44.00	\$ 721.75	20.00	80.50	80.50

5.9.2 Estimated Actuals from Progress

With the correct settings enabled, estimated actuals can be brought in from Progress based on approved daily plans. Estimated labor and equipment hours from Progress are calculated as approved hours multiplied by the operational rate codes.

This calculation differs from estimated actuals claimed in Control, which are based on claimed quantities multiplied by the current estimate unit rate.

Note in the example below, prior to the creation of a new daily plan, the estimated actuals for this cost item have a value of 0.

Tasks	CBS position	Description	WBS phase code	Confirmed actual cost	Confirmed actual equipment	Confirmed actual man hours	Confirmed actual qty	Estimated actual cost	Estimated actual equipment	Estimated actual man hours	Estimated actual qty	Last estimated actual cost
<input type="checkbox"/>	1	Job Overhead	1002	\$ 0.00	0.00	0.00	0.00	\$ 0.00	0.00	0.00	0.00	
<input type="checkbox"/>	2	Earthwork	1069	\$ 92,300.00	0.00	2,030.00	2,150.00	\$ 0.00	0.00	0.00	0.00	
<input type="checkbox"/>	3	Concrete	1071	\$ 103,500.00	0.00	1,890.00	695.00	\$ 0.00	0.00	0.00	0.00	
<input type="checkbox"/>	4	Bolted Connections	1110	\$ 0.00	0.00	0.00	0.00	\$ 0.00	0.00	0.00	0.00	
<input type="checkbox"/>	5	Structural Steel	1073	\$ 76,300.00	0.00	1,620.00	0.00	\$ 28,703.85	140.00	610.50	0.00	
<input type="checkbox"/>	5.1	Erect Steel - Heavy	1074	\$ 51,300.00	0.00	1,060.00	80.00	\$ 26,761.60	120.00	500.00	0.00	
<input checked="" type="checkbox"/>	5.2	Erect Steel - Light	1005	\$ 20,500.00	0.00	400.00	21.00	0.00	0.00	0.00	0.00	05/14/2025 2...
<input type="checkbox"/>	5.3	Bolted Connections	1006	\$ 4,500.00	0.00	160.00	44.00	\$ 721.75	20.00	80.50	0.00	05/06/2025 1...
<input type="checkbox"/>	6	Materials	1084	\$ 604,400.00	0.00	0.00	0.00	(\$ 250,000.00)	0.00	0.00	0.00	

In Progress, labor hours and equipment hours are tracked on the Time Sheet tab of a daily plan.

Steel Structure Training Job 2 | 1... / Progress / Daily planning

Daily Plans > Erect Steel Module 12 - 05/14/2025 (Execution) - Plan ID 63

OVERVIEW DETAILS TIME SHEET QUANTITIES NOTES / ISSUES

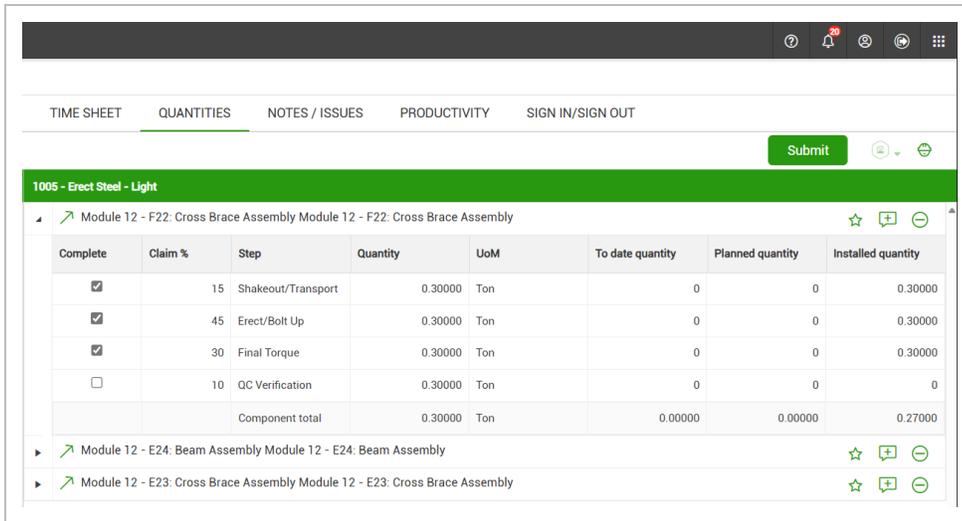
1005 Erect Steel - Light
:32 : : :11

Alejandro Ramirez
Laborer - Laborer Journeyman
IN8-10023
MH : 8
ST: 8

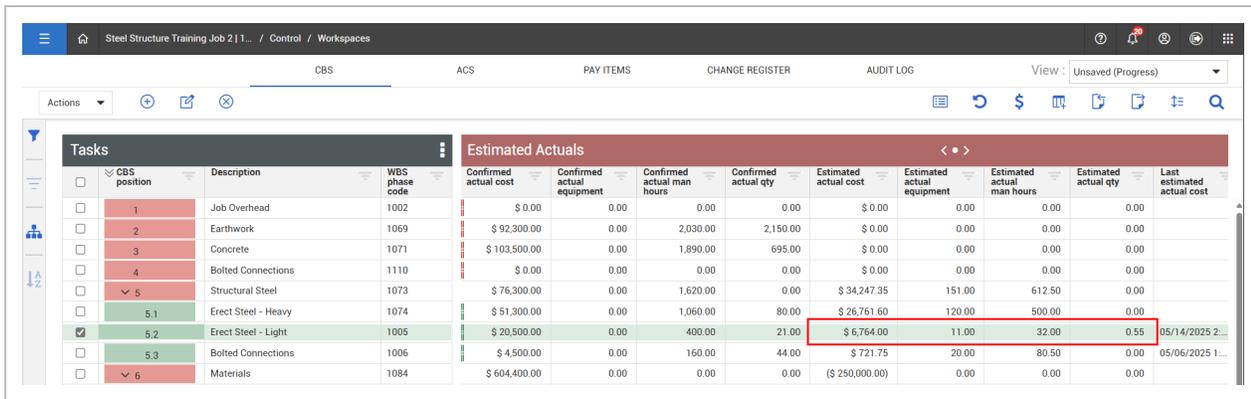
Maria Popova
Iron Worker - Iron Worker (Stru...
IN8-10013
MH : 8
ST: 8

Grove-RT880E Crane
MC-10000000
MH : 8
Operated: 8

Quantities are tracked on the Quantities tab of a daily plan.



After the daily plan is submitted and approved in Progress, the estimated actuals values automatically update in Control.



Estimated actuals values are only general estimates. They are not confirmed until synced with an ERP or an external payroll system.

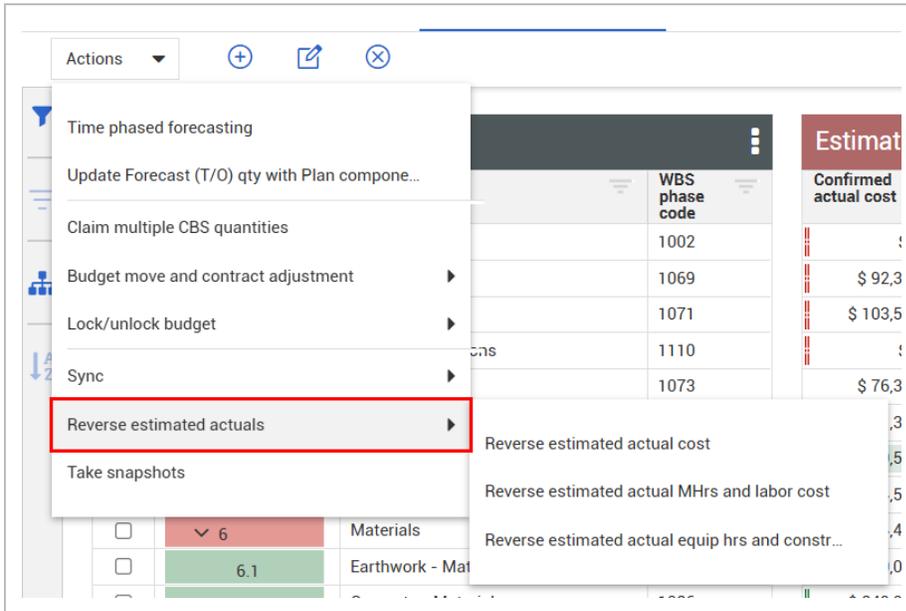
5.9.3 Reverse Estimated Actuals

After actuals are reviewed and confirmed in your ERP system, they are brought into Control through a sync. These values are then reflected as “confirmed” actuals. Following this process, you can reverse the estimated actuals, since the confirmed actuals now reflect the most up-to-date information.

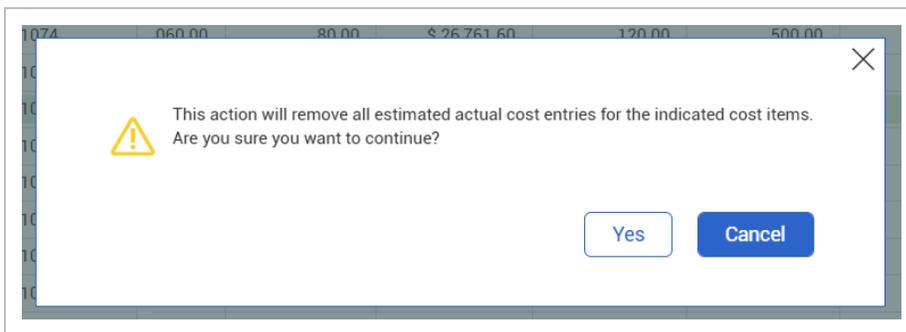
If you keep the estimated values without reversing after syncing with the ERP system, those values are detected as double values.

Reverse Estimated ACTuals

1. From the CBS, select the cost items which have recorded estimated actuals.
2. From the Actions menu, select **Reverse estimated actuals**, and then select the appropriate type of reversal.



3. Click **Yes** to confirm the reversal.



4. In the CBS, the estimated values are reset to 0.

5.10 ACTUALS HISTORY

Once progress is tracked against a cost item, you can view its actuals claim history. You can view actuals history of a cost item by right clicking on a cost item and selecting **Actuals details** from the menu. On the resulting slide out panel, you can view the history of when actual quantities, costs, and man-hours were posted by clicking on the Actuals History tab of the cost item.

The Actuals history tab displays and groups the actual claim history by posting date. Within in each posting date folder you can view as-built progress details of quantity, cost, man-hours, and equipment hours of the specific cost item selected in the CBS.

Posting date	Quantity	Cost	Man hours	Equipment hours
11/16/2018 View more	0.00	\$ 0.00	40.00	0.00

In addition, by clicking on the posting date link, you can view more specific claim history details such as actuals type, cost category, employee change by, and notes.

Actuals type	Actuals completed	Cost category	Changed by	Notes
Man Hours	40.00		Control - [Paul Bennion]	

5.11 PROGRESS CONTROL SETTINGS

InEight Control integrates with several other programs. Within the tool, a few specific columns allow you to manage the information that is sent to other InEight applications and to your ERP system. Below is a table of the key columns and their functions.

Column Name	Function
Allow as-built	Allows you to choose whether a cost item accepts actual cost, quantities, both, or none. Once this item receives actual costs, quantities, or man-hours, this setting cannot be adjusted (changed from All to None).

Column Name	Function
As-built lock	<p>Once you lock the ERP status, your ERP does not allow the WBS to be progressed.</p> <p>Example use cases for locking ERP status:</p> <ul style="list-style-type: none"> • Work will not begin for two more years • Foreman is not allowed to claim more quantity because work is 100% complete • Work is complete and you do not want people mistakenly charging cost to completed to cost items
Hide in Plan, Progress, and Design	<p>Allows the user to choose whether to have a cost item available to use in InEight Plan, InEight Progress, and InEight Design.</p> <p>Example use case for using the hide feature:</p> <ul style="list-style-type: none"> • Indirect staff cost codes should not be available for direct labor to charge. <p>For more information, see Hide in Plan, Progress, and Design.</p>

The steps below walk you through the various columns and discuss options for changing the settings.

Progress Control Settings

For this step you will need to have a subordinate available to use.

1. On the Control main page CBS tab, select the **Progress** view.
2. Navigate to the **Task Details** data block.
3. Select the second **Data Panel** in the Task Details data block.
4. Double click in the **Allow as-Built** field of the subordinate cost item and select the drop-down arrow.
5. Select **All**.
6. Navigate to the **Third Panel** of the Task Detail data block.
7. Select the **Hide in Plan, Progress, and Design** check box of the cost item.

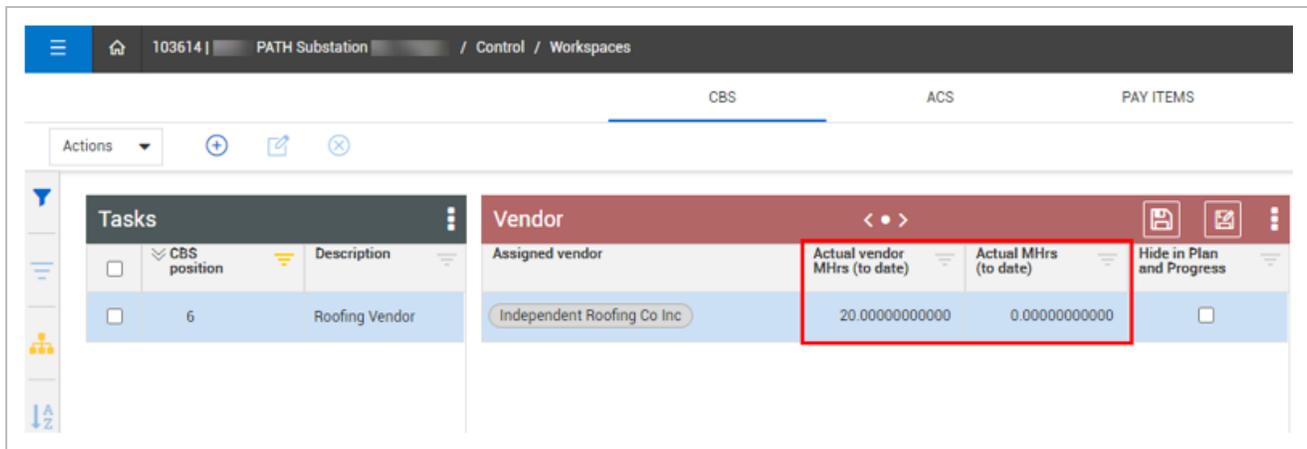
5.12 VENDOR WORK HOURS FROM PROGRESS

5.12.1 Vendor Mhrs from Progress

You can see the subcontract man-hours in Control for cost items that derive from InEight Progress. Subcontract performance can be tracked in Progress with data coming into Control for increased transparency, improved monitoring, and analysis.

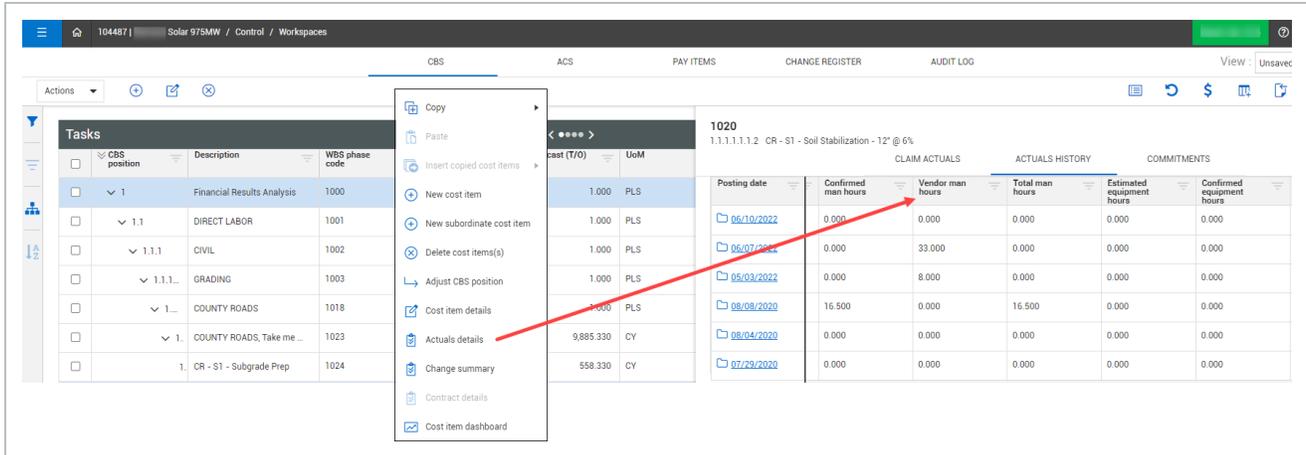
In addition to assigning a vendor to a cost item, and viewing the assigned vendors from InEight Contract, you can also see the claimed Mhrs originating from Progress in Control > **Workspaces**, upon approval in Progress.

After the claimed vendor hours are approved in Progress, the Actual vendor Mhrs (to date) and Actual columns populate with the claimed hours. This helps to find and focus on the true causes of any issues and support the ongoing work in the best way possible.

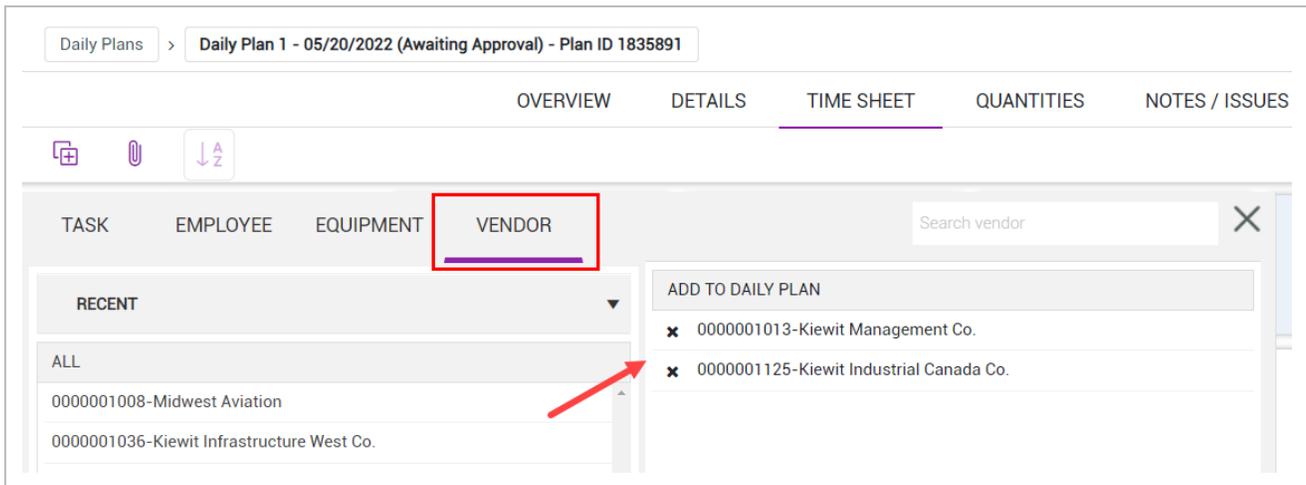


Tasks		Vendor			
CBS position	Description	Assigned vendor	Actual vendor Mhrs (to date)	Actual Mhrs (to date)	Hide in Plan and Progress
6	Roofing Vendor	Independent Roofing Co Inc	20.000000000000000	0.000000000000000	<input type="checkbox"/>

The Actuals Details slide-out panel shows the number of hours worked by the assigned vendor.



In Progress > Daily Plans > **Timesheet**, the new Vendor tab lets you choose which vendors to include on your daily time sheet as selected vendors to claim hours.



Only those vendors that are assigned in Control > Workspaces can claim hours against a timesheet Progress’s daily plan. In Progress, if a vendor is not assigned to a cost item in Control, the vendor hours task block is disabled and hours cannot be claimed.

103614 | - PATH Substation / Progress / Daily plan

Daily Plans > Install Roof - 04/07/2022 (Awaiting Approval) - Plan ID 1835468

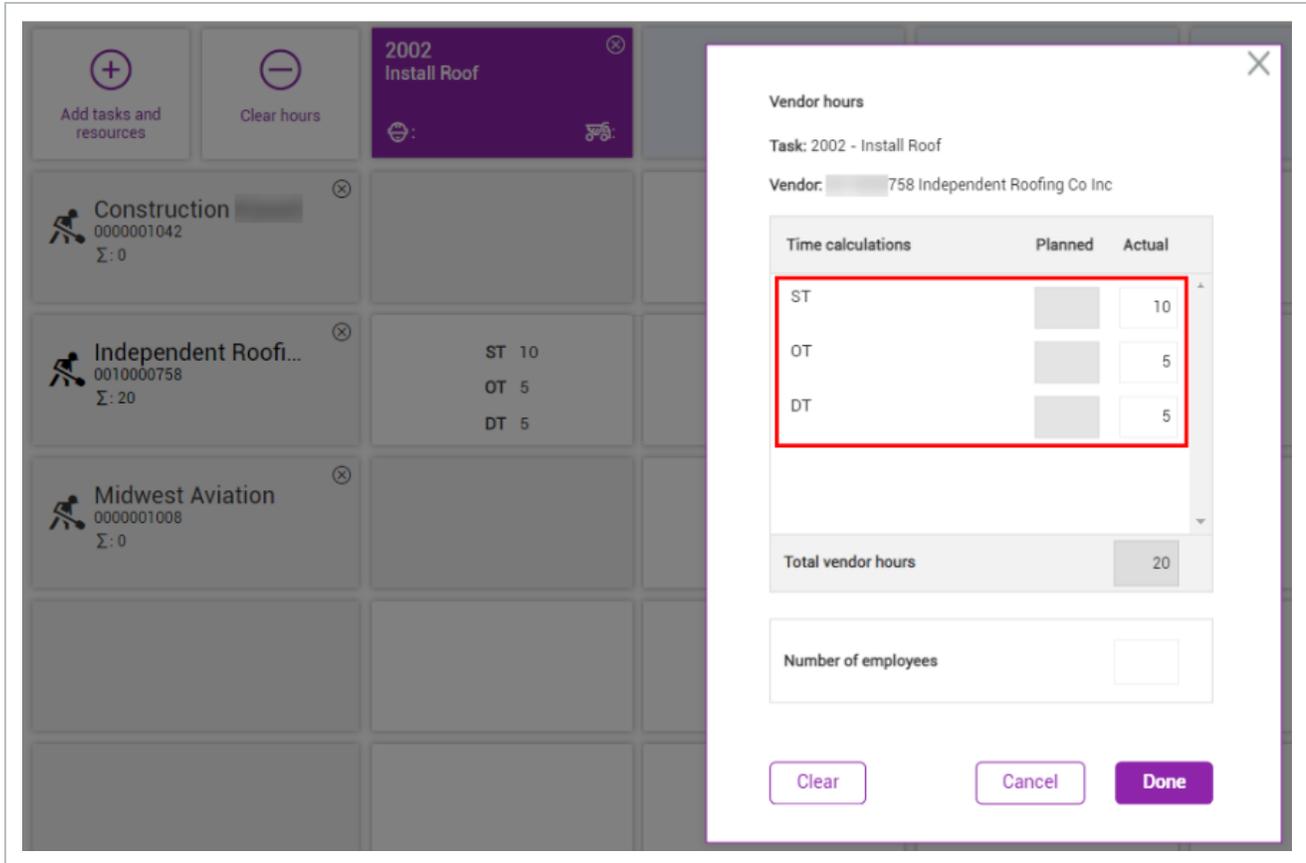
2002 Install Roof

Add tasks and resources

Clear hours

Construction 0000001042 Σ: 0		Vendor not assigned in Control
Independent Roofi... 0010000758 Σ: 20	ST 10 OT 5 DT 5	Vendor is assigned in Control
Midwest Aviation 0000001008 Σ: 0		Vendor not assigned in Control

If a vendor is assigned to a cost item in Control, the vendor can claim actual hours.



Note that the Actual vendor MHrs (to date) are recorded and reported on separately from the self-perform work hours that are recorded in the Actual MHrs (to date) fields.

5.13 TRACK OPEN/REMAINING AND TOTAL COMMITTED COSTS

Additional information about purchase orders and contracts (for any particular task) can be viewed and updated within CBS columns. This provides users with a more comprehensive data set in one location.

Committed costs are the purchase orders or subcontract commitments that a cost item may have against it. To determine open and total commitments, look at the agreed or pending purchase order amounts that are associated to any particular cost item. This information is typically exported from your ERP or accounting system.

Open/Remaining committed cost: Total committed cost - Actual cost (amount that still needs to be paid for a cost item).

Total committed cost: The summation of all purchase order and/or contract obligation amounts assigned to a cost item.

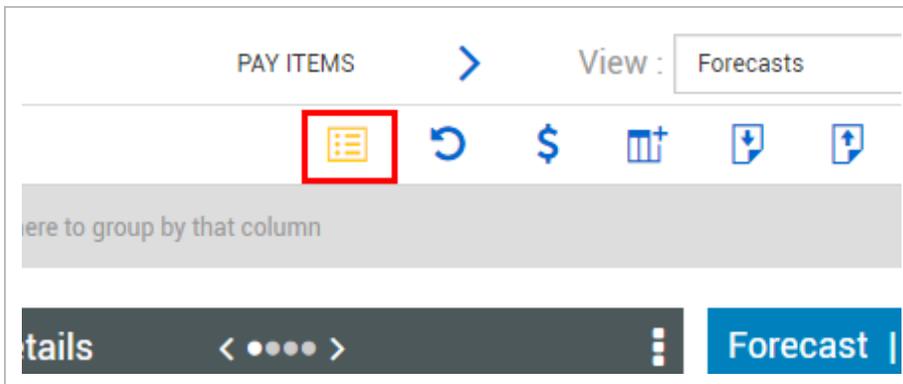
Open/Remaining committed cost adjustment: A debit or credit to the existing Open committed/Remaining cost value.

New open committed cost: Open/Remaining committed cost + Open/Remaining committed cost adjustment.

However, there is also the option to use a generic API to push committed cost values into InEight Control. If your organization does not have an ERP system, you can configure the endpoints in APIM and push over your committed cost values.

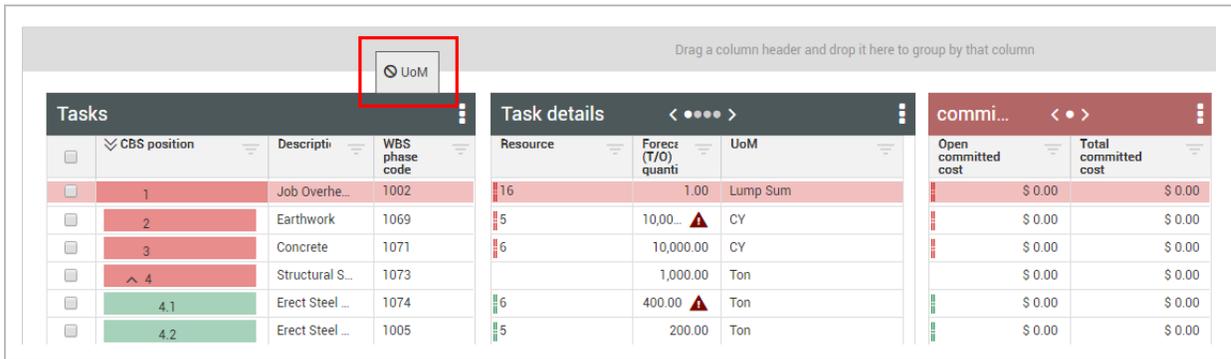
Viewing Open/Remaining and Total Committed Costs

1. On the CBS register tab, select the **Group Columns** icon to the right of the page. The icon will turn yellow when turned on.

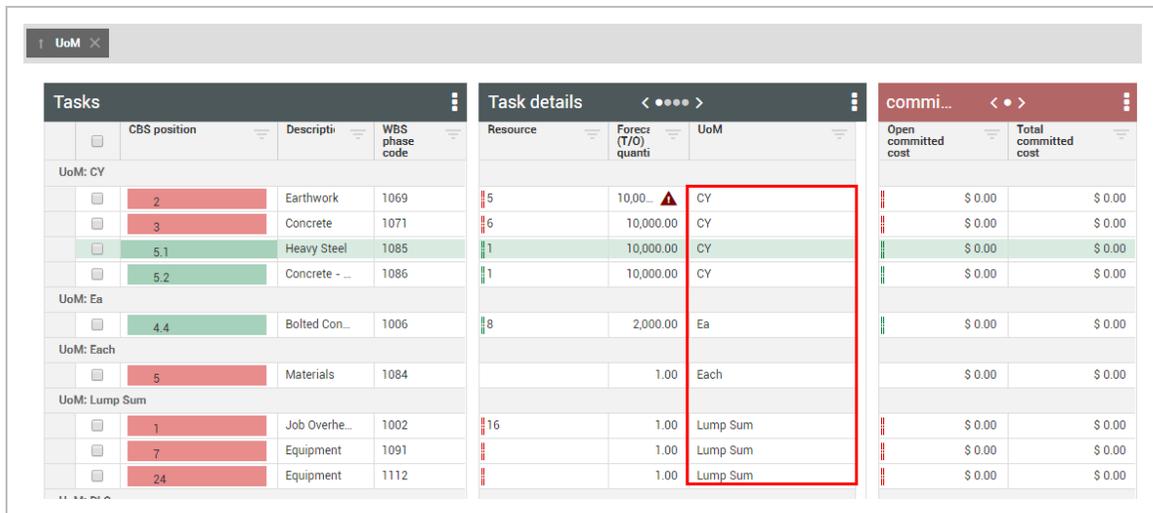


- Tasks, Task details and Commitments data block need to be present on this screen
- If the Commitments data block has not been created, create a custom data block using the Data Icon and include columns Remaining committed cost, and Total committed cost. Insert this data block into your view.

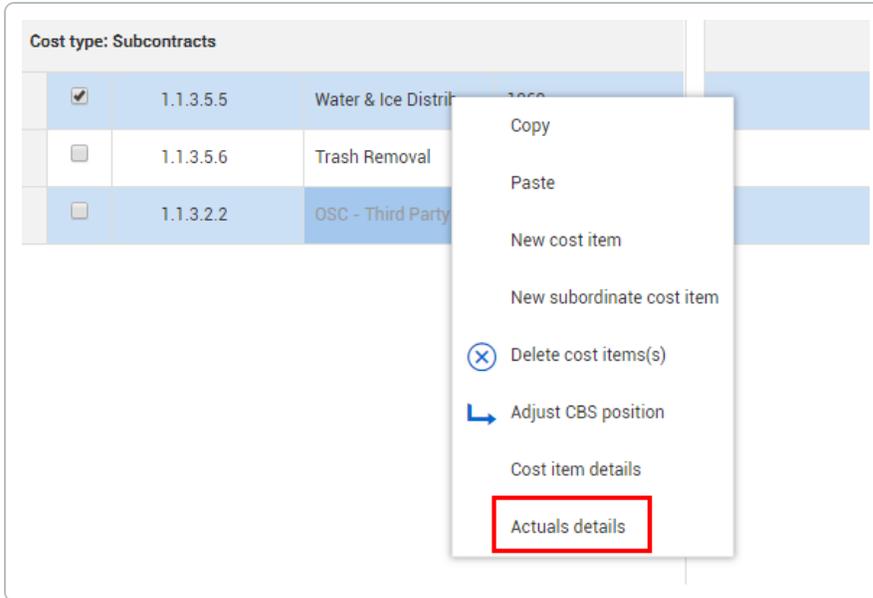
2. Drag the **UoM** column from the Task details data block, and drop it into the grey bar area



- Notice how UoM's are now visible by groups.



3. To view a more granular level of information, navigate into the **context menu** for a cost item, and select **Actuals details**.



4. Once in the Actuals details, navigate to the Commitments tab.
 - Here is a more concentrated view of the cost category breakdown of the Open and Total commitments
 - It's also possible to update information. *For example:* the below cost item for Water & Ice Distribution, the New total committed cost is showing that a contract was signed

for \$1,267.87.

1069
1.1.3.5.5 Water & Ice Distribution

CLAIM ACTUALS ACTUALS HISTORY **COMMITMENTS**

Open committed cost **Total committed cost**
\$ 700.00 \$ 1,267.87

Cost category	Open committed cost adjustment	New open committed cost	Total committed cost adjustment	New total committed cost
^ Total	\$ 0.00	\$ 700.00	\$ 0.00	\$ 1,267.87
v Labor	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Construction Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v FOM Rented Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Subcontract	\$ 0.00	\$ 700.00	\$ 0.00	\$ 1,267.87

- There is \$700.00 left remaining to pay the full \$1,267.87 subcontract, as shown in the New open committed costs column

1069
1.1.3.5.5 Water & Ice Distribution

CLAIM ACTUALS ACTUALS HISTORY COMMITMENTS

Open committed cost **Total committed cost**
\$ 700.00 \$ 1,267.87

Cost category	Open committed cost adjustment	New open committed cost	Total committed cost adjustment	New total committed cost
^ Total	\$ 0.00	\$ 700.00	\$ 0.00	\$ 1,267.87
v Labor	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Construction Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v FOM Rented Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Subcontract	\$ 0.00	\$ 700.00	\$ 0.00	\$ 1,267.87

- Assuming a bill of \$100.00 was just paid, it's possible to update the Open committed cost adjustment field with this value. Notice how the New open/remaining committed cost decreases to \$600.00, after making an adjustment of \$-100.00 to the Open committed cost adjustment field.

1069
1.1.3.5.5 Water & Ice Distribution

CLAIM ACTUALS ACTUALS HISTORY COMMITMENTS

Open committed cost Total committed cost
\$ 700.00 \$ 1,267.87

Cost category	Open committed cost adjustment	New open committed cost	Total committed cost adjustment	New total committed cost
^ Total	(\$ 100.00)	\$ 600.00	\$ 100.00	\$ 1,367.87
v Labor	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Construction Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v FOM Rented Equipment	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Supplies	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
v Subcontract	(\$ 100.00)	\$ 600.00	\$ 100.00	\$ 1,367.87

5. Select **Apply** to apply the above changes.

Tasks				Task details			Commi...	
<input type="checkbox"/>	CBS position	Description	WBS phase code	Forecast (T/O) quantity	UoM	Cost type	Open committed cost	Total committed cost
Cost type: Subcontracts								
<input type="checkbox"/>	1.1.3.2.2	OSC - Third Party I...	1054	13.00	MWk	Subcontracts	\$ 7,525.23	\$ 13,000.00
<input checked="" type="checkbox"/>	1.1.3.5.5	Water & Ice Distrib...	1069	3,489.55	DMH	Subcontracts	\$ 600.00	\$ 1,367.87
<input type="checkbox"/>	1.1.3.5.6	Trash Removal	1070	3,489.55	DMH	Subcontracts	\$ 309.00	\$ 873.24

6. Back on the CBS, you can now see your new updated values for this cost item.

Both the Open/Remaining committed cost and the Total committed cost values can be edited in the Actuals details slideout > Commitments tab (with the right permissions).

5.14 COMMITTED COST FROM CONTRACT

When the Drive committed cost values setting is on, your committed cost is then derived from Contracts.

When the switch is off, your committed cost is driven from the ERP. Regardless of the state of the switch, you can always manually enter your committed cost directly in the product or via a Microsoft Excel import.

Forecast

% Complete value at which delta from straight line calculation utilizes average performance

Drive committed cost values from Contract

With the setting on, all of your committed cost values initially zero out, and then pull over all of your committed cost values that exist in InEight Contract.

For example, if you have a cost item that is associated with a contract, those values are pulled over from Contract and populate the total committed cost and open/remaining committed cost columns.

The calculation is *Forecast final cost = your Total committed cost*; *Forecast remaining cost = your Open/Remaining Committed Cost*.

In a contract on the Line items tab, change your view to Progress. Take note of the WBS phase code and then view the Gross amount. The gross amount for the cost item is the exact amount for the total committed cost, which includes your line item amount, plus tax.

Total gross amount is your line item amount plus tax. That is going to be your total committed cost value. The calculation for that: *Total committed cost = Line item amount + Tax* (this is also called Gross amount in Contract)

If you have a cost item that is associated with multiple line items in a single contract or across multiple contracts, the total committed cost for that cost item is the gross amount for all the line items that cost item is associated with.

If the WBS element is associated to three different line items, the sum of those three gross amounts is the total committed cost value. A best practice is to associate a single cost item to a single line item.

To get your Open/Remaining Committed Cost, calculate what you still have to pay for your remaining commitments. It is your total committed costs minus what you have already paid. You track payments in contract in three different ways:

- goods receipts
- accruals
- invoices

Invoices are generated in your payment forms.

The calculation is *Open/Remaining Committed Cost = Total committed cost - Max(Goods receipt amount, Invoice amount) - Accrual amount*.

Exercise 5.1 – Progress Measurement

The purpose of this exercise is to give you more familiarity with the InEight Control progress measurement terminology.

1. From the CBS register in InEight Control, create a new viewset with one or more custom data blocks that contain the planned, earned, and actual measurements you would want to see in your project.
2. Add additional productivity measurements (e.g., CF, LEI) as desired.

Congratulations, you have completed this exercise!

Review

1. How can you determine what your productivity is for a specific timeframe?
 - a. Excel Spreadsheet (Date Range Select)
 - b. Forecast Final MH (Date Range Select)
 - c. CB Total MH (Date Range Select)
 - d. Actuals CB Productivity Factor (Date Range Select)

2. What term describes your Original Budget plus or minus approved changes?
 - a. Current Actuals
 - b. Current Budget
 - c. Current Estimate
 - d. Current Cost Changes

3. How can you view the actuals history of a cost item?
 - a. Select the Actuals History viewset
 - b. Right clicking on a cost item and selecting Cost item details
 - c. Right clicking on a cost item and selecting Actuals details
 - d. Selecting Actuals History from the Actions menu

Summary

As a result of this lesson, you can now:

- Define the measurements for analyzing the progress of a project
- Set up a Date Range for progress data
- Get Plan quantities, actual costs, and actual man-hours using the Sync feature
- Explain the settings used for managing progress data shared between applications
- Add and adjust actuals manually
- View actuals history

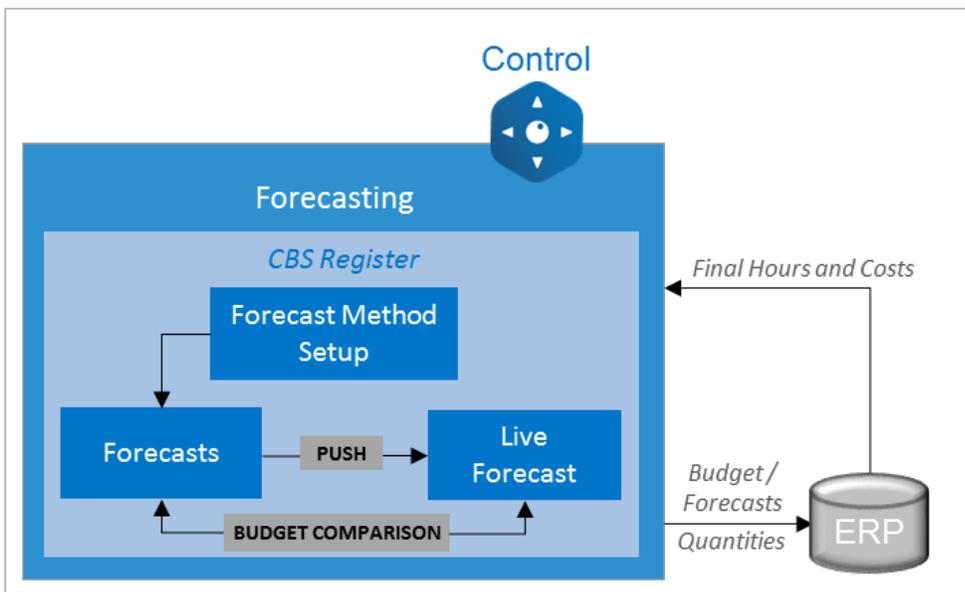
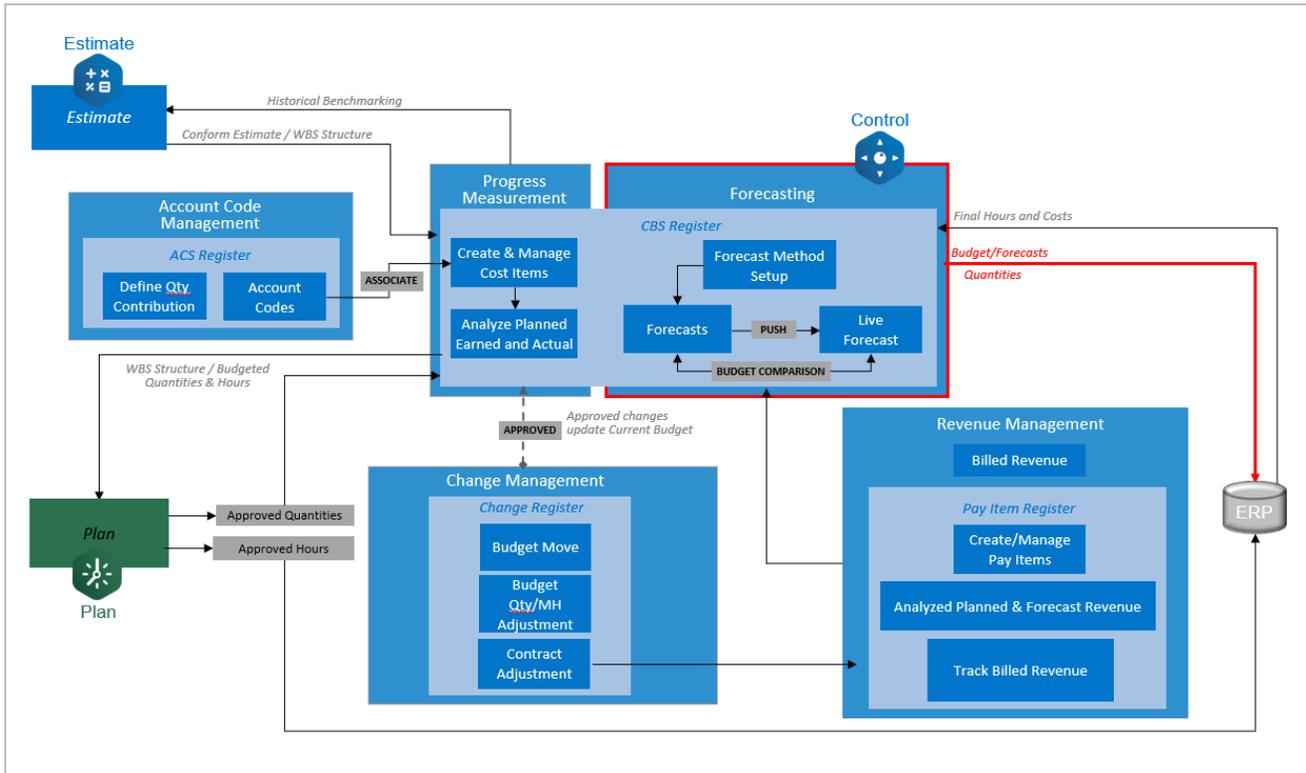
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CHAPTER 6 – FORECASTING

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6.1 FORECASTING WORKFLOW



6.2 FORECASTING OVERVIEW

Forecasting in InEight Control is the process of predicting project costs and progress based on current data and trends. Accurate forecasting helps project teams stay on budget and make informed decisions.

Depending on the size of your project, multiple engineers may be involved in forecasting tasks. For example, a large team might divide responsibilities by discipline, with discipline-specific field engineers preparing data for the project manager.

Control supports collaborative forecasting by allowing users to create and save their own forecasts without affecting others' work. These forecasts can then be shared and combined to build the official project forecast.

6.2.1 Private forecasts

Private forecasts give you flexibility to explore outcomes without impacting the official project data. In Control Workspaces, you can create multiple private forecasts to:

- Test different forecasting methods.
- Explore what-if scenarios (e.g., changes in labor rates or material costs).
- Compare alternative approaches before sharing with the team.

Private forecasts are visible only to you until you choose to share them. This makes them ideal for refining your work before contributing to a shared or live forecast.

6.2.2 Shared forecasts

Shared forecasts allow collaboration among team members. You can create up to five shared forecasts, which are automatically visible to all members assigned to the project. A shared forecast lets you do the following:

- Joint editing and review of forecast data.
- Real-time updates visible to everyone sharing the forecast.
- Preparing a consensus forecast before pushing it to the Live forecast.

Any member with the appropriate permissions can edit a shared forecast.

6.2.3 Live forecast

The Live forecast is the official project forecast used for financial reporting. It is automatically shared with all project members and managed through its own data block.

- Data from private or shared forecasts can be pushed to the Live forecast to keep it current.
- Only users with the appropriate permissions can update the Live forecast.

Live forecast		Current live forecast		10/15/2025	
Forecast total cost	Forecast total MHRs	Forecast total MHRs/unit	Forecast total productivity	Forecast total unit cost	Forecast method
\$ 250,000.00	0.00	0.00	0.00	\$ 250,000.00	Current estimate
\$ 406,300.00	8,310.00	0.83	0.96	\$ 40.63	Current estimate
\$ 1,499,250.00	29,805.00	2.98	1.01	\$ 149.93	Current estimate
\$ 1,056,600.00	21,226.00	21.23	0.99	\$ 1,056.60	Rollup
\$ 800,300.00	16,040.00	19.95	1.00	\$ 995.40	Current estimate
\$ 202,500.00	4,040.00	20.00	0.99	\$ 1,002.48	Current estimate
\$ 53,800.00	1,146.00	0.57	0.87	\$ 26.74	Current estimate
\$ 1,749,400.00	0.00	0.00	0.00	\$ 1,749,400.00	Rollup
\$ 250,000.00	0.00	0.00	0.00	\$ 25.00	Current budget
\$ 999,000.00	0.00	0.00	0.00	\$ 99.90	Current budget
\$ 500,400.00	0.00	0.00	0.00	\$ 500.40	Current budget

6.3 FORECAST METHODS

The Forecast Method establishes the appropriate forecast unit cost, which is used to calculate the total forecast cost. The Forecast Method applies to individual cost items and can be changed at any time.

You can use several forecast production methods to calculate the cost of the remaining work associated with a cost item. This enables the control of forecasting on a cost item by cost item basis by controlling the calculation of the cost of the remaining work. The different methods available for forecasting are:

Forecast Methods

Method	Calculation	Apply to
Current Budget (CB)	Actual Total cost + (Current budget unit cost * Quantity remaining)	Terminal or superior cost items

Forecast Methods (continued)

Method	Calculation	Apply to
Current Estimate (CE)	Actual Total cost + (Current estimate unit cost * Quantity remaining)	Terminal or superior cost items
Average Performance	Actual Total cost + (Actual unit cost * Quantity remaining)	Terminal or superior cost items
Manual	Manually entered forecast value	Terminal or Superior cost items
Rollup	The sum of subordinate forecast values	Superior cost items
Committed Cost	Actual Total cost + Open/Remaining committed cost	Terminal or superior cost items
None	The Forecast total cost will be 0	Terminal or superior cost items
Contract	Line item gross amount + Draft vendor change order amount + Remaining to buy (value allocated to the first line item in the contract)	Terminal or superior cost items
Detailed ETC	Actual Total cost + sum (Forecast remaining cost) for all assigned forecast resources.	Terminal cost items
Static manual time phased forecasting (TPF)	The sum of the manually distributed time phased forecast cost.	Terminal or superior cost items
Custom (customer specified)	Calculation specified by customer.	Terminal or superior cost items

6.3.1 Forecast Method Assignment

There are three different ways to assign a forecast method:

- Globally to all cost items in the project
- Selection of multiple cost items
- Individual cost item

6.3.1.1 Global Forecast Method

From the Actions menu, you can set the forecast method globally for all the cost items within the project.

The Global forecast method only applies to the forecasted items of the user who performs the function. It does not apply to other users in the project.

The following steps walk you through applying a global Forecast Method.

Set Global Forecast Method

1. From the CBS tab register, select the **View** menu.
2. Select the Project Controls viewset.
3. Click on the Actions drop-down menu and select Global Forecast Method.
4. Select the **Current Budget** Forecast Method.
5. Click **Apply**.

Only **terminal** cost items will adjust per the global Forecast Method selected. The parent item Forecast Method will stay as **Rollup**.

6. Click **Yes** on the prompt that appears.

6.3.1.2 Forecast Method for Selected Items

You can also set the forecast method for selected cost items, as shown in the steps below.

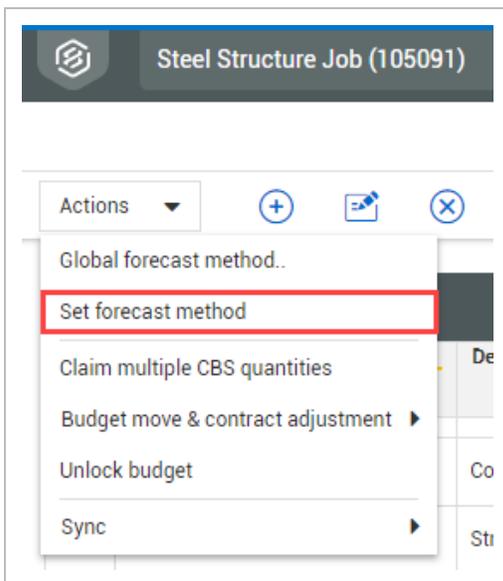
Set the Forecast Method for Selected Items

1. In the Tasks data block, select the **check box** next to the desired tasks.

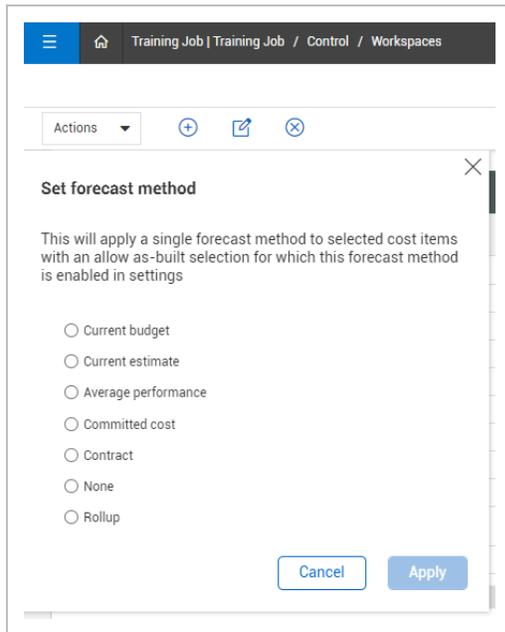
The screenshot shows the 'Control' software interface for a 'Steel Structure Training Job'. The 'Tasks' table is displayed with columns for CBS Position, Description, WBS Phase Code, Forecast to City, UOM, and various forecast metrics. The 'Forecast' columns include Forecast Final Cost, Forecast Final MH, Forecast Final Man Hour/Unit, Forecast Final PF, Forecast Final Unit Cost, and Forecast Method. The 'Forecast Method' column shows 'Current estimate' for most items. The 'Forecast Method' column is highlighted in blue for items 4.1, 4.2, and 4.3. The 'Forecast Method' column is highlighted in red for items 2, 3, 4, 5, 5.1, 5.2, and 5.3. The 'Forecast Method' column is highlighted in green for items 1, 4.1, 4.2, 4.3, 4.4, 4.5, 5.1, 5.2, and 5.3.

Tasks	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast							
CBS Position	Description	WBS Phase Code	Forecast to City	UOM	Forecast Final Cost	Forecast Final MH	Forecast Final Man Hour/Unit	Forecast Final PF	Forecast Final Unit Cost	Forecast Method	Forecast Final Cost	Forecast Final MH	Forecast Man Hour
1	Job Overhead	1000	1.00	Lump Su.	\$250,000.00	0.00	0.00	0.00	\$250,000.00	Current estimate	\$250,000.00	0.00	
2	Earthwork	1001	10,000.00	CY	\$400,000.00	8,000.00	0.80	1.00	\$40.00	Current estimate	\$400,000.00	8,000.00	
3	Concrete	1002	10,000.00	CY	\$1,500,000.00	30,000.00	3.00	1.00	\$150.00	Current estimate	\$1,500,000.00	30,000.00	
4	Structural Steel	1003	1,000.00	Ton	\$1,050,000.00	20,000.00	20.00	1.00	\$1,050.00	Rollup	\$1,050,000.00	20,000.00	
4.1	Erect Steel - Heavy	1004	800.00	Ton	\$800,000.00	16,000.00	20.00	1.00	\$1,000.00	Current estimate	\$800,000.00	16,000.00	
4.2	Erect Steel - Light	1005	200.00	Ton	\$200,000.00	4,000.00	20.00	1.00	\$1,000.00	Current estimate	\$200,000.00	4,000.00	
4.3	Bolted Connections	1006	2,000.00	Ea	\$50,000.00	0.00	0.00	0.00	\$25.00	Current estimate	\$50,000.00	0.00	
5	Materials	1007	1.00	Each	\$1,750,000.00	0.00	0.00	0.00	\$1,750,000.00	Rollup	\$1,750,000.00	0.00	
5.1	Earthwork - Materials	1008	10,000.00	CY	\$250,000.00	0.00	0.00	0.00	\$25.00	Current estimate	\$250,000.00	0.00	
5.2	Concrete - Materials	1009	10,000.00	CY	\$1,000,000.00	0.00	0.00	0.00	\$100.00	Current estimate	\$1,000,000.00	0.00	
5.3	Structure Steel - Materials	1010	1,000.00	Ton	\$500,000.00	0.00	0.00	0.00	\$500.00	Current estimate	\$500,000.00	0.00	
Subtotals		11			\$4,950,000.00	58,000.00					\$4,950,000.00	58,000.00	

2. Select the **Actions** drop-down menu and select **Set Forecast Method**.



3. On the resulting slide out panel, select your desired Forecast Method and click **Apply**.



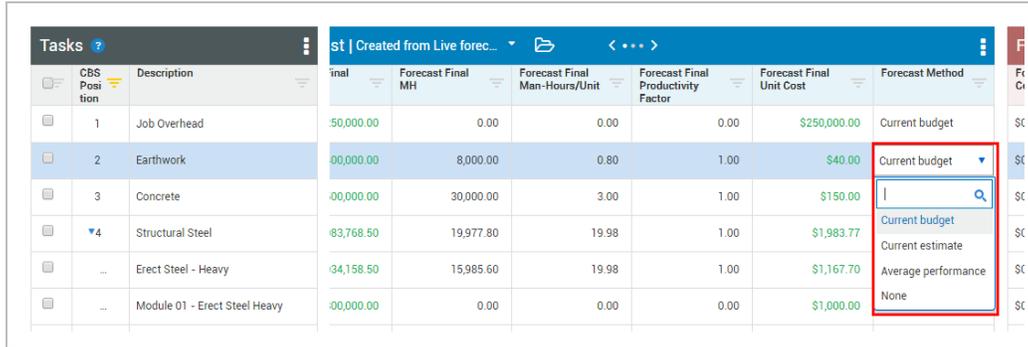
6.3.1.3 Forecast Method for Individual Items

You may need to change the forecast method for a single cost item. The following Step by Step walks you through how to do so.

Set the Forecast Method for Individual Items

1. In the **Forecast** data block, locate the **Forecast Method** column.
2. Double click on the Forecast Method field for the your desired cost item.

- A dropdown menu appears where you can select your Forecast Method from a list



6.3.1.4 Average Performance Forecast Method

The average performance forecast method lets you use actuals for a specific time frame range to determine the unit cost and rate for the remaining work when calculating the remaining forecast. Forecasting using average performance lets you forecast the remainder of work based off completed work.

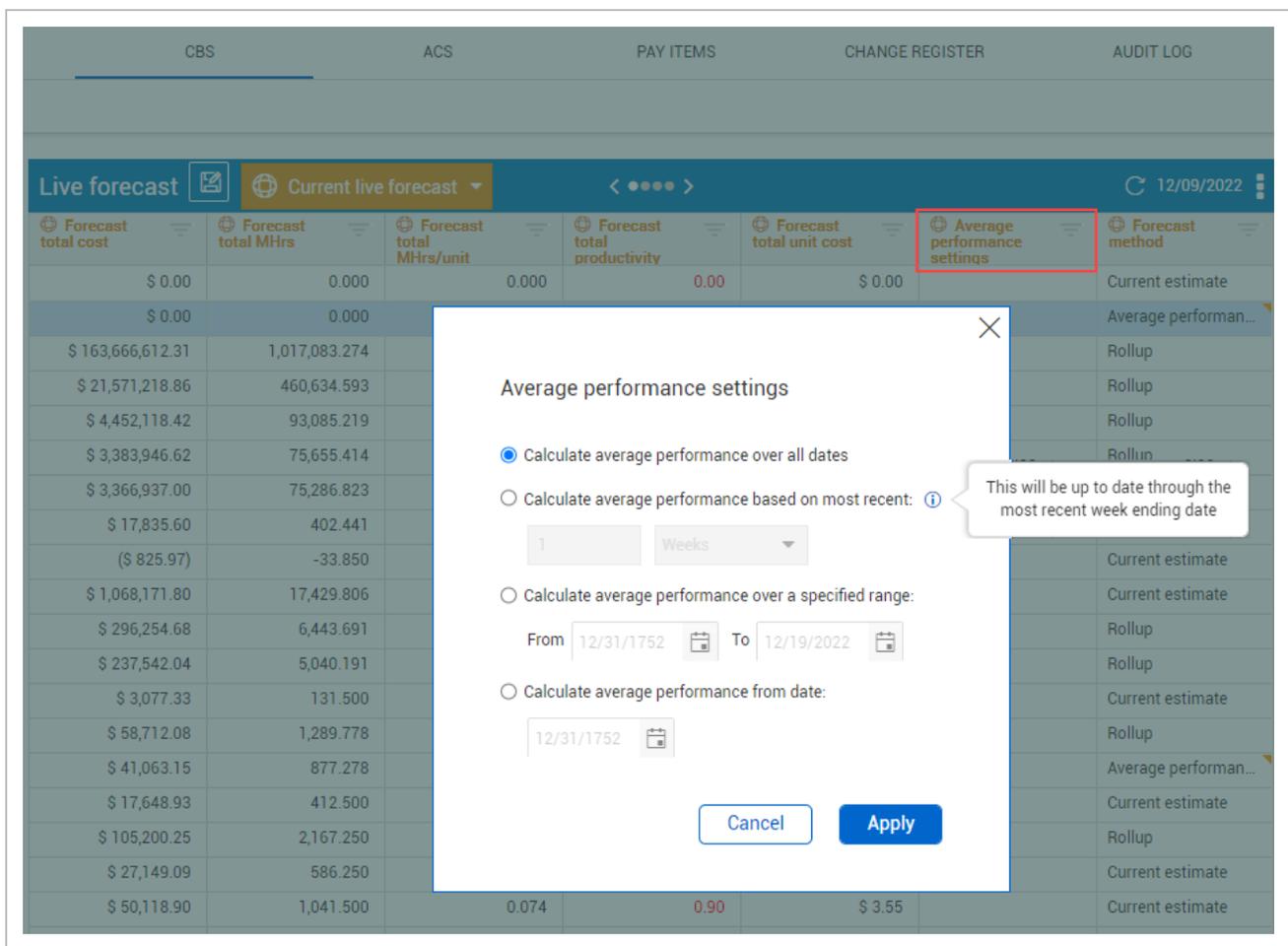
When Average performance is selected as the forecast method in the CBS, you can click the value in the Average performance settings column and select a date range to use for the actual rate of completion for the remainder of work.

This feature lets you identify a length of time you want to utilize a cost item's hours and quantities to determine the install rates for the remaining work.

Click an Average Performance Settings CBS record to access the Average Performance Settings window.

Setting	Usage notes
Calculate average performance over all dates	The average performance for the cost item takes all the dates into account when calculating its average performance.
Calculate average performance based on most recent	You can determine how many weeks or months to calculate the average performance for a cost item. For example, you determine that the last 2 weeks performance best represents how to progress, then you would calculate two weeks of average performance.

Setting	Usage notes
Calculate average performance over a specified range	Selecting a date range uses only the specified time range for calculating the average performance.
Calculate average performance from date	You can select a specific date to calculate average performance. After the learning period for the selected cost item is complete, you can use the average performance for a specific date and onward.



The average performance settings can also be accessed in the cost item details slide-out panel.

The screenshot displays a software interface with three main sections:

- Tasks Table:** A list of tasks with columns for 'CBS position' and 'Description'. The task '2.3.1.1.1 Resurface Existin...' is selected.
- Actuals Table:** A table showing 'Actual qty (to date)' for the selected task.
- DETAILS Panel:** Shows information for '1004 Resurface Existing Access road', including 'Description', 'Forecast T/O qty', 'CE total cost' (\$ 5,803.84), 'CE total MHRs' (103.20), and 'CE MHR/Unit' (0.02).
- Forecast Settings Panel:** A red-bordered box highlights the 'Average performance settings' section. It includes:
 - 'To date' dropdown menu.
 - Radio buttons for:
 - Calculate average performance over all dates
 - Calculate average performance based on most recent: (1) Weeks
 - Calculate average performance over a specified range:** (Selected)
 - From: 11/22/2018
 - To: 01/10/2023
 - Calculate average performance from date: 11/22/2018
 - 'Apply' button.

As an example, if you choose to calculate the average performance based on the most recent three weeks, the Forecast remaining cost and Forecast remaining MHRs change based off the cost item’s performance from the last three weeks.

The screenshot shows a 'CHANGE REGISTER' table with the following data:

Forecast total cost	Forecast remaining MHRs	Average performance settings	Forecast remaining cost	Forecast method
\$ 0.00	0.000		\$ 0.00	Current estimate
\$ 2,469,443.93	-2.409		(\$ 101.66)	Rollup
\$ 2,452,434.31	0.000	Last 3 weeks	\$ 0.00	Average performan...

On the left, a 'Tasks' table shows the selected task '2.1.1.1.1 Site ...'.

The Forecast method and Average performance settings changes are also shown in the cost item details slide-out panel.

The screenshot displays a software interface for forecasting resources. On the left, a sidebar shows details for item 1396, 'Site Maintenance Crew'. It lists 'Forecast T/O qty' as 75,181.000 with a unit of measure 'MH', and 'Last changed on' as 12/16/2022 09:54 AM. The main area is divided into 'CURRENT ESTIMATE RESOURCES' and 'FORECAST RESOURCES'. Under 'CURRENT ESTIMATE RESOURCES', the 'CBS position' is 2.1.1.1.1. Under 'FORECAST RESOURCES', there is a 'Cost source' dropdown set to 'Detail'. A red box highlights the 'Live forecast method' section, which includes an 'Average performance' dropdown set to 'Average performance' and 'Average performance settings' dropdown set to 'Last 3 weeks'. Other fields include 'Description' (Site Maintenance), '* Forecast T/O qty' (empty), 'CE total cost', and 'CE total MHrs'.

6.3.1.5 Committed Cost Forecast Method

Committed Costs are obligations made for contract work or purchase orders that you have agreed to pay for. The Committed Cost forecast method provides you with the ability to use committed cost information to forecast your cost at completion.

Forecast final unit cost	Forecast remaining cost	Forecast method
(\$ 120,539,221.43)	(\$ 122,907,115.92)	Rollup
(\$ 142,040,228.20)	(\$ 142,445,305.28)	Rollup
(\$ 12,535.89)	(\$ 129,212.48)	Rollup
\$ 118.05	\$ 10,805.00	Committed cost
\$ 43.88	\$ 8,676.00	
\$ 9.18	\$ 0.00	
(\$ 14,869.35)	(\$ 148,693.48)	
\$ 0.00	\$ 0.00	
\$ 0.00	\$ 0.00	

Forecasting cost items can be done in the live or private forecast, and can be forecasted at the parent or terminal levels. The Committed Cost Forecast method can only be used when cost items have an Allow as-built of All or Costs. When the Allow as-built values are set to None or Quantities, this forecast method cannot be used because cost and committed costs cannot be claimed.

The Committed Cost forecast is mostly utilized on cost items that are driven from purchase orders or contracts. It is not used when you're claiming quantities. For example, this forecast method isn't suitable for direct labor items where quantities are claimed to generate progress and crew performance. This forecast method works well for cost items that are tied to a contract or PO.

When Open/Remaining Committed Cost values are being entered, these values will also update the forecast values in the CBS. There is also an integration available that allows you to import committed cost data from your ERP, instead of manually entering in the data. For more information on Commitment Costs, visit subject Track Open/Remaining and Total Committed Costs within this topic.3.3 Cost Item Setup on page 89

The following columns will help you view the Committed Cost forecast method:

Forecast total cost: Forecast cost at completion which is equal to the Open/Remaining committed cost plus any Actual cost to date.

Forecast remaining cost: This is the amount of money that remaining to be paid out. This column is equal to the Open/Remaining Committed Cost.

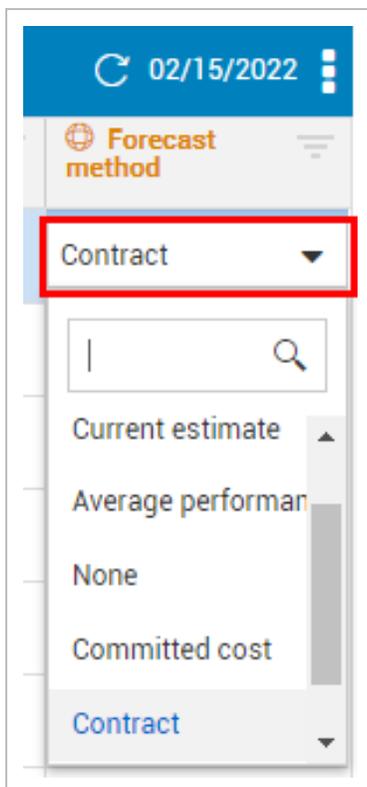
Tasks		As-built lock		Allow as-built		Forecast Created from Live forec...						
CBS position	Description					Forecast final man hours/Unit	Forecast final cost	Forecast final productivity factor	Forecast final Mhrs	Forecast final unit cost	Forecast remaining cost	Forecast method
1.1.1.1	Permits	<input type="checkbox"/>		All		1.00	\$ 11,805.00	2,323.00	1.00	\$ 118.05	\$ 10,805.00	Committed cost

The Committed cost forecast method is most commonly used for costs that are associated to a purchase order tracked through an ERP system. This method doesn't focus on quantities or percent complete, but rather the progression of costs paid towards the final agreed upon PO value.”

6.3.1.6 Contract Forecast Method

Using this forecast method, you can forecast by Contract values. This forecast method is only available in the forecast drop down for cost items that are assigned to a Contract.

Any modifications that you make in Contract automatically updates and comes into Control.



When a cost item is assigned to a contract, you have the option of adding the read-only column **Number of contracts** to your CBS. This column is an integer value that counts the number of contracts a particular cost item is associated to. You have to go into Contracts to see which Contract your cost item is associated to.

	Number of contracts	Forecast Method
\$6.00	1	Contract

If the **Number of contracts** column is set to zero, the Contract Forecast Method becomes unavailable from the Live Forecast, Private Forecast, and the Cost Item Details slideout drop down for Live Forecast Method on the Details tab.

Contract Forecast Method pulls the cost that is associated to a specific cost item from Contracts. Cost items can be associated to the following if using Contract Forecast Method:

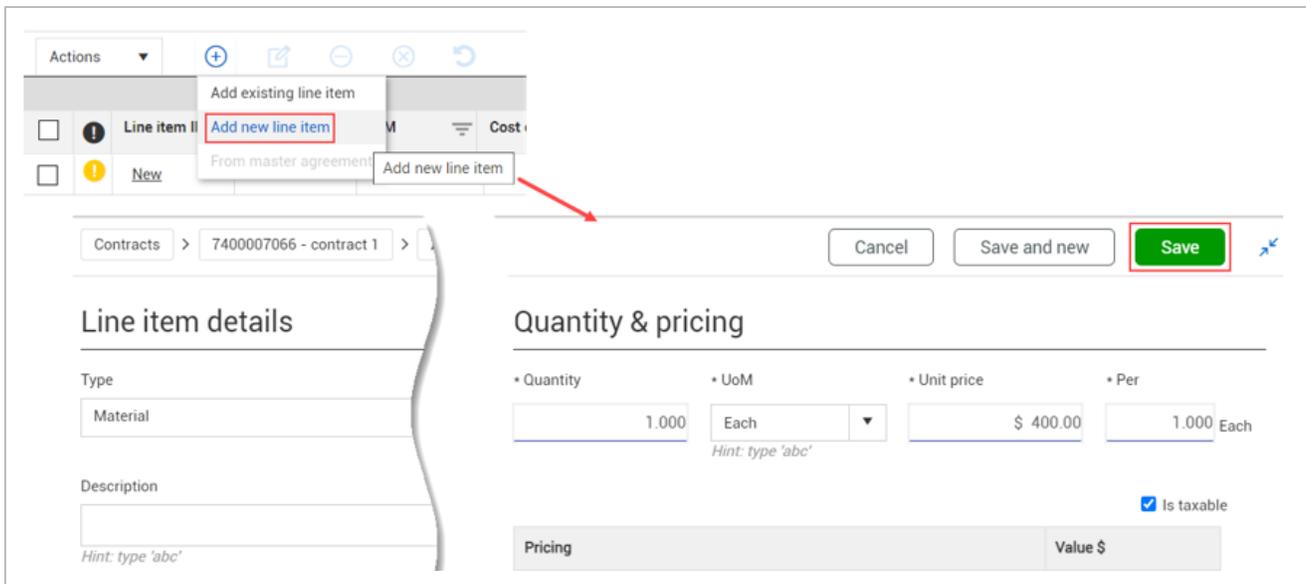
- Many different Contracts
- Many different line items across different Contracts

The cost item's Forecast Final Cost value sums up the line item amounts of all cost that is associated to a cost item from Contract.

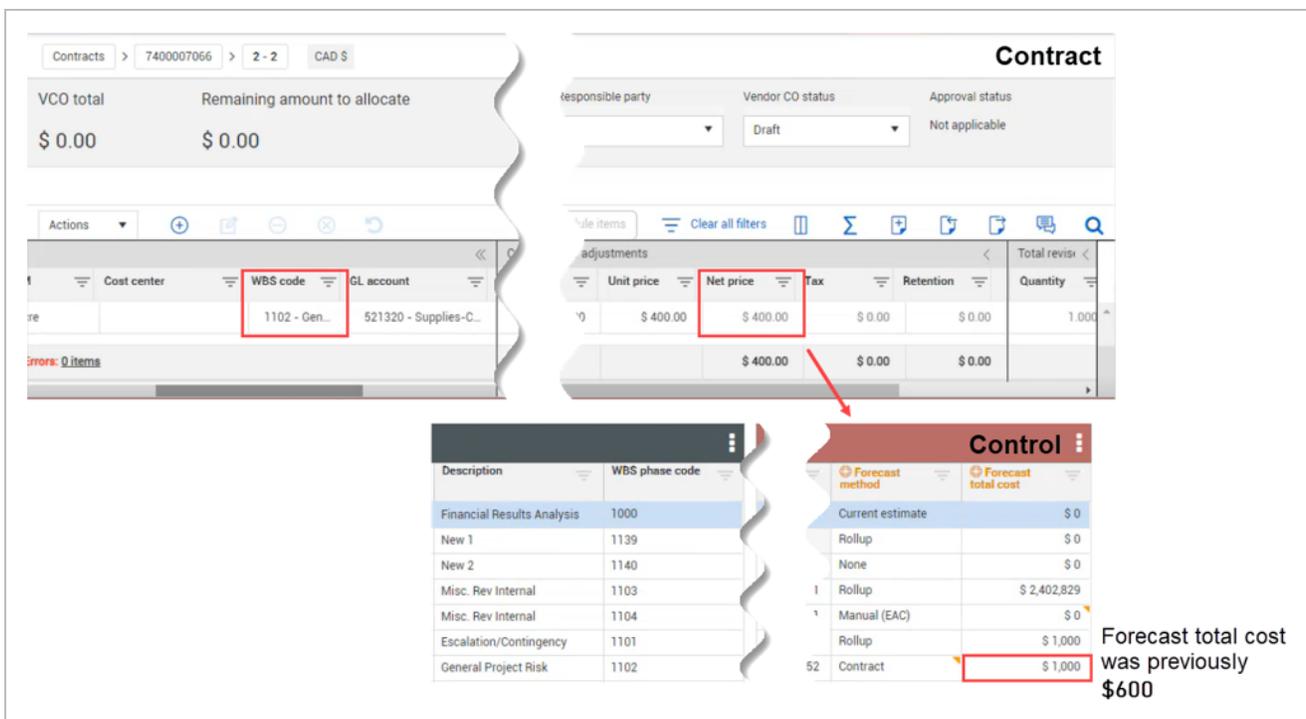
Unapproved Contract Line Items

The line item price is included in the associated cost item's Contract forecast method when creating new line items in a Contract vendor change order.

After a new line item is saved, a batch process is initiated in the background that sends the line item's net price over to Control.



The net price from Contract shows in Control’s forecast total cost column, which also includes the tax from draft pending vendor change line orders.



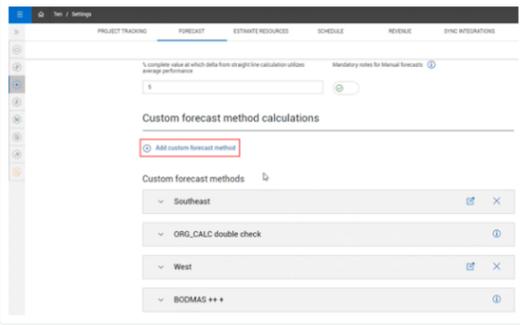
6.3.1.7 Custom Forecast Method

The Custom forecast method lets you specify a calculation for a forecast cost and manhours. For more information, refer to [Project Control settings](#) where Custom forecast methods can be configured.

- > Scheduling
- > Administration
- > Account Code Structure (ACS)
- > InEight Control Interfaces
- > Control Settings
- Roles & Permissions
- Project Settings**

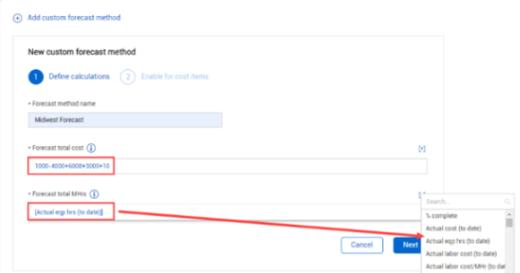
Custom Forecast method calculations

You can create custom forecast methods at both the project and organization levels by configuring your own calculations.



To create a custom Forecast Method, click Add custom forecast method, and then enter the Forecast Method Name, Forecast Total Cost and Forecast Total Mhrs calculations. You can create a maximum of 10 custom organization and project level forecast methods each at one time.

Select the **Formula** icon to choose fields to include in your forecast formula.



- Project Tracking (organization & project level)
- Tasks
- Actuals
- Estimated Actuals
- Enabling actuals for Progress
- Enabling actuals for Control
- Estimated actuals process overview
- Reversing estimates
- Reversing Estimated Actuals
- Time Phasing budget
- Forecast (organization & project level)
- Time Phasing
- Forecast**
- Enable Forecast methods based on Allow as-built selections
- Estimate Resources (organization & project level)
- Schedule (organization & project level)
- Revenue (project level)
- Revenue and Cost Timing
- Billing method default earnings rules
- Pay item forecast takeoff quantity rollups
- Pay item forecast takeoff quantity roll down
- Markup
- Sync Integrations (project level)
- Others (project level)
- Required Cost Items
- Decimal Precision
- Others (org level)
- Required Cost Items

6.4 MANUAL FORECASTING

Scenario

Assume you have a structural steel installation code being performed by a subcontractor. They have notified the project team that the material cost of the steel has gone up due to a change of thickness of some of the column base plates. You will need to forecast an increase in the total subcontract cost of the code to reflect this change.

You also receive an update from the concrete superintendent that the code for a concrete pouring operation will now be using journeymen instead of apprentice concrete finishers. He has provided the total and you will update the total cost and the labor cost per man-hour.

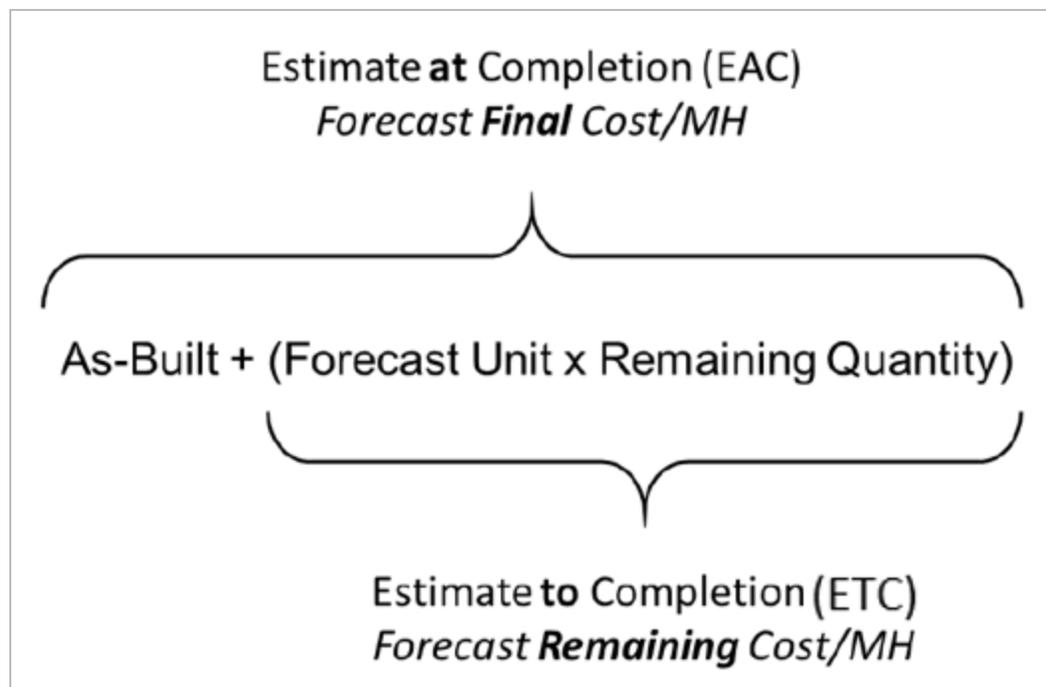
6.4.1 EAC vs. ETC

You can manually enter forecast values for both your Estimate at Completion (EAC) and Estimate to Completion (ETC) values.

Control uses different descriptions than EAC and ETC as indicated below.

Forecast Term	Control Term	What it measures
Estimate at Completion (EAC)	Forecast Final Cost Forecast Final MHrs	As-built + (Forecast Unit Cost x Quantity Remaining)
Estimate to Completion (ETC)	Forecast Remaining Cost Forecast Remaining Man Hour	Forecast Unit Cost x Quantity Remaining

The image below illustrates what EAC and ETC measure:



6.4.2 Manual EAC (Estimate at Complete) Forecast

You can use the Manual (Estimate at Completion) Forecast Method to make a simple, quick adjustment to the calculated forecast numbers, or to forecast the cost of the work remaining, while ignoring actual costs in the calculation of the forecast.

When you enter a forecast cost at the total level, you can have forecast costs:

- Distributed to the cost categories, or
- Back calculated if forecast man-hours are adjusted

To set the forecast total or EAC forecast, type a value into one of the following cells within the forecasting data block:

- Forecast final cost
- Forecast final MHrs
- Forecast Final Man-hours per Unit
- Forecast Productivity Factor
- Forecast Final Cost per Unit

The next two Step by Steps walk you through how to define the Manual (EAC) forecast by adjusting the Forecast Final Cost and the Forecast Final Man-Hours.

Manually Adjust Forecast Final Cost

1. In the Forecast data block, double click the **Forecast Final Cost** cell for a cost item.
 - This will allow you to edit the dollar value manually

Tasks		Task Det.		Forecast Created from Live foreca.					Forecast Created from Live foreca.				
CBS Position	Description	WBS Phase Code	Forecast TO Qty	UOM	Forecast Final Cost	Forecast Final MH	Forecast Final Man Hour/Unit	Forecast Final PF	Forecast Final Unit Cost	Forecast Method	Forecast Final Cost	Forecast Final MH	Forecast Man Hour
1	Job Overhead	1000	1.00	Lump Su.	\$250,000.00	0.00	0.00	0.00	\$250,000.00	Current estimate	\$250,000.00	0.00	
2	Earthwork	1001	10,000.00	CY	\$400,000.00	8,000.00	0.80	1.00	\$40.00	Current budget	\$400,000.00	8,000.00	
3	Concrete	1002	10,000.00	CY	\$1,500,000.00	30,000.00	3.00	1.00	\$150.00	Current estimate	\$1,500,000.00	30,000.00	
*4	Structural Steel	1003	1,000.00	Ton	\$1,000,000.00	20,000.00	20.00	1.00	\$1,000.00	Rollup	\$1,050,000.00	20,000.00	
4.1	Erect Steel - Heavy	1004	800.00	Ton	\$800,000.00	16,000.00	20.00	1.00	\$1,000.00	Current budget	\$800,000.00	16,000.00	
4.2	Erect Steel - Light	1005	200.00	Ton	\$200,000.00	4,000.00	20.00	1.00	\$1,000.00	Current budget	\$200,000.00	4,000.00	
4.3	Bolted Connections	1006	2,000.00	Ea	\$0.00	0.00	0.00	0.00	\$0.00	Average performan...	\$50,000.00	0.00	
*5	Materials	1007	1.00	Each	\$1,750,000.00	0.00	0.00	0.00	\$1,750,000.00	Rollup	\$1,750,000.00	0.00	
5.1	Earthwork - Materials	1008	10,000.00	CY	\$250,000.00	0.00	0.00	0.00	\$25.00	Current estimate	\$250,000.00	0.00	
5.2	Concrete - Materials	1009	10,000.00	CY	\$1,000,000.00	0.00	0.00	0.00	\$100.00	Current estimate	\$1,000,000.00	0.00	
5.3	Structure Steel - Materials	1010	1,000.00	Ton	\$500,000.00	0.00	0.00	0.00	\$500.00	Current estimate	\$500,000.00	0.00	
Subtotals		11			\$4,300,000.00	58,000.00					\$4,950,000.00	58,000.00	

2. Change this value to **125,000**.

Tasks		Task Det.			Forecast Created from Live foreca.				Forecast Created from Live foreca.				
CBS Position	Description	WBS Phase Code	Forecast TO City	UOM	Forecast Final Cost	Forecast Final MH	Forecast Final Man Hour/Unit	Forecast Final PF	Forecast Final Unit Cost	Forecast Method	Forecast Final Cost	Forecast Final MH	Forecast Man Hour
1	Job Overhead	1000	1.00	Lump Su.	\$250,000.00	0.00	0.00	0.00	\$250,000.00	Current estimate	\$250,000.00	0.00	
2	Earthwork	1001	10,000.00	CY	\$400,000.00	8,000.00	0.80	1.00	\$40.00	Current budget	\$400,000.00	8,000.00	
3	Concrete	1002	10,000.00	CY	\$1,500,000.00	30,000.00	3.00	1.00	\$150.00	Current estimate	\$1,500,000.00	30,000.00	
*4	Structural Steel	1003	1,000.00	Ton	\$1,000,000.00	20,000.00	20.00	1.00	\$1,000.00	Rollup	\$1,050,000.00	20,000.00	
4.1	Erect Steel - Heavy	1004	800.00	Ton	\$800,000.00	16,000.00	20.00	1.00	\$1,000.00	Current budget	\$800,000.00	16,000.00	
4.2	Erect Steel - Light	1005	200.00	Ton	\$200,000.00	4,000.00	20.00	1.00	\$1,000.00	Current budget	\$200,000.00	4,000.00	
4.3	Bolted Connections	1006	2,000.00	Ea	\$0.00	0.00	0.00	0.00	\$0.00	Average performan...	\$50,000.00	0.00	
*5	Materials	1007	1.00	Each	\$1,750,000.00	0.00	0.00	0.00	\$1,750,000.00	Rollup	\$1,750,000.00	0.00	
5.1	Earthwork - Materials	1008	10,000.00	CY	\$250,000.00	0.00	0.00	0.00	\$25.00	Current estimate	\$250,000.00	0.00	
5.2	Concrete - Materials	1009	10,000.00	CY	\$1,000,000.00	0.00	0.00	0.00	\$100.00	Current estimate	\$1,000,000.00	0.00	
5.3	Structure Steel - Materials	1010	1,000.00	Ton	125000	0.00	0.00	0.00	\$500.00	Current estimate	\$500,000.00	0.00	
Subtotals		11			\$4,900,000.00	58,000.00					\$4,950,000.00	58,000.00	

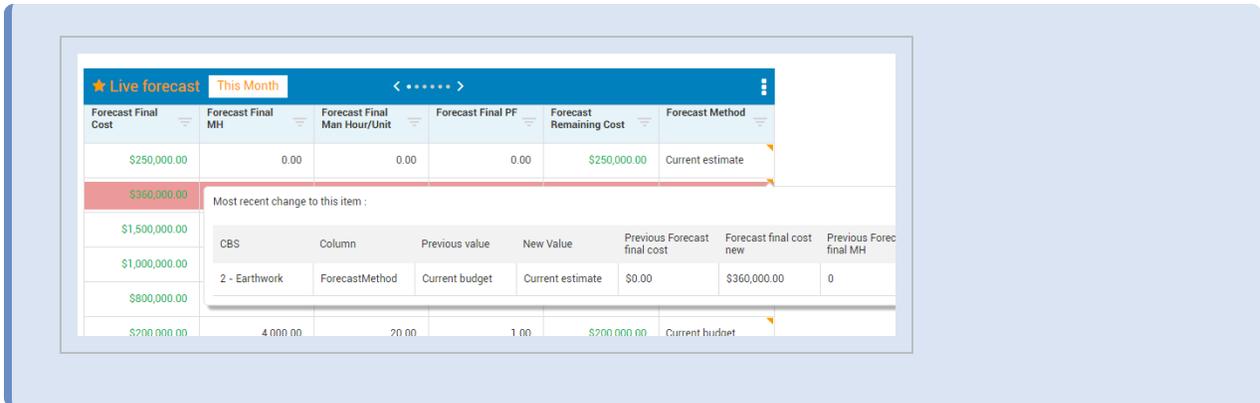
To revert to the original value when manually typing into the cell, press the Escape (Esc) key.

All other cost categories proportionally adjust automatically once the labor is adjusted.

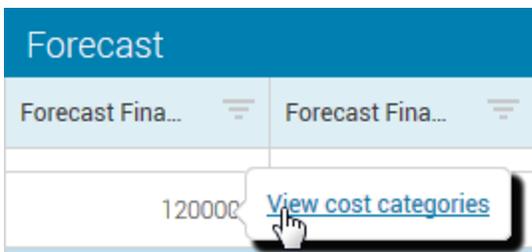
In the Forecast data block, blue dots indicate what the forecast driver is. A forecast driver is the manually edited value that the Forecast Final Cost is based off.

Forecast Created	
Forecast Final Cost	
\$250,000.00	
\$400,000.00	
\$1,500,000.00	
\$1,000,000.00	
\$800,000.00	
\$200,000.00	
\$0.00	
\$1,375,000.00	
\$250,000.00	
\$1,000,000.00	
\$125,000.00	●

In the *Live forecast data block, orange triangles will appear in the top right-hand corner of the cell. These indicate what the forecast driver is and give a detail of the change when hovered over.



3. Hover over the **Forecast Final Cost** cell of the value you entered and select the **View cost categories** pop-up.



- You can see the adjustments that were made by cost category

6.4.2.1 Proportional Adjustment

As you make changes, you may receive a prompt asking you how you would like to adjust other values affected by your change. For example, when you change your Forecast Final Cost, this will affect either:

- Forecast Final MH or
- Forecast Final \$/MH

✕

Proportionally adjust Forecast Final MH or Forecast Final \$/MH ?

The Forecast Final Cost can be modified by proportionally adjusting Forecast Final MH or Forecast Final \$/MH. Specify the value you would like to modify:

Forecast Final MH

0.000000000000

Forecast Final \$/MH

0.000000000000

Cancel OK

While one of those values will remain constant, the other will adjust as indicated in the table below:

Forecasting - Proportional Adjustment Example	
Action	Result
Original Forecasted Values	Forecast Final Cost = \$1000 Forecast Final MH = 100 Forecast Final \$/MH = 10
Manually adjust Forecast Final Cost	Forecast Final Cost changes from \$1000 to \$2000
Resulting adjustment Option 1: Adjust Forecast Final MH	Forecast Final Cost / Original Forecast Final \$/MH = Adjusted Forecast Final MH \$2000 / 10 = 200 MH
Resulting adjustment Option 2: Adjust Forecast Final \$/MH	Forecast Final Cost / Original Forecast Final MH = Adjusted Forecast Final \$/MH \$2000 / 100 = 20/MH

6.4.3 Manual ETC (Estimate to Completion) Forecast

The Manual ETC (Estimate to Completion) forecast method can be used to make an adjustment to forecast the unit cost of the work remaining and adding it to the as-built costs in the calculation of the forecast.

To set the forecast remaining or ETC (Estimate to Complete) forecast, type a value into one of the following cells within the forecasting data block:

- Forecast Remaining Labor Cost/MHr
- Forecast Remaining Labor Cost
- Forecast Remaining Man-hours per Unit
- Forecast Remaining Productivity Factor
- Forecast Remaining Cost per Unit

This will set the unit cost and man hour factors. When applied to the remaining qty to deliver and added to the existing actuals this will equal your total forecast amounts.

6.4.3.2 Detailed ETC FC Method

The Detailed ETC (estimate to completion) method lets you modify the crew makeup and production rates that drive the remaining forecast values (based on remaining quantities and hours).

For example, if you started your project and you used apprentices, and now you prefer to use journeymen, you can swap out resources for your forecast resources and use journeymen instead of apprentices.

In Control settings > Project Tracking, you can now enable forecast methods for terminal cost items when the allow-as built is set to all or cost for Detailed ETC. When the Detailed ETC forecast method is enabled, all existing Current Estimate Resources for that cost item are copied to the Forecast Resources tab in the CBS > Cost Item Details slide-out panel.

Terminal cost items ^

When Allow as-built is set to *All or Cost*
 Enable the following Forecast methods for terminal cost items when Allow as-built is set to *All or Cost*

Current estimate	<input checked="" type="checkbox"/>	Manual (ETC)	<input checked="" type="checkbox"/>
Current budget	<input checked="" type="checkbox"/>	Manual (EAC)	<input checked="" type="checkbox"/>
Average performance	<input checked="" type="checkbox"/>	None	<input checked="" type="checkbox"/>
Committed cost	<input checked="" type="checkbox"/>	Contract	<input checked="" type="checkbox"/>
Detailed ETC	<input checked="" type="checkbox"/>		

Default Forecast method for terminal cost items when Allow as-built is set to *All or Cost*

Current estimate ▼

Only enabled selections above are eligible. 'Manual (ETC)' and 'Manual (EAC)' cannot be default options.

When Allow as-built is set to *Quantity*
 Enable the following Forecast methods for terminal cost items when Allow as-built is set to *Quantity*

Current estimate	<input checked="" type="checkbox"/>	Manual (ETC)	<input checked="" type="checkbox"/>
Current budget	<input checked="" type="checkbox"/>	Manual (EAC)	<input checked="" type="checkbox"/>
Average performance	<input checked="" type="checkbox"/>	None	<input checked="" type="checkbox"/>

Default Forecast method for terminal cost items when Allow as-built is set to *Quantity*

Current estimate ▼

Only enabled selections above are eligible. 'Manual (ETC)' and 'Manual (EAC)' cannot be default options.

When Allow as-built is set to *None*
 Enable the following Forecast methods for terminal cost items when Allow as-built is set to *None*

None	<input checked="" type="checkbox"/>		
------	-------------------------------------	--	--

Default Forecast method for terminal cost items when Allow as-built is set to *None*

None

When the Detailed ETC setting is enabled, a new tab is available in Cost Item Details called Forecast Resources. This new tab is almost identical to the Current Estimate Resources tab, with the major difference being that the Forecast Resources tab contains forecast information. You can edit these resources and values separately from the current estimate resources for a cost item.

The screenshot displays the Control software interface. At the top, there are navigation tabs: CBS, ACS, PAY ITEMS, CHANGE REGISTER, and AUDIT LOG. A 'View' dropdown menu is set to 'Unsaved (Forecasts)'. Below the navigation, there is a toolbar with various icons. The main content area is divided into two sections. On the left, a 'Tasks' table is visible with columns for 'CBS position', 'Description', 'WBS phase code', and 'SPI'. The table contains several rows, with row 2 (Earthwork, 1069) selected. On the right, a 'Task detail' panel for task 1069 Earthwork is shown. This panel has tabs for 'DETAILS', 'ATTRIBUTES', 'COST CATEGORIES', 'CURRENT ESTIMATE', and 'RESOURCES'. The 'RESOURCES' tab is active and highlighted with a red box. Below the tabs, there are expandable sections: 'Forecast details', 'Resources', 'Productivity and overall settings', and 'Resource details'.

6.5 FORECAST MANAGEMENT

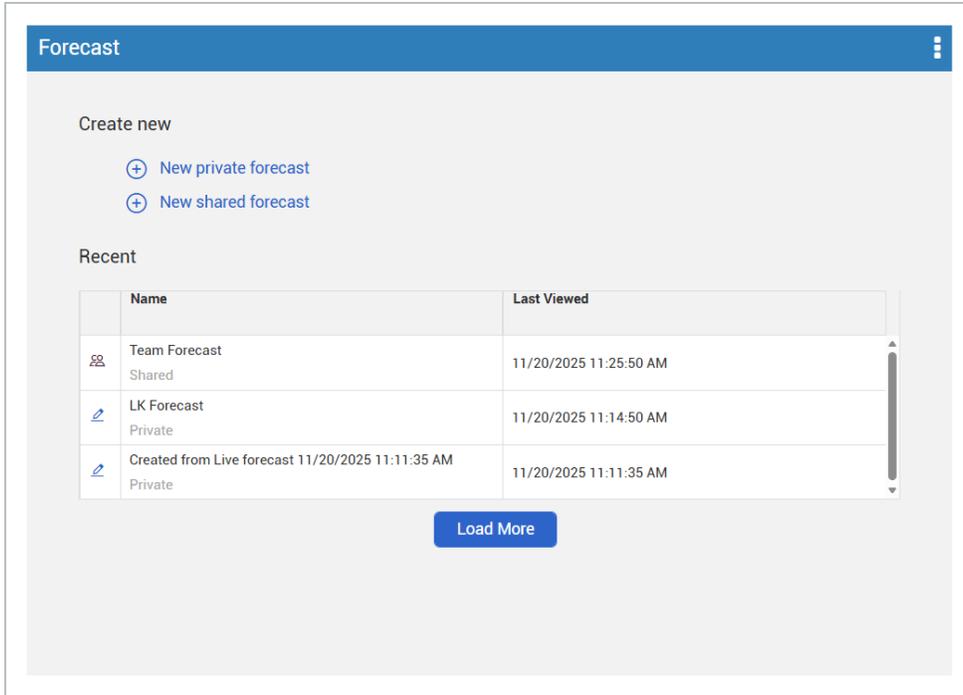
Control uses three data blocks for forecasting:

- Forecast – Enter and adjust forecast values.
- Forecast delta – Compare two forecasts side by side.
- Live forecast – displays the official project forecast.

6.5.1 Forecast data block

All forecasting adjustments are made in the Forecast data block. This block includes a variety of columns that show cost, man-hours, and productivity, as well as forecast methods.

When you first access the Forecast data block, either by opening the Forecasts view or by adding the data block to your view, it will show several options for loading a forecast. Select **New private forecast** or **New shared forecast** to load a new forecast based off the Live forecast. You can also select an existing forecast under Recent.



After you make your selection, the data block populates.

The screenshot shows a data block table with the following columns: Forecast total cost, Forecast total Mhrs, Forecast total Mhrs/unit, Forecast total productivity, Forecast total unit cost, Forecast remaining cost, and Forecast method. The table contains 11 rows of data.

Forecast total cost	Forecast total Mhrs	Forecast total Mhrs/unit	Forecast total productivity	Forecast total unit cost	Forecast remaining cost	Forecast method
\$ 250,000.00	0.00	0.00	0.00	\$ 250,000.00	\$ 250,000.00	Current estimate
\$ 406,300.00	8,310.00	0.83	0.96	\$ 40.63	\$ 314,000.00	Current estimate
\$ 1,499,250.00	29,805.00	2.98	1.01	\$ 149.93	\$ 1,395,750.00	Current estimate
\$ 1,150,300.00	23,100.00	23.10	0.91	\$ 1,150.30	\$ 1,074,000.00	Rollup
\$ 896,300.00	17,960.00	19.96	0.89	\$ 995.89	\$ 845,000.00	Current estimate
\$ 200,500.00	4,000.00	20.00	1.00	\$ 1,002.50	\$ 180,000.00	Current estimate
\$ 53,500.00	1,140.00	0.57	0.88	\$ 26.75	\$ 49,000.00	Current estimate
\$ 1,749,400.00	0.00	0.00	0.00	\$ 1,749,400.00	\$ 1,145,000.00	Rollup
\$ 250,000.00	0.00	0.00	0.00	\$ 25.00	\$ 150,000.00	Current budget
\$ 999,000.00	0.00	0.00	0.00	\$ 99.90	\$ 650,000.00	Current budget
\$ 500,400.00	0.00	0.00	0.00	\$ 500.40	\$ 345,000.00	Current budget

You can adjust the forecast by entering values directly into the data block cells.

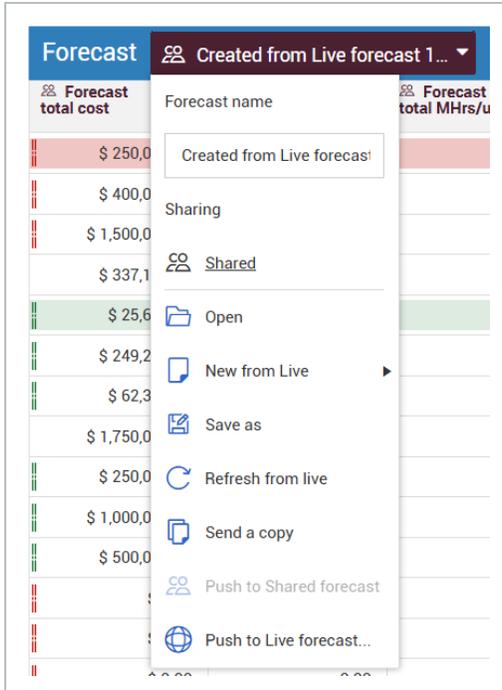
Forecast Created from Live fore...		
Forecast total cost	Forecast total Mhrs	total
\$ 250,000.00	0.00	
\$ 406,300.00	8,310.00	
\$ 1,499,250.00	29,805.00	
\$ 331,141.02	6,686.00	
\$ 74,841.02	1,500.00	
\$ 202,500.00	4040	
\$ 53,800.00	1,146.00	

To view or adjust cost categories for a cost item, click the **View cost categories icon** inside a cell. This opens the Cost Categories tab of the cost item details slide-out panel.

The screenshot shows the 'COST CATEGORIES' tab for WBS phase code 1005. The table below displays the cost breakdown:

Cost category	Current budget	Actual cost (to date)	Current estimate	Forecast	Forecast remaining cost	Billing rate markup amount
Total	\$ 200,000.00	\$ 20,500.00	\$ 202,000.00	\$ 202,500.00	\$ 182,000.00	\$ 0.00
↳ Labor	\$ 200,000.00	\$ 20,500.00	\$ 202,000.00	\$ 202,500.00	\$ 182,000.00	\$ 0.00
↳ Construction...	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
↳ FOM Rented ...	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

The drop-down menu in the Forecast data block gives you options for managing your forecasts. The image and table below show the option details.



Menu Option	Details
Forecast name	Enter a name for the current forecast.
Sharing	Click to select Shared or Private access to this forecast. You can also send a copy of this forecast to team members.
Open	Load a saved or shared forecast. You can also delete saved forecasts.
New from Live	Create a new private or shared forecast from the Live forecast.
Save as	Save a copy of this forecast.
Refresh from live	Overwrite forecast values with the Live forecast values on selected cost items.
Send a copy	Send a snapshot of this forecast to specific users.
Push to Shared forecast	Overwrite values in a shared forecast with values from this forecast for selected cost items. See below for more details.
Push to Live forecast	Overwrite Live forecast values with values from this forecast for selected cost items. See Push to Live forecast for more details.

6.5.2 Push to shared forecast

Changes made to a private forecast can be pushed to a shared forecast.

Push to shared forecast

1. From the private forecast data block, select the cost items with updated values.
2. Open the data block drop-down menu, and then select **Push to Shared forecast**.

CBS position	Description	WBS phase code	Forecast total cost
1	Job Overhead	1002	\$ 250.0
2	Earthwork	1069	\$ 406.3
3	Concrete	1071	\$ 1,499.2
4	Structural Steel	1073	\$ 1,062.8
4.1	Erect Steel - Heavy	1074	\$ 748.4
4.2	Erect Steel - Light	1005	\$ 260.6
4.3	Bolted Connections	1006	\$ 53.8
5	Materials	1084	\$ 1,749.4
5.1	Earthwork - Materials	1085	\$ 250.0
5.2	Concrete - Materials	1086	\$ 999.0
5.3	Structure Steel - Materials	1087	\$ 500.0
6	Merrill Iron & Steel - Steel Material	1088	

3. A dialog box opens where you can review the changes. Select a shared forecast from the drop-down menu.

Push these values to the selected shared forecast?
Please review the changes below, and then click 'Yes' if you wish to push these values to the selected shared forecast.

CBS position	Description	WBS phase code	Shared Forecast 2	Shared Forecast 1	LK Forecast Forecast total cost	LK Forecast Forecast total Mhrs	Cost difference	Mhrs difference
4.1	Erect Steel - H...	1074			\$ 748,410.22	15,000.00	(\$ 51,889.78)	-1,040.00
4.2	Erect Steel - LI...	1005	\$ 202,500.00	4,040.00	\$ 260,643.56	5,200.00	\$ 58,143.56	1,160.00
			\$ 1,002,800.00	20,080.00	\$ 1,009,053.79	20,200.00	\$ 6,253.79	\$ 120.00

4. Review the changes, and then click **Yes** to finish. The updated values now show in the shared forecast.

Forecast Shared Forecast 1			
Forecast total cost	Forecast total MHrs	Forecast total MHrs/unit	
\$ 250,000.00	0.00	0.00	
\$ 406,300.00	8,310.00	0.83	
\$ 1,499,250.00	29,805.00	2.98	
\$ 1,062,853.79	21,346.00	21.35	
\$ 748,410.22	15,000.00	18.66	
\$ 260,643.56	5,200.00	25.74	
\$ 53,800.00	1,146.00	0.57	

6.5.3 Compare forecasts

You can compare forecasts by adding the Forecast delta data block to your view and then selecting two forecasts in the data block header to compare.

Forecast delta Ma... Liv...				
Forecast total cost	Forecast total MHrs	Forecast total MHrs/unit	Forecast total cost	Forecast product factor
\$ 0.00	0.00			0.00
\$ 0.00	0.00			0.00
\$ 0.00	0.00			0.00
\$ 6,253.79	12			-0.01
(\$ 51,889.78)	-1			0.07
\$ 58,143.56	1,160.00	5.74		-0.22

The Forecast delta data block displays any deltas between the selected forecasts.

- Values in black indicate equal values between the selected forecasts.
- Values in green indicate a higher value than the corresponding value in the other forecast.
- Values in red indicate a lower value than the corresponding value in the other forecast.

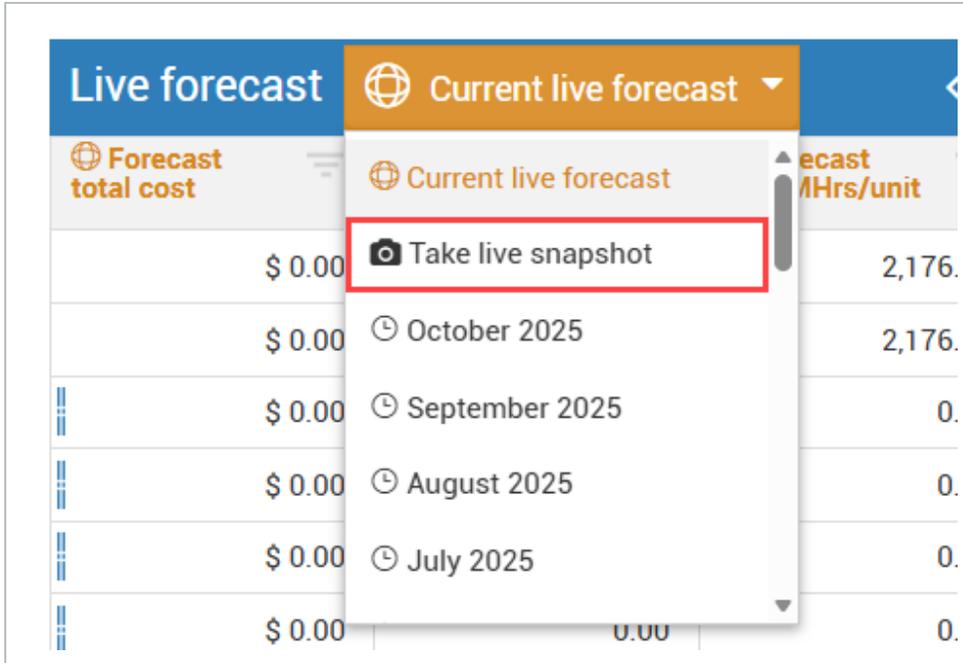
Forecast delta					
Forecast total cost	Forecast total Mhrs	Forecast total Mhrs/unit	Forecast total productivity factor	Forecast total unit cost	Forecast remaining cost
\$ 0.00	0.00	0.00	0.00	\$ 0.00	\$ 0.00
\$ 0.00	0.00	0.00	0.00	\$ 0.00	\$ 0.00
\$ 0.00	0.00	0.00	0.00	\$ 0.00	\$ 0.00
\$ 6,253.79	120.00	0.12	-0.01	\$ 6.25	\$ 6,253.79
(\$ 51,889.78)	-1,040.00	-1.29	0.07	(\$ 64.54)	(\$ 51,889.78)
\$ 58,143.56	1,160.00	5.74	-0.22	\$ 287.84	\$ 58,143.56
\$ 0.00	0.00	0.00	0.00	\$ 0.00	\$ 0.00

6.5.4 Live forecast data block

Access the Live forecast data block to view official project forecast values. Users with the correct permissions can make updates directly in the data block.

Live forecast						
Forecast total cost	Forecast total Mhrs	Forecast total Mhrs/unit	Forecast total productivity	Forecast total unit cost	Forecast method	
\$ 312.50	0.00	0.00	0.00	\$ 312.50	Current estimate	
\$ 406,300.00	8,310.00	0.83	0.96	\$ 40.63	Current estimate	
\$ 1,499,250.00	29,805.00	2.98	1.01	\$ 149.93	Current estimate	
\$ 475,850.00	9,560.00	9.56	2.20	\$ 475.85	Rollup	
\$ 346,300.00	6,960.00	19.89	2.30	\$ 989.43	Current estimate	
\$ 125,050.00	2,440.00	20.00	1.64	\$ 1,025.00	Average performan...	
\$ 4,500.00	160.00	4.00	6.25	\$ 112.50	Current estimate	
\$ 1,749,400.00	0.00	0.00	0.00	\$ 1,749,400.00	Rollup	

Additionally, you can access previous Live forecast snapshots from the drop-down menu.



6.6 TIME PHASED FORECASTING

Projects are typically overwhelmed by escalating forecast values as the project progresses. What the business thought they were going to spend doesn't end up being very accurate at the end of a project.

One way to mitigate this is to take the forecast and break it down into more consumable, estimate related time blocks/periods, as shown in the screenshot below. This prompts the project engineers to think about what activities, bills, and costs are going to occur in smaller more mentally digestible time periods.

The screenshot shows a table with columns for months from Sep '19 to Feb '20. A 'Forecasted CBS item' label points to a row with 'CBS position' 1.2.2.1.2.3 and 'Description' Light Removal. A 'Time blocks' label points to the cost values for Nov '19 and Dec '19.

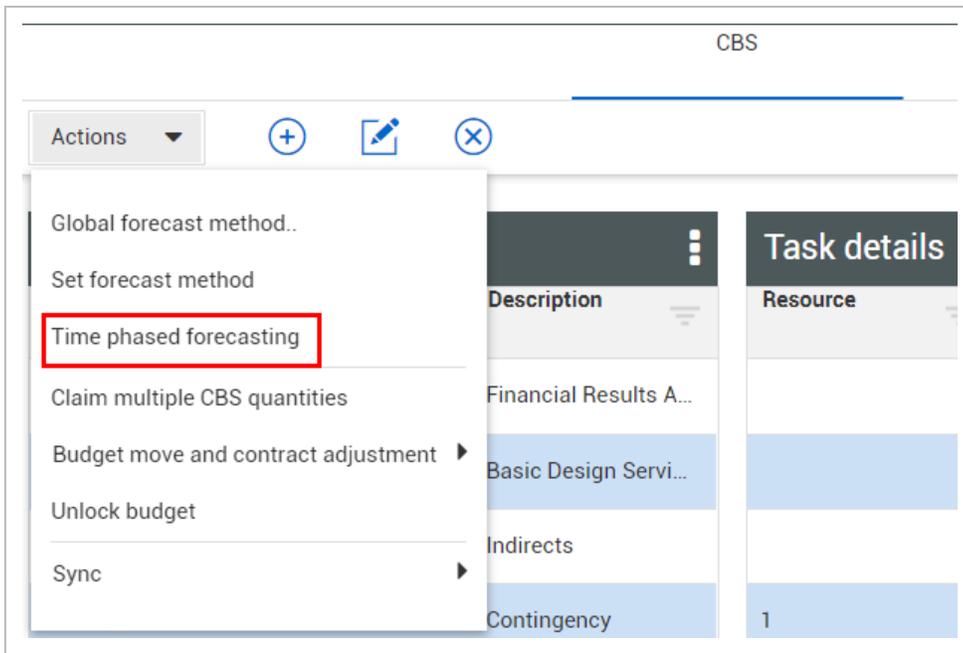
Sep '19 cost	Oct '19 cost	Nov '19 cost	Dec '19 cost	Jan '20 cost	Feb '20 cost
\$ 1,166.65853658536	\$ 1,129.02439024390	\$ 1,166.65853658536	\$ 112.90243902439	\$ 300.00000000000	\$ 500.00000000000

Projects need to spread their estimate by periods to verify forecast accuracy vs. the actuals spent within that period. One of the key goals of time phased forecasting is to see when you are forecasting to spend allocated budget. You can then determine how accurate your forecast was versus the actuals spent within that period. Based on forecast accuracy, this gives you the opportunity to make manual

adjustments within the Time phased forecasting register. It also provides the ability to have the system automatically distribute the forecast for you based upon certain criteria.

TPF gives you visibility into when you are going to spend dollars associated to a cost item in monthly time periods. TPF also helps with cash flow, enabling customers to provide more insight into how much money they need to pay employees and other bills.

After selecting a cost item from the CBS, TPF can be accessed from Control > Workspaces > Actions > Time phased forecasting. This is only if the project settings for TPF is enabled under the Forecast section.



The table below shows the columns from the Time Phased Forecasting page.

Overview - Time phased forecast

	Resource	Description
1	Auto Distribute remaining forecast based on cost curve and start/end dates 	This will automatically distribute remaining forecast based on the cost curve being used, in addition to the Start and Finish dates.

Overview - Time phased forecast (continued)

	Resource	Description
2	CBS position	The CBS position identifier number.
3	Description	The description of the CBS.
4	WBS Phase code	Work Breakdown Structure code number.
5	Start	This is the scheduled start date for the cost item.
6	Finish	This is the scheduled finish date for the cost item.
7	Cost Curve	This is a graph/calculation of the costs of production as a function of total quantity produced. Cost curves can be created, viewed and maintained in Settings > Control > Schedule, in the Cost Curves section on the page.
8	Forecast method	Forecast methods include: Current Budget, Current Estimate, Average Performance, Manual (EAC), None, and Rollup.
9	Forecast remaining cost	This is the unsettled balance of forecast. Cost that is projected to still be required to be paid out (varies depending on forecast method).
10	Forecast final cost	Total cost to date + Forecast remaining cost, cost item projected total cost at completion.
11	Phased Forecast Remaining Cost Delta	This is the remaining forecasted cost that has not yet been allocated to a monthly period. It is the difference between the Forecast remaining cost and the sum of forecasted cost currently represented in all remaining months on the TPF window.
12	Load more	This will load additional month columns to view in the TPF window.
13	<date> cost	The forecasted cost projected to be incurred during that individual month.

CBS position	Description	WBS phase code	Start	Finish	Cost curve	Forecast method	Forecast remaining cost	Forecast final cost	Phased forecast remaining cost delta	Load m...	Jul '19 cost	Aug '19 cost	Aug '19 remaining cost
1	Financial Results...	1000	06/19/2019	12/31/2019	Linear	Rollup	\$ 15,038,381.26	\$ 15,038,381.26	(\$ 15,038,381.26)		\$ 35,544.88	\$ 116,944.26	
1.1	Commercial Cost	1025	06/19/2019	12/31/2019	Linear	Rollup	\$ 1,410,506.62	\$ 1,410,506.62	(\$ 1,410,506.62)		\$ 984.78	\$ 5,507.29	
1.1.1	G & A Expense (7...	1026	06/19/2019	06/19/2019	Linear	Current estimate	\$ 1,090,208.12	\$ 1,090,208.12	(\$ 1,090,208.12)		\$ 0.00	\$ 0.00	
1.1.2	P & P Bond (0.40...	1027	06/19/2019	06/19/2019	Linear	Current estimate	\$ 67,828.91	\$ 67,828.91	(\$ 67,828.91)		\$ 0.00	\$ 0.00	

There is a **Load More** column that exists in the middle/top of the page. When selected, additional monthly time buckets will be added to the page.



6.6.1 TPF Register

The Time phased forecasting register allows you to time phase **auto spread** forecast remaining costs, which are based on cost curves, and start/end dates. You can also **manually override** specific months and change the distribution costs.

For example: you have \$250,000 to spend on a cost item (Forecast remaining cost). You can use Time Phased Forecasting to spread your dollars into monthly allocation buckets. This can be done by automatically spreading the \$250,000 forecast, or by manually overriding the forecast and entering your own values into the monthly buckets.

CBS > Time Phased Foreca...														
CE pc	Descript	WE ph-Coi	Start	Finis	Cos curv	Fo mi	Forecast remaining cost	Forecast final cost	Phase remain delta	Sep '19 remaining cost	Oct '19 cost	Nov '19 cost	Dec '19 cost	Jan '20
1	Job Overhead	1002	06/11/2019	11/25/2019	Linear	△	\$ 250,000.00	\$ 250,000.00		000.00	\$ 0.00	\$ 60,000.00	\$ 25,000.00	\$ 48,000.00
2	Earthwork	1069	11/26/2019	05/11/2020	Linear		\$ 800,000.00	\$ 800,000.00		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 28,571.43
3	Concrete	1071	05/12/2020	10/26/2020	Linear	△	\$ 3,000,000.00	\$ 3,000,000.00		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
4	Structural Steel	1073	10/27/2020	04/12/2021	Linear		\$ 1,050,000.00	\$ 1,050,000.00		\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

6.6.2 Auto Distribute

The **Auto distribute** icon allows you to have the system automatically allocate remaining forecast as determined by your **Actual Start** date, **Actual Finish** date, and **Cost Curve**.

Auto distribute remaining forecast based on cost curve and start/end dates

CBS positio	Load m...	Jul '19 cost	Aug '19 cost	Aug '19 remaining cost
1.1		1,092,364,798.677	12,310,649,399.471	12,567,815,504.198
1.1.1		1,092,364,798.677	12,310,649,399.471	12,567,815,504.198
1.1.1.1		19,187,552.694	1,641,816.243	102,472,320.000
1.1.1.2		USD 21,497,584.087	USD 11,845,050,361.155	USD 12,345,678,901.123
1.1.1.3		(136,936.199)	3.116	0.000
1.1.1.4		961,605.565	(1,068,557.342)	(1,535,622.827)
1.1.1.4.1		(86,894.355)	(253,032.894)	30,158.730

The Auto distribute icon allows you to automatically distribute dollars into monthly allocation buckets. In this case, the allocating of dollars will begin on the **Start** date of May 2020 and stop allocating on **Finish** date month of October of 2020.

Descript	WBS phase code	Start	Finist	Cos curv	Fo mi	Forec rema cost	Phased forecast remaining...	Sep '20 cost	Oct '20 cost
Concrete	1071	05/12/2020	10/26/2020	Linear	△	Curr... \$ 3,000,00...	\$ 0.00	\$ 553,571.43	\$ 535,714.29

6.6.3 Manual Time Phased Forecast

Using the same example, it's also possible to manually forecast the allotted \$3,000 into your desired monthly buckets. By manually entering in \$400,000.00 into the Oct 2020 bucket, your Phased forecast remaining cost delta changes to \$135,714.29. This represents the remaining amount of dollars to still be forecasted.

Descript	WBS phase code	Start	Finist	Cos curv	Fo mi	Forec rema cost	Phased forecast remaining...	Aug '20 cost	Sep '20 cost	Oct '20 cost	
Concrete	1071	05/12/2020	10/26/2020	Linear	△	Curr... \$ 3,000,00...	(\$ 135,714.29)	\$ 535,714.29	\$ 553,571.43	\$ 553,571.43	\$ 400,000.00

On the right side of the screen, a blue circle displays by the forecast quantity when a manual override to the forecast quantity is performed. If you hover over the blue circle, it shows a description of the manual override.

Sep '19 cost	Oct '19 cost	Nov '19 cost
\$ 238,134.05	\$ 221,910.98	\$ 1,266,...
\$ 10,723.09	\$ 76,254.74	\$ 3,...
\$ 0.00	\$ 500.00	
\$ 0.00		
\$ 0.00		

Manual Override:
 Changed by: paul trippi
 Change date: 08/05/2019 04:29 PM
 Value before: \$ 0.00

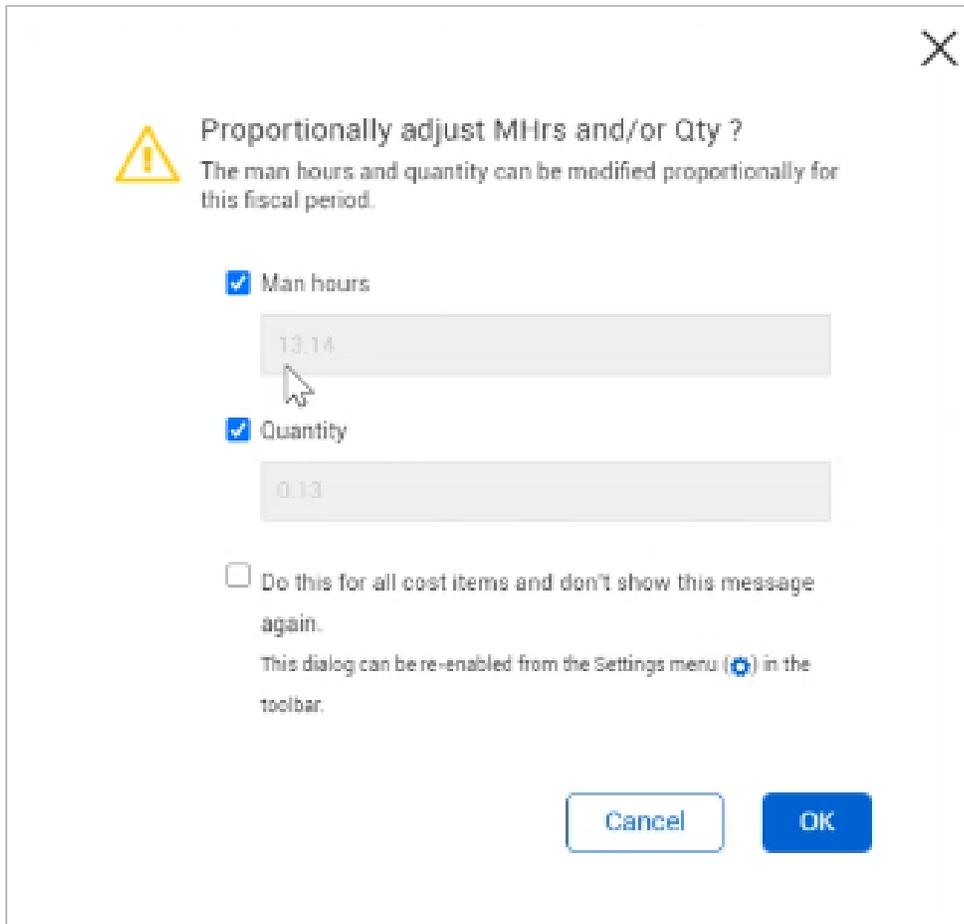
On the left side of the screen, a manual override to the forecast amount shows a warning symbol by the cost curve. Hovering over the warning sign shows that the cost item contains a manual change to the time phased months, and thus, the cost curve is no longer accurate.

CBS position	Description	list	Cost curve	Forec meth	Forec co
1	Financial Results...	31/2019	Linear	Rollup	\$
1.1	Commercial Cost	31/2019	Linear	Rollup	\$
1.1.1	G & A Expense (7...	19/2019	Linear	Current es...	\$
1.1.2	P & P Bond (0.40...	19/2			
1.1.3	Buildout Disk In...	10/2019	Linear	Current es...	

Cost item contains manual time phased months

6.6.3.1 Proportional Man Hours and Quantity

In addition to Cost, Man hours and Quantity displays on the Time phased forecast grid. If you manually adjusted the cost for one of the months in the grid, a dialog box appears asking to proportionally adjust Man hours and the Quantity.



Proportionally adjust MHrs and/or Qty ?
The man hours and quantity can be modified proportionally for this fiscal period.

Man hours
13.14

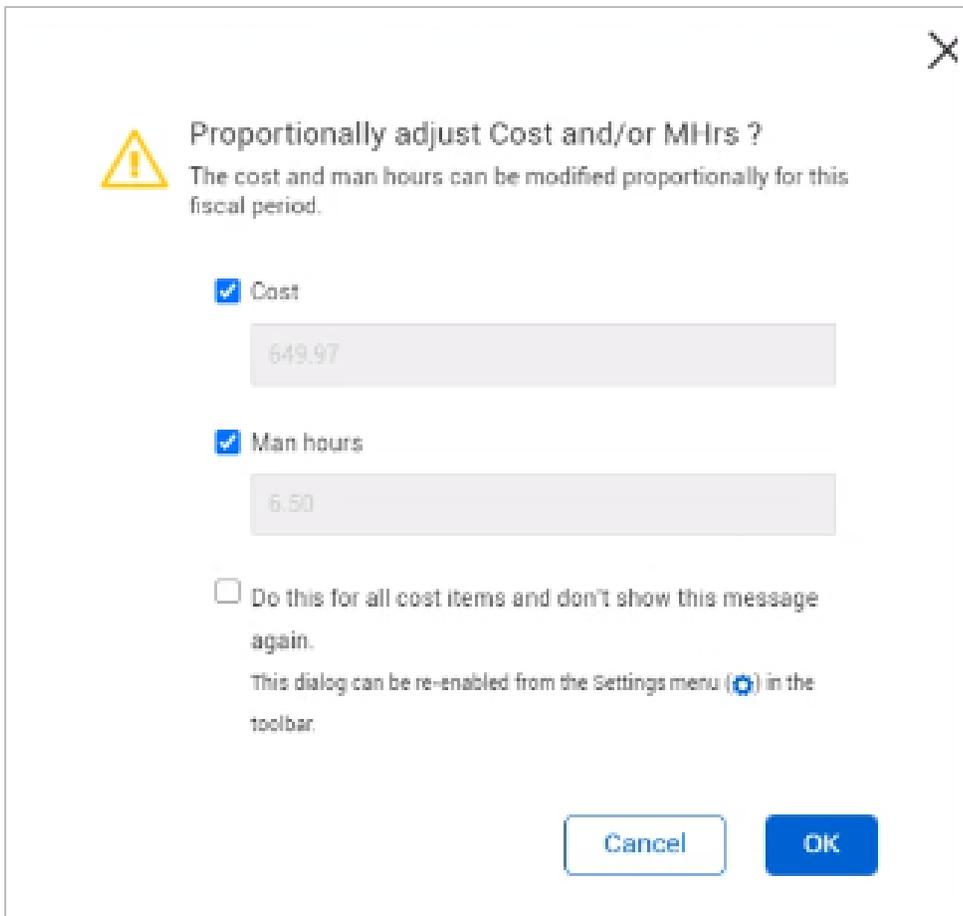
Quantity
0.13

Do this for all cost items and don't show this message again.
This dialog can be re-enabled from the Settings menu (⚙️) in the toolbar.

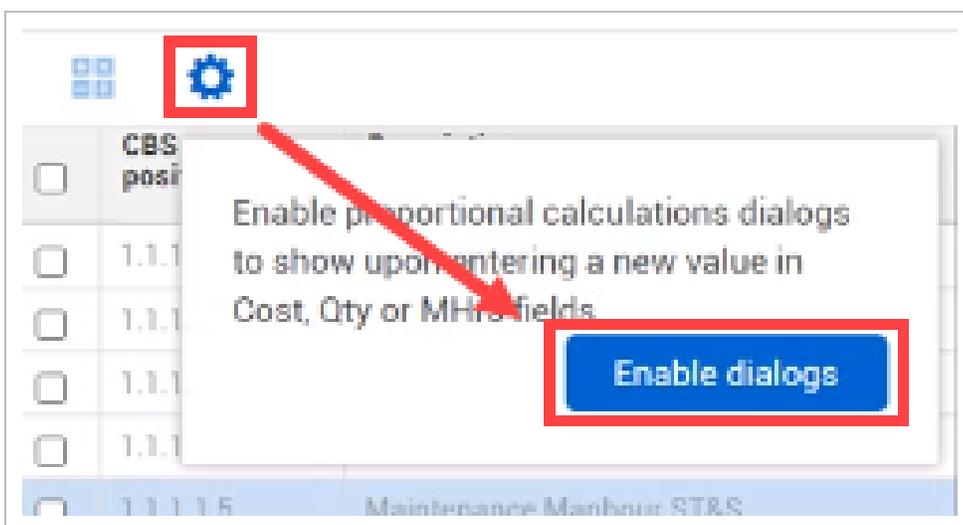
Cancel OK

If for example you doubled your cost in the Time phased forecast, it would also proportionally double your Man hours or Quantity. You can view the values that the man hours and quantity would proportionally adjust to in the read only cells.

If you manually adjusted Man hours or Quantity in the Time phased forecast grid, a dialog box appears asking to proportionally adjust cost and man hours .



Both dialog boxes have the option to adjust proportionally without showing the message again. If you selected this option and want to revert settings back to see the dialog again, in the Time phased forecast grid, go to the Settings icon and select **Enable dialogs**.



In the Time phase forecast grid, you can also select to export to Excel.

November 2020			December 2020		
Qty	Cost	Mhrs	Qty	Cost	Mhrs
-0.14	(\$ 10,000.00)	0.00	1.00	\$ 2,542.37	0.00
0.00	\$ 3,113.20	311.32	0.00	\$ 5,322.80	532.28
0.00	\$ 1,000.00	0.00	0.00	\$ 0.00	0.00
0.00	\$ 0.00	0.00	0.00	\$ 0.00	0.00
0.29	\$ 649.97	6.50	0.13	\$ 2,542.37	25.42

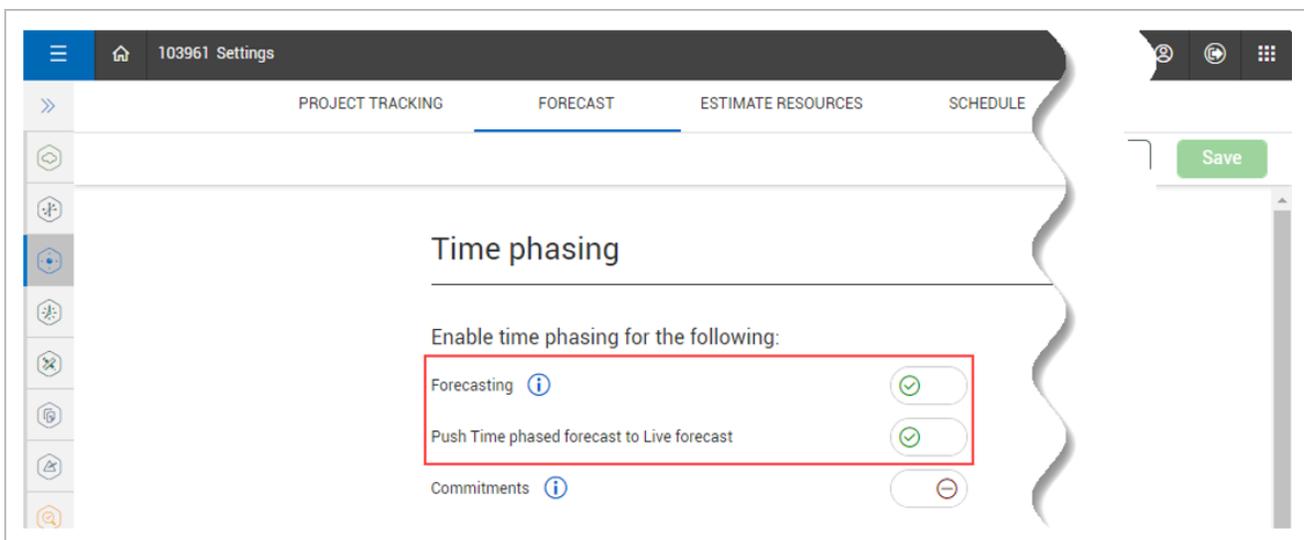
Selecting this exports everything that is in your view to an Excel spreadsheet.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
CBS posit	Descriptio	WBS phas	Start	Finish	Forecast n	Cost curve	Forecast r	Forecast r	Qty remai	Phased fo	Phased fo	Phased fo	March 20	March 20	March 20	April 2020	April 2020	April 2020
1.1.1.1.1	MAINTAIN	1348	#####	#####	Manual (E	Linear	10000	100	-1	-12627.1	-100	1.262712	0	0	0	0	0	0
1.1.1.1.2	FUEL AND	1017	#####	#####	Manual (E	Bell Shape	10000	100	-99	0.001005	900	99	0	0	0	0	0	0
1.1.1.1.3	GAS & DIE	1018	#####	#####	Manual (E	Front Load	10000	100	-220	1000	-100	220	0	0	0	0	0	0
1.1.1.1.4	FUEL HOSI	1474	#####	#####	Manual (E	Back Load	10000	100	1	-1.7E-05	-100	0	0	0	0	0	0	0
1.1.1.1.5	Maintena	1476	#####	#####	Manual (E	Linear	10000	100	1	-535.826	-5.35826	0.01142	0	0	0	0	0	0

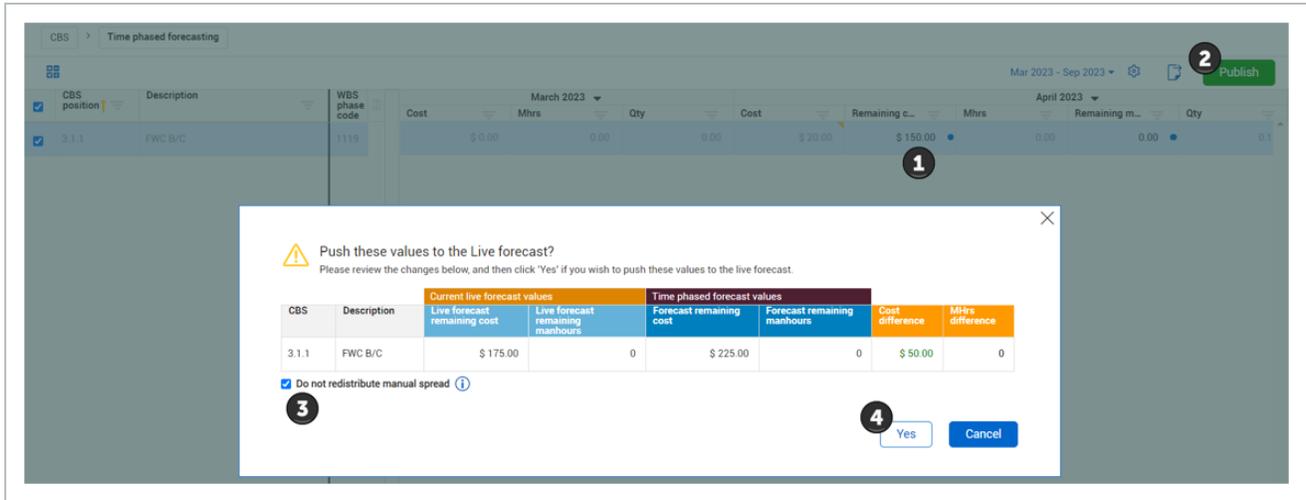
6.6.4 Static manual time phased forecasting (TPF)

Static manual TPF lets you distribute a time phased forecast in the future without causing a redistribution. All values entered in the TPF are constant, and any deltas based on current month actuals that do not equal what was forecasted for that month, must be spread manually.

To enable the static manual forecast method, the Forecasting and Push time phased forecast to Live forecast toggles must be set to *On* in Settings > Control > **Forecast**.



The static manual forecast can be enabled on the Time phased forecasting page by first making a change to any of the distribution fields. After you click the **Publish** button, the Push these values to the Live forecast dialog box opens. When the Do not redistribute manual spread check box is selected, the values entered in whole months remain as-entered and are not automatically redistributed when actuals are incurred or months close.



The forecast method for the CBS record automatically changes to static manual TPF, and the forecast remaining cost and forecast total cost changes based on the distribution amount adjusted in TPF.

Tasks	Forecast remaining cost	Forecast total cost	Forecast remaining Mhrs	Forecast remaining unit cost	Forecast method
3.1 Misc. Rev External	\$ 2,375.00	\$ 245,042.96	75.00	\$ 9,500.00	Rollup
3.1.1 FWC B/C	\$ 225.00	\$ 325.00	0.00	\$ 450.00	Static manual TPF ...

Static Manual TPF (estimate at completion)

If costs are claimed for the CBS item, the forecast total cost remains the same, but the forecast remaining cost is reduced from the claimed actual quantity.

The screenshot displays the 'CLAIM ACTUALS' section with the following data:

CE total cost	Actual cost (to date)
\$ 100.00	\$ 100.00

Below this, the 'Claimed cost' is set to 50 and the 'Cost category' is 333333. The 'Posted date' is 04/21/2023.

The 'Live forecast' table shows the following data:

Forecast remaining cost	Forecast total cost
\$ 2,325.00	\$ 245,042.96
\$ 175.00	\$ 325.00

In TPF, the claimed amount now shows the phased forecast remaining cost, which represents the remaining amount that still needs to be spread. The phased forecast remaining cost now must be deducted somewhere from the TPF distribution.

CBS position	Description	Forecast remain... cost	Forecast remaining Mhrs	Remaining qty	Phased forecast remaining cost
3.1.1	FWC B/C	\$ 175.00	0.00	0.50	\$ 50.00

CBS position	Description	WBS phase code	Start	Cost	Remaining c...
3.1.1	FWC B/C	1119	04/01/2023	\$ 0.00	-50

6.6.5 Time Phased Forecast Settings

Time phased forecast can be turned on in Settings > Control > **Project Settings**, in the Forecast section of the page.

If the setting is turned off, you will not see the Time phased forecasting option in the Actions dropdown, CBS tab, in the Control > Workspaces page.

6.6.5.2 Enable Time Phased Forecasting

Time phasing

Time phased forecasting provides the ability to spread forecast remaining values into the projects fiscal periods. Navigate to Project details to set the Start and End dates which define the earliest and latest project periods.

Enable time phasing for the following:

Forecasting (i)

Push Time phased forecast to Live forecast

6.6.5.3 Cost Curves

Cost curves determine the proportion of money to be expended in a certain period of time. In the case of Time phased forecasting, the type of cost curve being used determines how forecast will be spread across the monthly forecasting buckets.

In addition, the fiscal calendar also influences how the forecast is spread.

Cost Curves are found in Settings > Control > Schedule, in the Cost Curves section of the page.

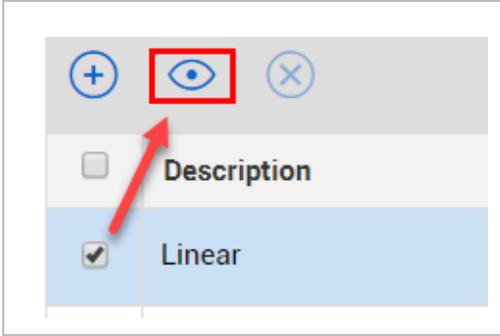
Cost curves

Customize cost curve tables

(+) (eye) (x)

	Description	Data points
<input type="checkbox"/>	Linear	20
<input type="checkbox"/>	Front Loaded	2
<input type="checkbox"/>	Back Loaded	2
<input type="checkbox"/>	Bell Shaped	21

By selecting a Cost Curve and selecting the View icon, you can view its default distribution.



In this case, the Linear Cost Curve settings displays the cost curve durations and values.

Description		Number of points
Linear		20

From duration %	To duration %	Value %
0.00%	5.00%	5.00%
5.00%	10.00%	5.00%
10.00%	15.00%	5.00%
15.00%	20.00%	5.00%
20.00%	25.00%	5.00%
Total		100.00%

For example, using a **Linear Cost curve**, with a Start Date of 05/12/2020, the Forecast Remaining cost is \$3,000,000.00, with a Phased forecast remaining cost delta of \$0. This means that you are forecasting to spend \$3,000,000.00, and your Phased Forecast Remaining Delta is zero because your Time Phased Forecast is now fully met (you have fully forecasted \$3,000.000.00).

CE po	Descript	WE ph: cot	Start	Finish	Cost curv	Forecast	Forecast remainin cost	Forecast final cost	Phased forecast remaining cost delta
3	Concrete	1071	05/12/2020	10/26/2020	Linear	Curr...	\$ 3,000,000.00	\$ 3,000,000.00	\$ 0.00

Since your scheduled **Start** date is 05/12/2020, the system will start forecasting money on this cost item in May. Based on the Linear Cost curve and the fiscal calendar it will stop forecasting money in October 2020. This is based off your scheduled **Finish** date of 10/26/2020. Over the period of 6 months, your spend is totaling 3,000.000.00.

May '20 cost	Jun '20 cost	Jul '20 cost	Aug '20 cost	Sep '20 cost	Oct '20 cost
\$ 339,285.71	\$ 500,000.00	\$ 500,000.00	\$ 625,000.00	\$ 500,000.00	\$ 535,714.29

6.6.6 Time Phased Forecast Prerequisites

There are certain **requirements** for a cost item to be eligible for time phased forecasting.

1. The Schedule data block must have a Start and Finish date.
2. The Schedule data block must have a Cost curve association.

6.6.7 Time Phased Forecast View

You may want to create a View in your Control Workspace similar to this one showing a Time Phased Forecast in comparison with the Live forecast. This shows the hours you are forecasting to spend money (TPF) vs. the Live forecast.

Tasks				TPF					Live forecast					
CB pos	Descrip	WBS phase code		Start	Finish	Cost curv	Forecast remaining cost	★ Phased forecast remaining co...	Forecast method	Forecast final cost	Forecast final man hours/Unit	Forecast final Mhrs	Forecast final productiv...	Forecast final unit cost
1	Job Overh...	1002		06/11/2019	11/25/2019	Linear	\$ 250,000.00	(\$ 0.00)	Current esti...	\$ 250,000.00	0.00	0.00	0.00	\$ 250,000.00
2	Earthwork	1069		11/26/2019	05/11/2020	Linear	\$ 800,000.00	(\$ 0.00)	Current esti...	\$ 800,000.00	1.60	16,000.00	1.00	\$ 80.00
3	Concrete	1071		05/12/2020	10/26/2020	Linear	\$ 3,000,000.00	\$ 320,000.00	Current esti...	\$ 3,000,000.00	6.00	60,000.00	1.00	\$ 300.00
^ 4	Structural ...	1073		10/27/2020	04/12/2021	Linear	\$ 1,050,000.00	(\$ 1,050,000.00)	Rollup	\$ 1,050,000.00	21.00	21,000.00	1.00	\$ 1,050.00
	Erect Steel...	1074				Linear	\$ 800,000.00	(\$ 800,000.00)	Current esti...	\$ 800,000.00	20.00	16,000.00	1.00	\$ 1,000.00
	Erect Steel...	1005				Linear	\$ 200,000.00	(\$ 200,000.00)	Current esti...	\$ 200,000.00	20.00	4,000.00	1.00	\$ 1,000.00
	Bolted Con...	1006				Linear	\$ 50,000.00	(\$ 50,000.00)	Current esti...	\$ 50,000.00	0.50	1,000.00	1.00	\$ 25.00
^ 5	Materials	1084				Linear	\$ 1,750,000.00	(\$ 1,750,000.00)	Rollup	\$ 1,750,000.00	0.00	0.00	0.00	\$ 1,750,000.00
	Earthwork ...	1085				Linear	\$ 250,000.00	(\$ 250,000.00)	Current esti...	\$ 250,000.00	0.00	0.00	0.00	\$ 25.00
	Concrete ...	1086				Linear	\$ 1,000,000.00	(\$ 1,000,000.00)	Current esti...	\$ 1,000,000.00	0.00	0.00	0.00	\$ 100.00
	Structure ...	1087				Linear	\$ 500,000.00	(\$ 500,000.00)	Current esti...	\$ 500,000.00	0.00	0.00	0.00	\$ 500.00
Subtotals 11							\$ 6,850,000.00			\$ 6,850,000.00		97,000.00		

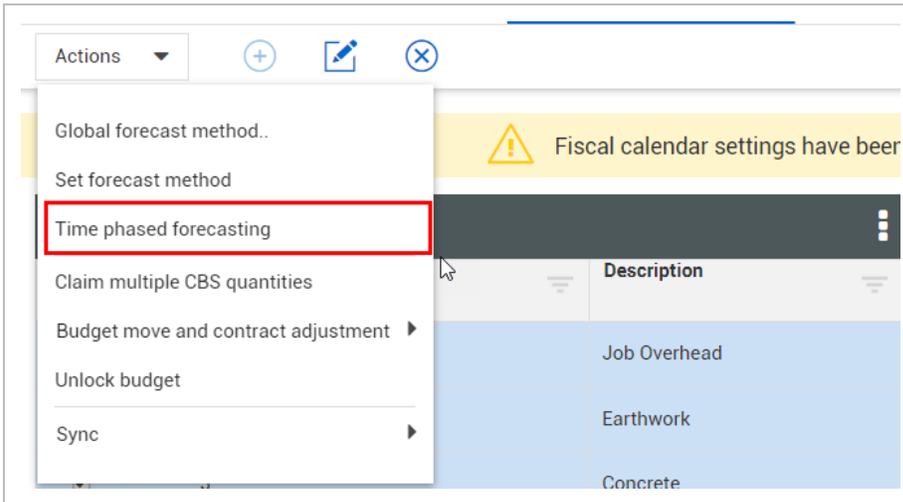
The following steps walk you through how to plan Time phased forecasting.

Time Phased Forecast Planning

1. To start time phased forecasting, on the CBS tab, select your pre-determined **CBS items** as shown below.

Tasks			Schedule			
CBS position	Description	Scheduled	Schedule ID	Schedule plug days	Plug days	
<input checked="" type="checkbox"/>	1 Job Overhead	<input checked="" type="checkbox"/>	HD.0000003	<input type="checkbox"/>	0.00	
<input checked="" type="checkbox"/>	2 Earthwork	<input checked="" type="checkbox"/>	HD.0000019	<input type="checkbox"/>	90.91	
<input checked="" type="checkbox"/>	3 Concrete	<input checked="" type="checkbox"/>	HD.0000044	<input type="checkbox"/>	375.00	
<input checked="" type="checkbox"/>	^ 4 Structural Steel	<input checked="" type="checkbox"/>	HD.0000046	<input checked="" type="checkbox"/>	262.50	
<input checked="" type="checkbox"/>	4.1 Erect Steel - Heavy	<input type="checkbox"/>	HD.0000064	<input type="checkbox"/>	200.00	
<input checked="" type="checkbox"/>	4.2 Erect Steel - Light	<input type="checkbox"/>	HD.0000105	<input type="checkbox"/>	50.00	

2. Select **Time phased forecasting** from the Actions menu.



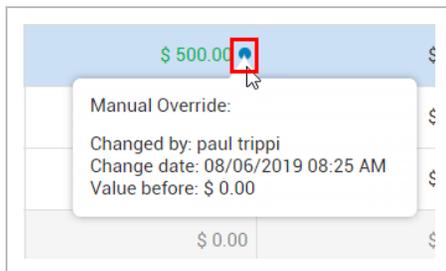
- This action opens the **Time Phased Forecast** window, where you can see the CBS on the left side of the screen, and its associated forecasting monthly allocation cost buckets on the right

CBS > Time Phased Foreca...										Publish					
CE po	Descript	WI po	St	Finish	Cor cur	Fo m	Forecast remaining cost	Forecast final cost	Phased remain delta	Load m	Jul '19 cost	Aug '19 cost	Aug '19 remaining cost	Sep '19 cost	Oct '19 cost
1	Job Overhead	1002	06/...	11/25/2019	Lin...	Curr...	\$ 250,000.00	\$ 250,000.00			\$ 0.00	\$ 18,000.00	\$ 18,000.00	\$ 62,000.00	
2	Earthwork	1069	11/...	05/11/2020	Lin...	Curr...	\$ 800,000.00	\$ 800,000.00			\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
3	Concrete	1071	05/...	10/26/2020	Lin...	Curr...	\$ 3,000,000.00	\$ 3,000,000.00			\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
4.1	Erect Steel - ...	1074			Lin...	Curr...	\$ 800,000.00	\$ 800,000.00			\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
4.2	Erect Steel - ...	1005			Lin...	Curr...	\$ 200,000.00	\$ 200,000.00			\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
4	Structural St.	1073	10/...	04/12/2021	Lin...	Roll	\$ 1,050,000.00	\$ 1,050,000.00			\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

3. For one of your cost items, type in **\$500** in one of the monthly bucket fields.

	Feb '20 cost	Mar '20 cost	Apr '20 cost
\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
147,619.05	\$ 147,619.05	\$ 138,095.24	\$ 147,619.05
\$ 0.00	\$ 0.00	\$ 500.00 ●	\$ 0.00
\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

- Notice how the field now has a blue circle next to the \$500.00. If you hover over it, you see the value before, after, and the date the change was made

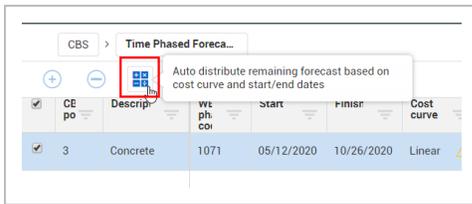


- Because of the manual adjustment, a warning sign appears on the Cost curve for this cost item. The cost curve is not being changed to manual, but the system records that this cost item is no longer linear, because it has been overridden

CE po	Descript	Wl ph co	St	Finish	Cost curve
1	Job Overhead	1002	06/...	11/25/2019	Linear
2	Earthwork	1069	11/...	05/11/2020	Linear
3	Concrete	1071	05/...	10/26/2020	Linear

- The override made to this cost item is no longer needed, and you now decide you want to **revert** to its original setting, and have the system Auto distribute the forecast

4. Make sure your cost item is checked, then select the **Auto distribute** icon.



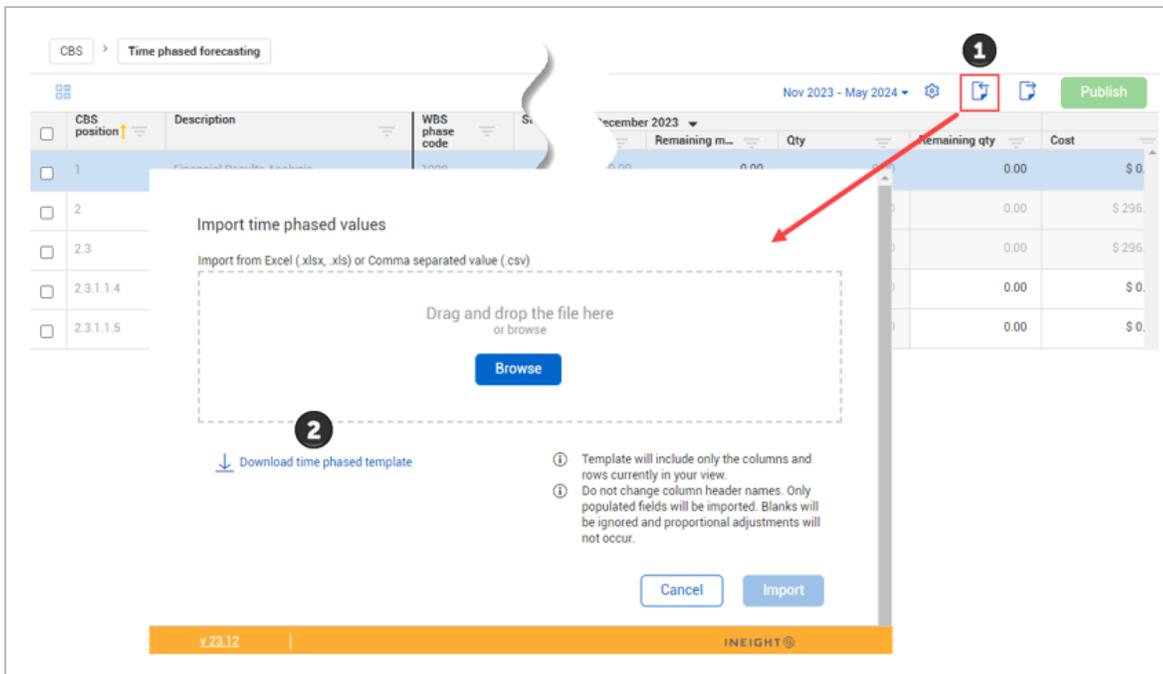
- This action will revert the time phase values back to the same numbers as they were prior to any manual adjustments, plus:
 - a. It will erase any manual adjustments
 - b. It will distribute the remaining forecast values based on cost curve and start/end dates of that specific cost item, as determined by the fiscal calendar
- The result of selecting the Auto distribute icon starts its forecasting spread on the cost item’s **Start** date of 05/12/20, and will **Finish** its schedule on 10/26/20

Descript	WBS phase code	Start	Finish	Cost curve	Forecast remaining...	Phased forecast remaining...	Aug '20 cost	Sep '20 cost	Oct '20 cost
Concrete	1071	05/12/2020	10/26/2020	Linear	3,000.00...	\$ 0.00	\$ 553,571.43	\$ 553,571.43	\$ 535,714.29

It is important to remember the purpose of utilizing Time Phase Forecasting is to see how you are forecasting to spend money over a period of time. The expectation is to get the forecast adjusted to where it should be, and update costs as needed.

6.6.8 Time Phased Forecast Microsoft Excel import

You can import a Microsoft Excel file to update the values in Time Phased Forecast by selecting **Import** on the Time Phased Forecast page to download the time phased template. To import time phased forecast values, you can download a template as shown in number 2 in the image below to use as a guide to import your new time phased forecast values. The same format provided in the download template is required for the import to be successful.



The Excel file includes the cost items that are in your current Time Phased Forecast view. Columns in orange are required, columns in yellow are optional to change, and columns in grey are ignored and cannot be changed. When you are finished making your Excel changes, you can then import the Excel file into Control to update the Time Phased Forecast with your new values. Column header names are ignored if changed.

	A	B	C	D	E		L	M	N	O
1	Orange	Required								
2	Yellow	Optional								
3	Gray	Ignored								
4										
5	CBS position	Description	WBS phase code	Start	Finish		Time Phased forecast rema	Time Phased forecast rema	November	November
6	1	Financial Results Analysis	1000				0	-1	0	0
7	2	Misc. Rev Internal	1103	1/1/2024	3/31/2024		0	-0.000956353	0	0
8	2.3	Directs	1001	1/1/2024	3/31/2024	56	0	9.1E-09	0	0
9	2.3.1.1.4	Type D Excavation LD/PL/CP to Embankm	1007				0	0	0	0
10	2.3.1.1.5	Road Subgrade Prep/Place/Finish (1600 m	1008				0	0	0	0
11	2.3.1.1.8	Sump Excavation & Backfill (CONDITIONA	1011				0	0	0	0

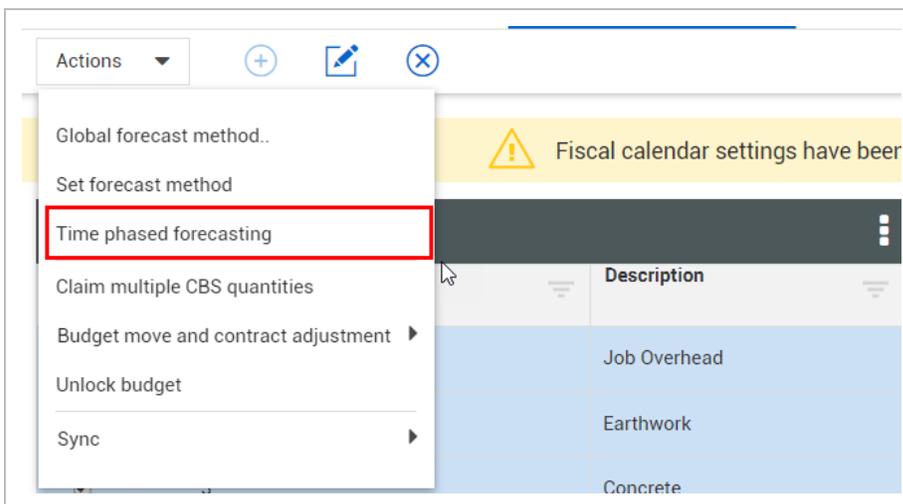
Updates are made when you select **Publish**. Excel imports are shown in the Import History Audit Log, where you can download the Excel file to see a list of errors if the process fails.

Time phased forecast Microsoft Excel import

- To start time phased forecasting, on the CBS tab, select your pre-determined **CBS items** as shown below.

Tasks			Task details		
<input type="checkbox"/>	CBS position	Description	Forecast (T/O) qty	UoM	Actual MHrs (to date)
<input checked="" type="checkbox"/>	1	Financial Results ...	1.00	PLS	0.00
<input checked="" type="checkbox"/>	2	Misc. Rev Internal	1.00	PLS	7,030.50
<input checked="" type="checkbox"/>	2.1	Misc. Rev Internal	1.00	PLS	0.00
<input checked="" type="checkbox"/>	2.3	Directs	1.00	PLS	3,821.00
<input checked="" type="checkbox"/>	2.3.1	Direct Labour	1.00	PLS	3,067.00

- Select **Time phased forecasting** from the Actions menu.



3. Select the **Import** icon.

The screenshot shows the 'Time phased forecasting' interface. On the left, a table lists CBS positions with their descriptions and WBS phase codes. On the right, a detailed view for 'February 2024' shows columns for Mhrs, Qty, and Cost. The 'Import' icon (a square with a downward arrow) is highlighted with a red box.

CBS position	Description	WBS phase code
1	Financial Results Analysis	1000
2	Misc. Rev Internal	1103
2.1	Misc. Rev Internal	1104
2.3	Directs	1001
2.3.1	Direct Labour	1002

February 2024				
Mhrs	Qty	Cost		
\$ 0.00	0.00	0.00	\$ 0.	
\$ 13.63	10.00	0.00	\$ 12.	
\$ 0.00	0.00	0.00	\$ 0.	
\$ 13.63	10.00	0.00	\$ 12.	
\$ 13.63	10.00	0.00	\$ 12.	

4. Click **Download time phased template**.

The screenshot shows the 'Import time phased values' dialog box. It includes a 'Browse' button and a 'Download time phased template' link, which is highlighted with a red box. There are also informational icons and a scroll bar on the right.

Import time phased values

Import from Excel (.xlsx, .xls) or Comma separated value (.csv)

Drag and drop the file here or browse

Browse

Download time phased template

Template will include only the columns and rows currently in your view.

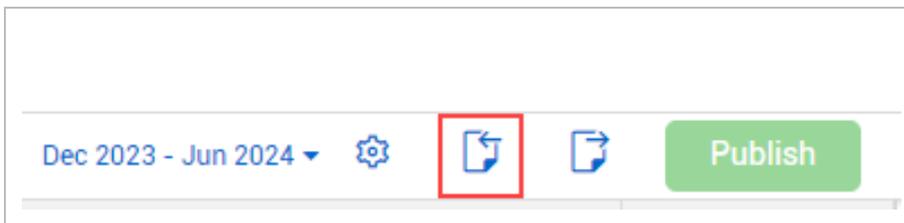
Do not change column header names. Only populated fields will be imported. Blanks will be ignored and proportional adjustments will not occur.

Cancel Import

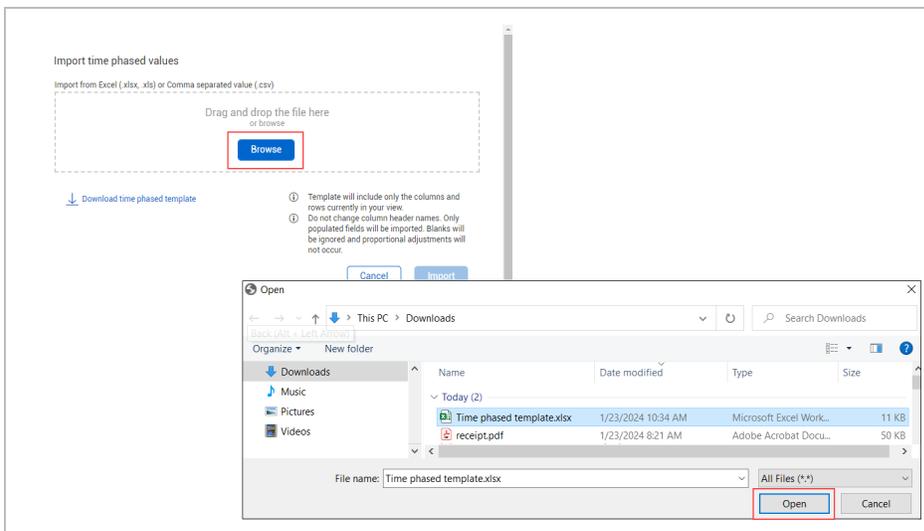
5. Adjustment any of the fields under the **yellow columns**. For example, for CBS position 2.3, change the February 2024 Cost from 13.62637329 to 9, then **save** your changes.

CBS position	Description	January 2024	February 2024 Cost	February 2024 Mhrs	February 2024 Qty	March 2024 Cost	March 2024 Mhrs	March 2024 Qty
1	Financial Results Analysis	0	0	0	0	0	0	0
2	Misc. Rev Internal	0	13.62637329	10	0.000614656	12.74725243	10	0.000575001
2.1	Misc. Rev Internal	0	0	0	0	0	0	0
2.3	Directs	0.001413	13.62637329	10	0.001990392	12.74725243	10	0.00186198
2.3.1	Direct Labour	0	13.62637329	10	0	12.74725243	10	0

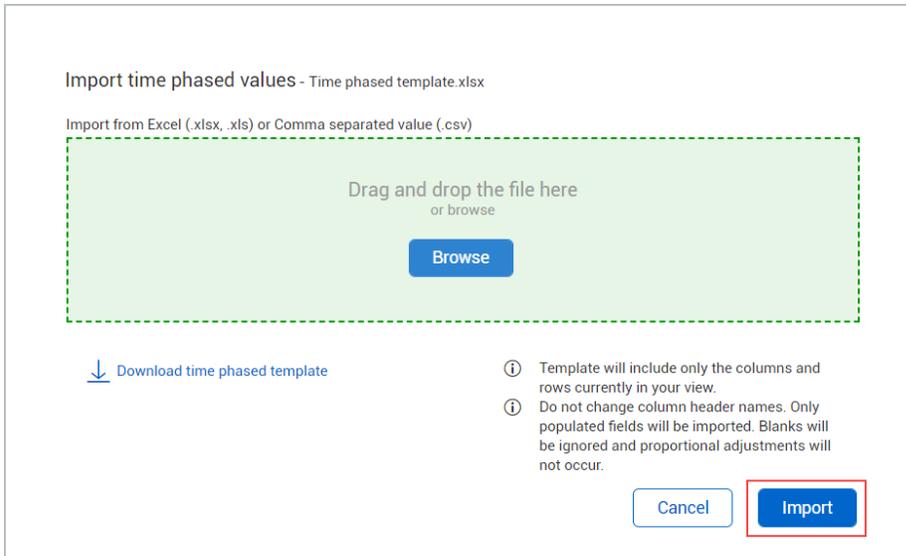
6. Select the **Import** icon again.



7. Select **Browse**, and then navigate to the Excel file you just saved, then select **Open**.

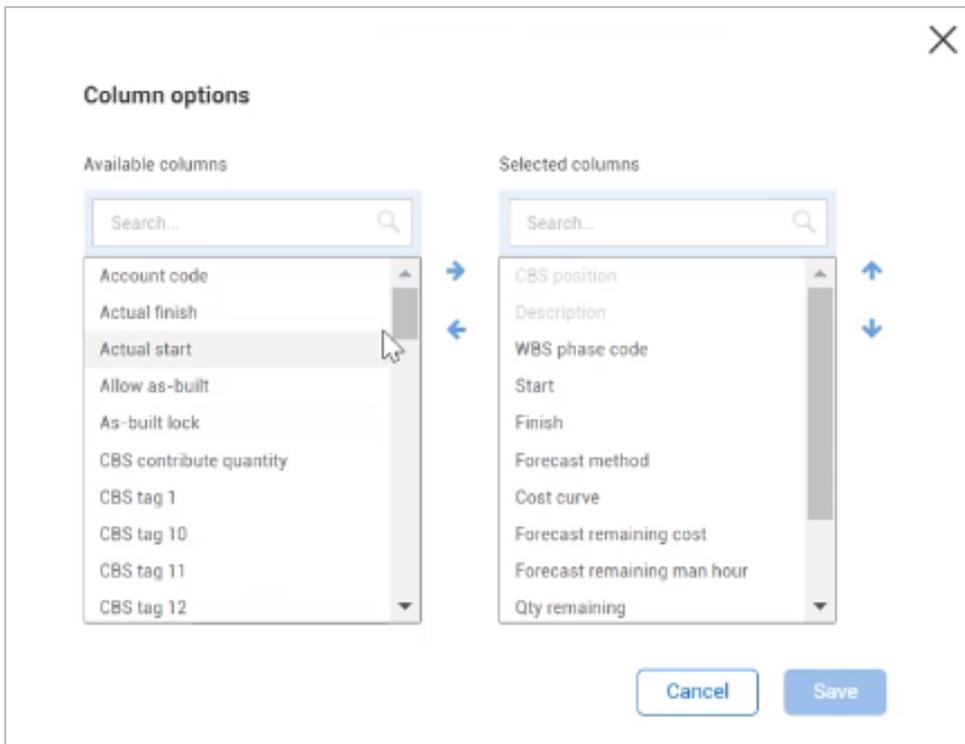


8. Select **Import**.



6.6.9 Column Chooser

When you open the Time phase forecast, a column chooser has been added to the grid.



After you choose which columns to show, the left side of the grid updates with your selection.

On the right of the grid, you can also adjust your view for each month's Cost, Man hours, and Quantity. This can be done using the drop down next to the month and deselecting the options you do not want to see on your grid.



If you select cost from past dates, the data is read only.

6.6.10 Audit Log

All changes made within TPF are captured in the Audit log within Control Workspaces. The Audit log captures changes based on any changes made to a forecasted CBS item.

In the example, it shows that a forecasting value was changed on 08/13/19 for Audit ID 232. The forecasting value had been changed from 89.36 to 100.00 for the Aug '10 remaining cost time period.

CBS	Audit ID	Data type	Item type	Description	WBS	Attribute	Change by	Changed date	Value before	Value after
ACS	232	Time phased forecast	Cost item	Job Overhead	1002	Aug '19 remaining cost	Paul trippi	08/13/2019 0...	89.36	100.00
Pay items	225	Current Estimate	Estimate r...	C01.04-Concr...		Resource employed	Paul trippi	08/13/2019 1...		Resource e...
Integration	224	Current Estimate	Estimate r...	E.01.05-Earth...		Resource employed	Paul trippi	08/13/2019 1...		Resource e...
Import history	223	Current Estimate	Estimate r...	C01.04-Concr...		Resource employed	Paul trippi	08/13/2019 1...		Resource e...

6.7 PUSH TO LIVE FORECASTS

As mentioned above, the Live Forecast is the official forecast used for financial reporting and shared with all members of the project.

You can push forecasts entered in the Forecast data block to the Live Forecast either individually or by selection. This allows you to send only the items that you choose from your forecast to the Live Forecast.

The Live Forecast can only be updated if the user is assigned the appropriate role with the associated permissions. Project Admin or Power User can edit the Live Forecast directly.

Forecast changes made in the Forecast data block WILL NOT be pushed to the Live Forecast without an additional action detailed in the Step by Step below.

Changes made to your Forecast are only seen by you, unless you share them with someone else (see topic 9.4 Forecast Management) or update them to the Live Forecast.

Push Live Forecast by Selection in the CBS Tab

1. From the CBS tab with the Forecast data block in the view, select a group of cost items, by clicking the row header check boxes.
2. Click on the **drop-down arrow** in the center of the Forecast data block.
3. Select **Push to Live Forecast**.

The Push to Live Forecast option is disabled until you select one or more cost items.

4. After review, select **Yes** and your forecast values will push to the Live Forecast.

6.7.1 Time phased forecast push to live

The time phased forecast feature lets you make edits in your time phased forecast. You are then able to push those edits to your live forecast.

You can edit your total forecast remaining cost and forecast remaining hour values in the Time phased forecast window. It would then override your forecast remaining cost and your forecast remaining man hour if there is a change.

The Time phasing Forecasting option must be enabled first in order to have the Push Time phased forecast to Live option available to be enabled. Enabling only the Forecasting option does not automatically enable both.

Time phasing

Enable time phasing for the following:

Forecasting  Budget 

Push Time phased forecast to Live forecast

Forecast

% Complete value at which delta from straight line calculation utilizes average performance

The Time phasing section can be located in the Project Settings of Control under the Project tracking tab.

When you have enabled both options under the Time phasing section click save. Then go back to the CBS tab.

Follow these step by steps to use a time phased forecast push to live.

Time phased forecast push to live forecast

1. Select cost items from the CBS tab with a **Forecast remaining cost** to use in the push to live feature.

Make sure the cost items you selected have start and end dates. Otherwise you cannot edit them in the Time phased forecasting window.

2. From Control's CBS tab, select the Actions tab. Then select the **Time phased forecasting** option.
3. In the third data block where it has the Month and Year, scroll to the Remaining cost. Now move the scroll bar over to January of 2021.

CBS position	Description	Forecast remaining cost	Forecast remaining man hour	Qty remaining	Phased forecast remaining	Remaining c...	Mhrs	December 2020	Remaining m...	Qty	Remaining qty	Cost
1.2	Fiber optic cable-1	\$ 5,000.00	0.00	10,000.00		\$ 5,000.00	0.00		0.00	0.00	10,000.00	
1.4	CCTV devices	\$ 1,500.00	0.00	6.00		\$ 318.77	0.00		0.00	0.00	1.28	

Remaining qty	Cost	Mhrs	Qty	Cost	Mhrs
10,000.00	\$ 366.00	0.00	0.00	\$ 0.00	
1.28	\$ 402.01	0.00	1.46		

- If you believe the line item could take up more time and money, you can adjust the Cost and Man hours for the following month. These changes will then be added to the phased forecast remaining columns once you push to live.

Remaining qty	Cost	Mhrs	Qty	Cost	Mhrs
10,000.00	\$ 1,000.00	100.00	10,000.00	\$ 1,000.00	100.00
6.00	(\$ 0.00)	0.00	0.00		
1.28	\$ 366.00	0.00	1.46	\$ 402.01	

Quantity will show as changed with a delta next to the column. Currently, you cannot push quantity updates to live.

- When you have made all the changes you need, select the cost items you want to push to live. You can either select one or all.

CBS position	Description	Remaining qty	Phased forecast remaining	Phased forecast remaining	Phased forecast remaining qty	January 2021	February 2021
1.2	Fiber optic cable-1	10,000.00	\$ 1,000.00	100.00	1.00	100.00	\$ 0.00
1.4	CCTV devices	6.00	(\$ 300.00)	0.00	-1.20	0.00	\$ 102.01

- Dialog appears asking if you want to push these values to the Live forecast. Select **Yes** to continue. The Cost and Man hours difference shows in the orange columns.

 Push these values to the Live forecast?
Please review the changes below, and then click 'Yes' if you wish to push these values to the live forecast.

CBS	Description	Current live forecast values		Time phased forecast values		Cost difference	MHRs difference
		Live forecast remaining cost	Live forecast remaining manhours	Forecast remaining cost	Forecast remaining manhours		
1.2	Fiber optic cable-1	\$ 5,000.00	0.00	\$ 6,000.00	100.00	\$ 1,000.00	100.00
1.4	CCTV devices	\$ 1,500.00	0.00	\$ 1,200.00	0.00	(\$ 300.00)	0.00

- When this is pushed to live, your Forecast remaining cost and Forecast remaining man hour should update in the Live forecast. Your Forecast Method will then change to **Manual ETC**. Manual ETC will have a green dot indicator that states it was pushed from Time phased forecast when you hover over the item.

Live forecast < ● ● ● ● ● > Live forecast 12/09/2020

★ Forecast remaining cost	★ Forecast remaining man hour	★ Forecast remaining man hour/Unit	★ Forecast remaining productivity	★ Forecast remaining unit cost	★ Forecast method
\$ 36,975.68	500.00	500.00	0.80	\$ 36,975.68	Rollup
\$ 25,000.00	300.00	0.03	1.00	\$ 2.50	Current estimate
\$ 6,000.00 	100.00 	0.01	0.01	0.00	Updated by push from Time phased forecast 
\$ 5,000.00	100.00	0.01	1.00	\$ 0.25	Current estimate
\$ 975.68 	0.00	0.00	0.00	\$ 162.61	Manual (ETC) 

The Forecast remaining cost and Forecast remaining man hour columns will have an orange wedge indicator that shows you which values have been updated manually changed when you hover over the indicator.

Tasks

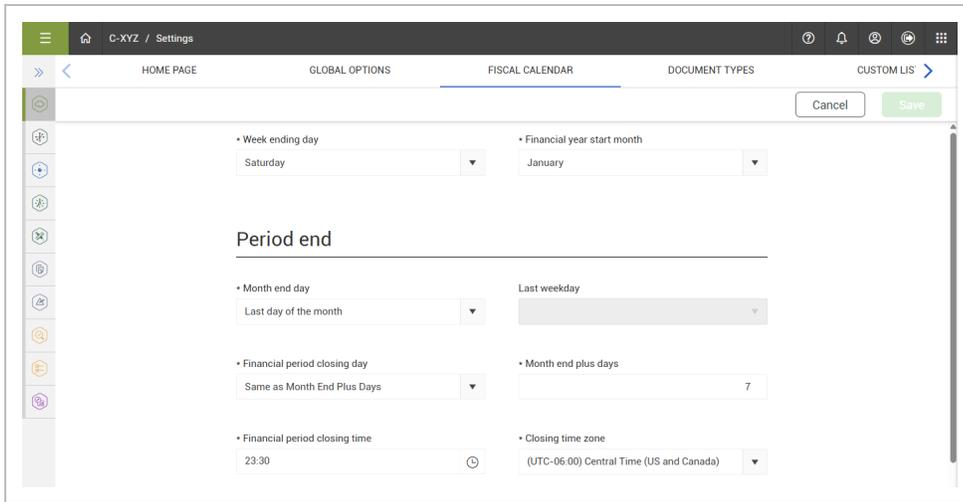
CBS position	Description	WBS phase code	Total committed cost	★ Forecast remaining cost	★ Forecast remaining man hour	★ Forecast remaining man hour/Unit	★ Forecast remaining productivity	★ Forecast remaining unit cost	★ Forecast method
1	Electrical devices	1000	500.00	\$ 36,975.68	500.00	500.00	0.80	\$ 36,975.68	Rollup
1.1	Install conduit	1002	250.00	\$ 25,000.00	300.00	0.03	1.00	\$ 2.50	Current estimate
1.2	Fiber optic cable-1	1001.1	250.00	\$ 6,000.00 	100.00 	0.01	0.01	\$ 0.60	Manual (ETC) 
1.3									
1.4									
1.5									
1.6									
2									

Most recent change to this item:

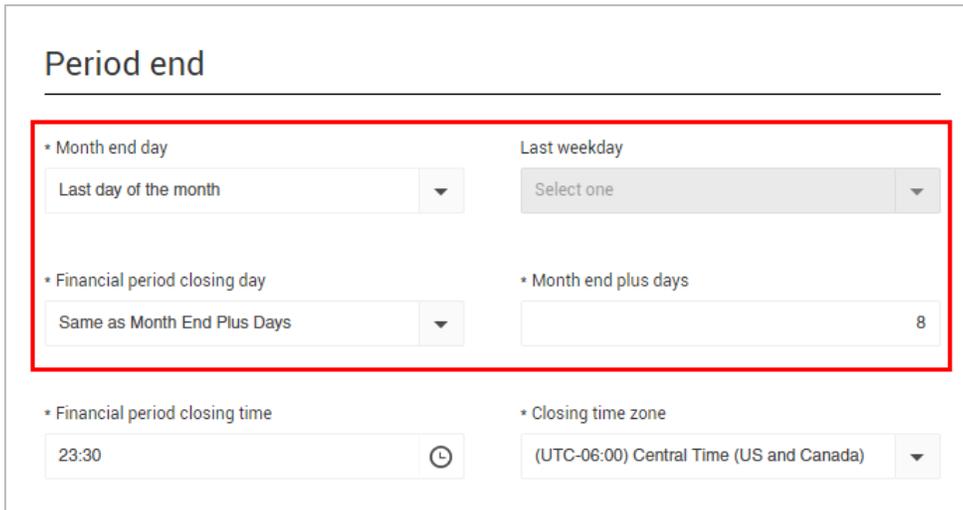
CBS	Column	Previous value	New value	Previous Forecast final..	Forecast final cost new	Previous Forecast final..	New Forecast final MH..	Changed by	Changed date
1.2 - Fiber optic cable-1	ForecastRemainingMa...	100.00000000000000	200.00000000000000	\$ 6,000.00	\$ 7,000.00	100.00	200.00	Danielle Shovel	12/9/2020

6.8 FISCAL CALENDAR

Control has built-in settings that automatically set the actuals in the forecasting-related data blocks to match your company's month end calendar.



The fiscal calendar settings include a suspended period for you to finalize your forecast numbers without incurring any new actuals.



During the suspended period, your numbers are frozen, allowing you to finish month end reporting without worrying about the numbers changing. Any new actuals accumulated during the suspended period will populate once the suspended period is over.

The Live forecast data block contains a Current live forecast label in its header. The Current live forecast label reminds you that the values in the Live forecast data block are only for the current period, as defined in the organization settings.

Live forecast		Current live forecast		09/02/2025	
Forecast total cost	Forecast total Mhrs	Forecast total Mhrs/unit	Forecast total productivity	Forecast total unit cost	Forecast method
\$ 312.50	0.00	0.00	0.00	\$ 312.50	Current estimate
\$ 406,300.00	8,310.00	0.83	0.96	\$ 40.63	Current estimate
\$ 1,499,250.00	29,805.00	2.98	1.01	\$ 149.93	Current estimate
\$ 475,850.00	9,560.00	9.56	2.20	\$ 475.85	Rollup
\$ 346,300.00	6,960.00	19.89	2.30	\$ 989.43	Current estimate
\$ 125,050.00	2,440.00	20.00	1.64	\$ 1,025.00	Average performan...

Fiscal calendar settings are configured in your organization settings. See the following table for details on fiscal calendar options.

Field Name	Purpose
Week ending day	Determines which day of the week is the final day.
Financial year start month	Allows the financial year-end to be different from the calendar year-end.
Month end day	Determines what the final day of the month is.
Last weekday	Sets the day for the above setting.
Financial period closing day	Allows you to set the financial period to end on the same day or allow a period to close out the finances.
Month end plus days	Sets the number of closing days.
Financial period closing time	Sets the time when the forecast actuals will be reset to the next period.
Closing time zone	Sets the closing time zone.
Project fiscal calendar settings	Enable this setting to allow different fiscal calendar settings at the project level.

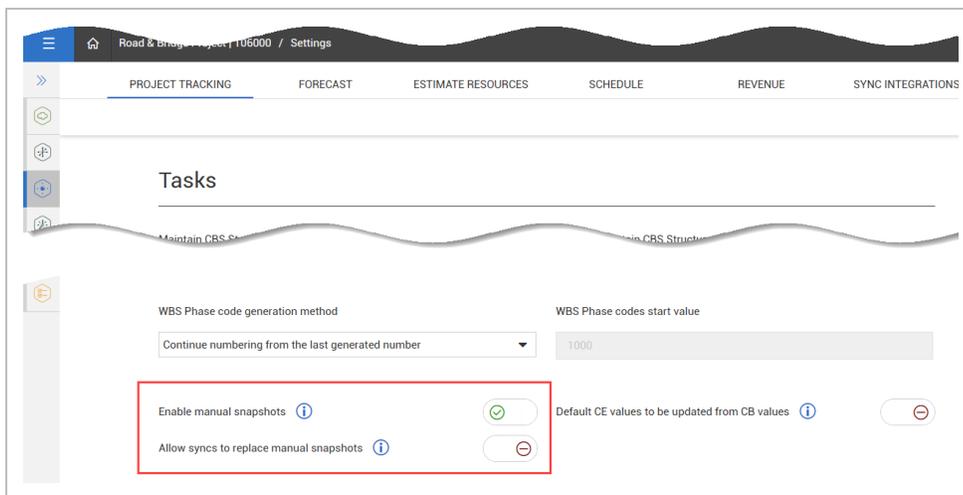
6.9 LIVE FORECAST SNAPSHOT

A Live Forecast Snapshot captures the forecast values for a project at a specific point in time. Snapshots can be used for reporting and historical comparison. Each month, a snapshot is created either manually, by syncing the live forecast on a specific date, or automatically at the end of the plus-days period. The most recent sync for the month becomes the snapshot for that month.

Snapshots contain all live forecast values at the time of capture, along with actuals for the current month. If actuals are posted during plus days with a posting date within the current period, they are included in the snapshot. However, actuals posted with next-period dates do not show until plus days are complete.

6.9.1 Snapshot settings

You can configure snapshot settings in Project settings > Control > **Project tracking**.

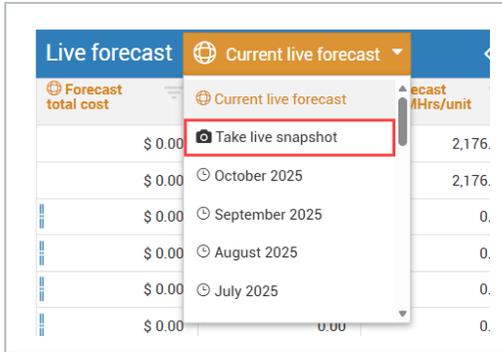


- **Enable manual snapshots** - When enabled, snapshots are captured only when a user with permission takes a monthly snapshot. When disabled, snapshots are captured automatically when *Push to Live Forecast* and *Push Forecast Revenue syncs* are run.
- **Allow Syncs to Replace Manual Snapshots** - When enabled, a manual snapshot is replaced if *Push to Live Forecast* or *Push Forecast Revenue* is synced. When disabled, syncs do not overwrite manual snapshots.

6.9.2 Manage snapshots

You can manage your snapshots from the drop-down menu in the Live forecast data block.

If manual snapshots are enabled, click **Take live snapshot** to capture a snapshot of the current Live forecast values.



Select a previous snapshot to view read-only values from that month.

Live forecast			
September 2025			
Forecast total cost	Forecast total Mhrs	Forecast total Mhrs/unit	Forecast total productivity
\$ 250,000.00	0.00	0.00	0.00
\$ 406,300.00	8,310.00	0.83	0.96
\$ 1,499,250.00	29,805.00	2.98	1.01
\$ 1,150,300.00	23,100.00	23.10	0.91

You can also load snapshots in the Forecast delta data block.

Forecast delta			
Sep.. ↔ Liv...			
Forecast total cost	Forecast total Mhrs	Forecast total Mhrs/unit	Forecast total productivity factor
\$ 0.00	0.00	0.00	0.00
\$ 0.00	0.00	0.00	0.00
\$ 0.00	0.00	0.00	0.00
\$ 93,700.00	1,874.00	1.87	-0.08
\$ 96,000.00	1,920.00	0.01	-0.11

Snapshots only capture Live forecast values. If you add a column to your view that does not relate to Live forecast values (such as *Committed remaining cost* and *Committed total cost*), those columns show as blank and disabled.

Exercise 6.1 – Forecasting

Now that you have covered all the functions of forecasting, it is time to perform your own forecasts. Utilizing the forecasting methods you have learned, practice creating forecasts as indicated below. You can use your own project (if available) or the training project used in this lesson.

1. From the Control main page, select the **CBS** tab.

2. Change to a view that contains the **Forecasts** data block.

3. Save a new forecast.

4. Update the forecasts of cost items of your choice to practice using each of the following Forecast Methods:
 - Current Budget
 - Average Performance
 - Manual EAC (based on costs or hours)_____
5. Send your forecast to a person.

6. Note the differences.

Congratulations, you have completed this exercise!

Review

1. How is the Current Budget Forecast Method calculated?
 - a. Forecast Total Cost = Current Budget
 - b. Forecast Total Cost = As-built Total Cost + (Current Budget Unit Rate * Current Budget Remaining Qty)
 - c. Forecast Total Cost = As-built Total Cost + (Current Budget Unit Rate * Current Estimate Remaining Quantity)

2. How does the Live Forecast receive updates?
 - a. They happen automatically
 - b. Push to live forecast from the Forecast data block title bar drop-down
 - c. Push to Live Forecast from the Actions drop-down menu
 - d. Viewed in the CBS change log

3. Who can a forecast be sent to?
 - a. Project Manager
 - b. Project Engineer
 - c. It automatically goes to everyone
 - d. Anyone you add to the list

4. Which data block do you use to compare forecasts?
 - a. Forecast
 - b. Forecast Delta
 - c. Forecast Comparison
 - d. Live Forecast

5. The fiscal calendar settings for Live Forecast are located under:
 - a. Organizational Breakdown Structure
 - b. Account code structure

- c. Operational resources
 - d. Project settings
-

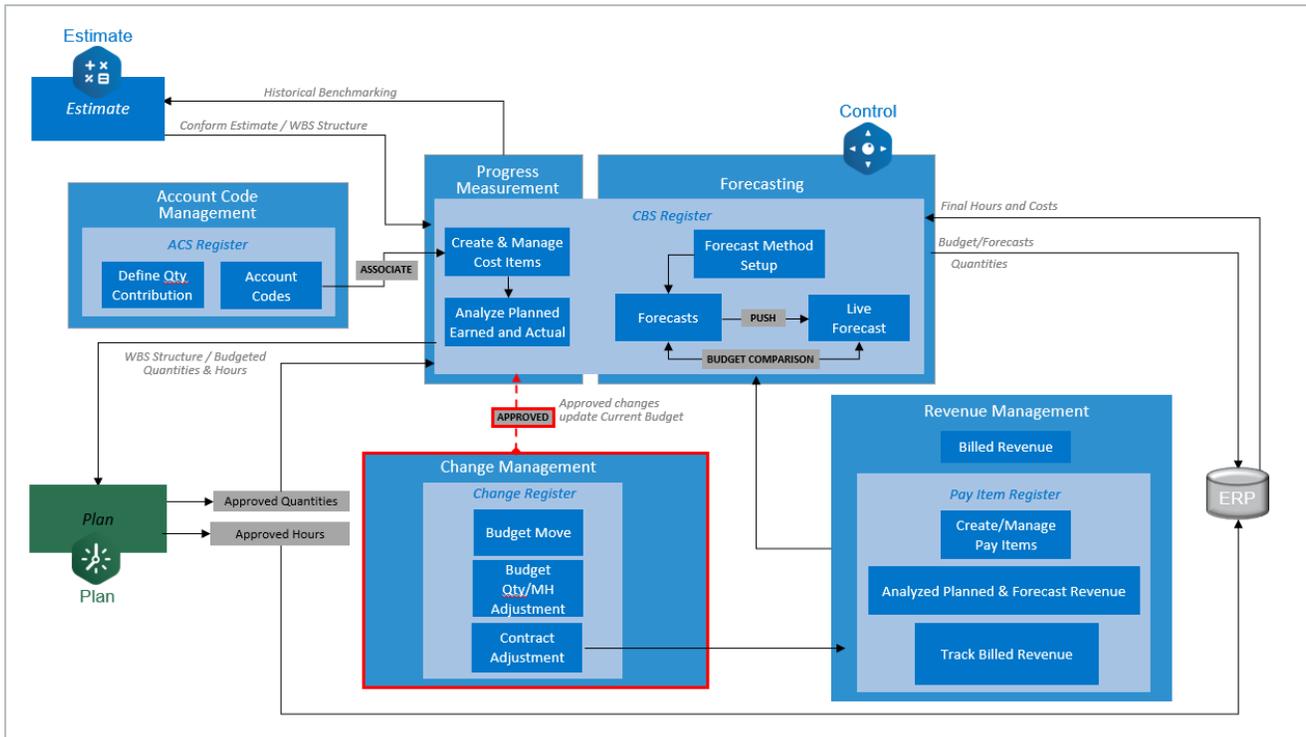
Summary

As a result of this lesson, you can:

- Differentiate and utilize InEight forecasting methods
- Manage forecasts
- Manage Time Phased Forecasting
- Push to Live Forecast
- View the Fiscal Calendar settings

CHAPTER 7 – CHANGE MANAGEMENT

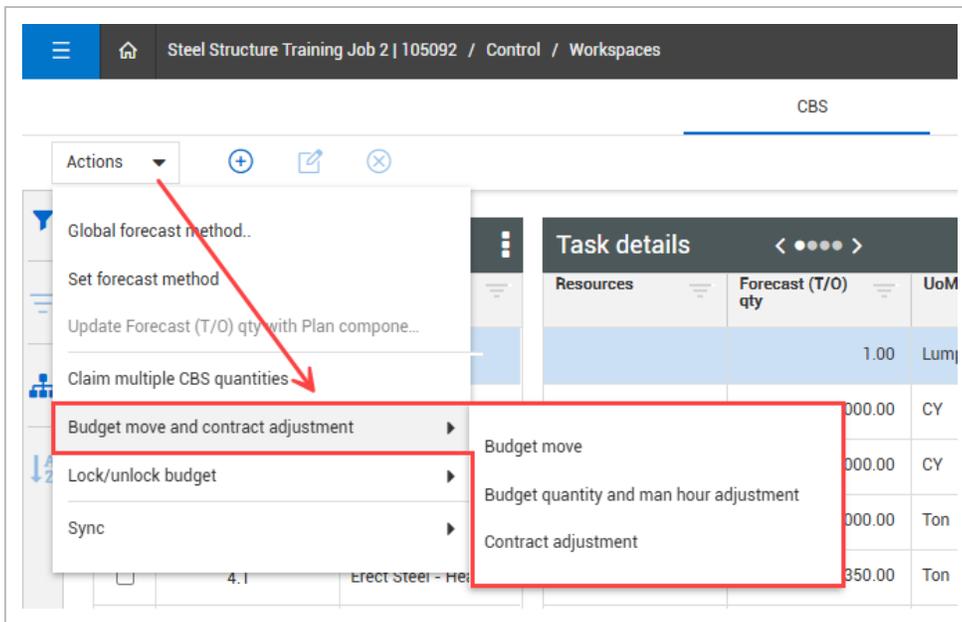
7.1 CHANGE MANAGEMENT WORKFLOW



7.2 CHANGE MANAGEMENT OVERVIEW

During any phase of a project there are multiple ways you can manage changes to items such as quantities, design, schedule, and cost. Within Control, you can manage changes to quantities, man-hours, and costs through a controlled approval process. You can make records of items such as budget moves, quantity and man-hour adjustments, and change orders by filling out forms.

You can access these change management forms from the Actions menu.



After you fill out and save the applicable changes, Control stores these changes in the Change Register tab, where the project budget is managed.

ACS PAY ITEMS CHANGE REGISTER AUDIT LOG												
ID	Description	CCO	Cre... date	Issue #	Last cha... by	Last changed on	Notes	Status	Total budget cost	Total budget MH	Total contract price	Type
22.0	Contingency Draw - Buildi...	CD-001	01/12/2023		AJ Waters	03/19/2023		Approved	\$ 0.00	0.00	\$ 0.00	Budget r
21.0	Fiber Office Connections	CO220831	08/31/2022	13	AJ Waters	08/31/2022		CCO-Approved	\$ 55,000.00	0.00	\$ 57,200.00	Contract
20.0	New Cabinet Hardware	CCO-0015	09/21/2020	9	Jordan Ca...	10/22/2020		CCO-Approved	\$ 3,500.00	0.00	\$ 3,500.00	Contract
19.0	Flooding and material was...	CCO-004	02/10/2020	6	Austin Wil...	03/10/2023		CCO-Approved	\$ 0.00	0.00	\$ 10,000.00	Contract
18.0	Extra Surveying	0019A	02/10/2020	19-1	Chris Hohl...	04/21/2021		Draft	\$ 15,000.00	0.00	\$ 19,500.00	Contract
17.0	Increase in Scope	002	01/18/2020	002	Mike Paul	02/05/2020		Approved	\$ 22,000.00	0.00	\$ 50,000.00	Contract
16.0	Change in Scope	CD1	01/18/2020	001	Paul Benni...	04/24/2020		Approved	\$ 0.00	0.00	\$ 0.00	Budget Q
15.0			11/13/2019		John Upton	04/12/2022		Approved	\$ 0.00	0.00	\$ 0.00	Budget r
14.0	traslado de dinero dentro ...		10/21/2019	011	Elia Burgu...	03/19/2023		Pending	\$ 0.00	50.00	\$ 0.00	Budget r
13.0	Traslado de dinero dentro ...		09/16/2019	013	Elia Burgu...	03/19/2023		Pending	\$ 0.00	0.00	\$ 0.00	Budget r
12.0		CCO0002	09/15/2019	003	Mike Paul	03/19/2023		Pending	\$ 0.00	0.00	\$ 0.00	Budget r
11.1	Flood control on haul road	CCO-0002	03/22/2021	4	Chris Hohl...	03/22/2021		CCO-Draft	\$ 9,000.00	0.00	\$ 0.00	Contract
Subtotals									\$ 12,115,309...	64,222.00	\$ 290,200.00	

In the Change Register you can review each change individually and approve changes as needed. When a change is approved, it updates the current budget values in the CBS and is given a status of *Approved* in the Change Register. Otherwise, the change is only documented in the Change Register with a status of *Draft* or *Pending* and has no effect on the current budget.

To manage changes, you must have applicable permissions.

The table below provides a brief description of the three types of changes you can record in Control.

Change type	Description
Budget move	Reallocate costs from one area of the budget to another. When making a budget move, the result must be net zero, neither adding nor removing costs from the budget. The move can include reallocation of man-hours and quantities as well.
Budget quantity and man hour adjustment	Make modifications to budgeted man-hours and/or quantities without making changes to overall budgeted costs.
Contract adjustment	Make a change to the scope of your budget and contract, via the addition or revision of cost items and pay items, which results in a change to the project's budgeted costs and pricing. Also commonly referred to as a change order.

When you perform a budget move, contract adjustment, or budget quantity and man-hour adjustment, you can select a maximum total of 250 cost items or 100 pay items. When you exceed the maximum, the Budget move and contract adjustment option in the Actions menu drop-down becomes unavailable. This improves the speed, reliability, and performance of the change order.

7.2.1 Managing changes using the InEight Suite

For a more holistic approach to managing changes within your organization, your company might choose to follow a change management process that integrates with other InEight applications that can include:

- InEight Change
- InEight Document
- InEight Schedule
- InEight Progress

For more information on how to use the InEight suite of applications to manage change orders, see [Change Order Management](#).

7.2.2 InEight Change integration with Control

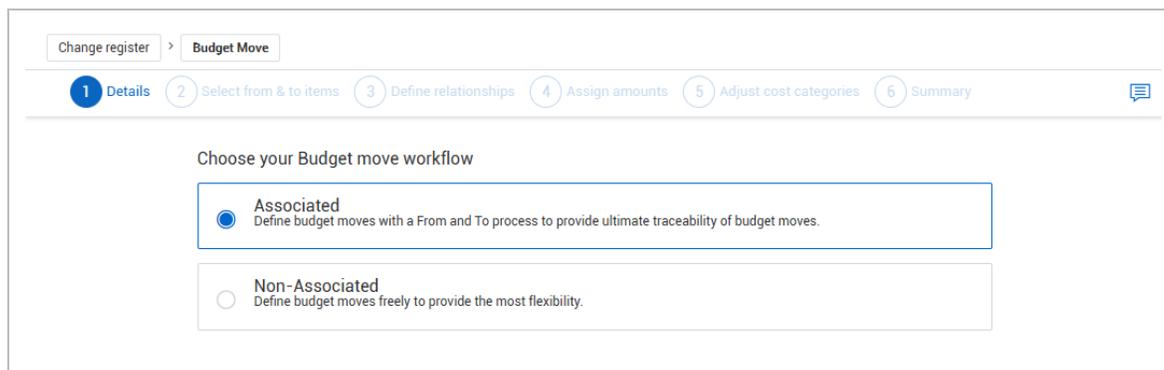
The InEight Change application is designed to manage project changes through a detailed, organized process, tracking changes from issue to executed change order. When executed in InEight Change, change orders can automatically become contract adjustments within InEight Control via an integration between the two applications. If your company is using both Change and Control for managing change orders, consult the [Contract adjustment from InEight Change overview](#) topic for more information on this process.

Budget moves can also be initiated in InEight Change and integrate with InEight Control to show up in the Control Change Register. For more information about managing budget moves using Change and Control, see [Budget Moves](#) in InEight Change.

7.3 ASSOCIATED BUDGET MOVE

During a project, you might need to move costs from one area of the budget to another to account for project changes, without changing the total budget amount. In Control, you can manage budget moves via a controlled approval process.

To launch a budget move in Control, from the CBS tab of the Workspaces module, select Actions > Budget move & contract adjustment > **Budget move**. This opens a Budget move record with the option to fill out the record following one of two workflows.



The following table provides information about each budget move workflow.

Budget move workflow	Description	Pros	Cons
Associated	Links each source cost item	<ul style="list-style-type: none"> • Clear audit trail – Shows both the 	<ul style="list-style-type: none"> • More steps required – Typically involves

Budget move workflow	Description	Pros	Cons
	<p>to a target cost item as a single transfer transaction.</p>	<p>source and destination of the funds in a single transaction, improving transparency.</p> <ul style="list-style-type: none"> • Traceability – Easily see where the budget came from and where it went. • Reporting clarity – Helps financial and project controls teams track budget changes as purposeful reallocations rather than isolated changes. 	<p>selecting both a “from” and “to” item, with extra steps for assigning amounts and adjusting cost categories, which can be more time-consuming than a non-associated move.</p> <ul style="list-style-type: none"> • Requires clear planning – You must know both ends of the move when performing it, which might not always be the case.
<p>Non-associated</p>	<p>Treats each adjustment (debit or credit) as a standalone action, without explicitly linking the source and destination.</p>	<p>Flexibility – Can make quick, one-sided adjustments without needing to define where the funds are coming from or going to.</p> <p>Faster entry – Useful when you're adjusting budgets over time and the counterbalance to the move is handled later or separately.</p> <p>Auto-calculate – Only non-associated budget moves contain the feature to automatically generate</p>	<p>Lack of traceability – Harder to tell where money came from or where it went, which complicates reviews and audits.</p> <p>Potential for confusion – Can lead to misunderstanding or misreporting of why certain budget changes occurred.</p> <p>Reduced accountability – Without links, it's easier to lose the rationale for the budget changes, especially over a long project timeline.</p>

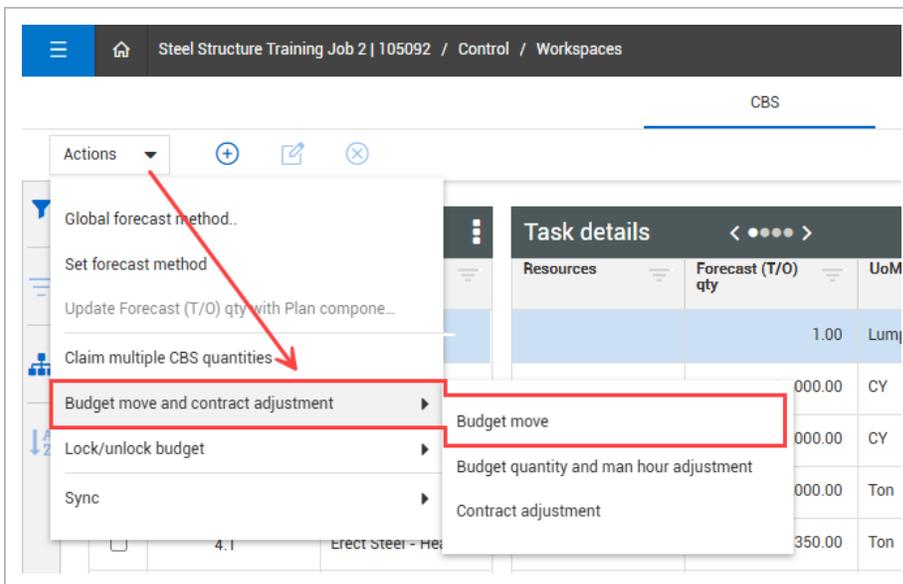
Budget move workflow	Description	Pros	Cons
		CB budget adjustments from CE values and CE values from CB budget adjustments.	

The following are considerations when performing a budget move using the Associated workflow option:

- Current Budget cost and man-hours are only maintained at the terminal level. You cannot move cost to or from a parent cost item.
- You can move costs between multiple cost items at the same time.
- You can automatically update Current Estimate (CE) values from Current Budget (CB) values only in a non-associated budget move or a contract adjustment.

Perform an associated budget move

1. Select Actions > Budget move & contract adjustment > **Budget move**.



The Budget Move wizard opens to the step 1, **Details**.

2. Select the **Associated** option and add budget move details as needed, and then click **Next**.

1 Details 2 Select from & to items 3 Define relationships 4 Assign amounts 5 Adjust cost categories 6 Summary

Choose your Budget move workflow

Associated
Define budget moves with a From and To process to provide ultimate traceability of budget moves.

Non-Associated
Define budget moves freely to provide the most flexibility.

Budget move details

Description 453
Move budget from light steel erection to heavy.

CCO 60
CCO

Issue # 57
056

Discipline 484
Structural Steel

The Budget move wizard opens step 2, **Select from & to items**.

- From the **From** section on the left, select the cost items you need to move budget from and from the To (for net zero moves) section on the right, select the cost items you need to move budget to.

Change register > Budget Move

1 Details 2 Select from & to items 3 Define relationships 4 Assign amounts 5 Adjust cost categories 6 Summary

From :

CBS position	Description	WBS phase code
<input type="checkbox"/>	3.1.8	Building N&O - Scrape...
<input type="checkbox"/>	4	Structural Steel
<input type="checkbox"/>	4.1	Erect Steel - Heavy
<input checked="" type="checkbox"/>	4.2	Erect Steel - Light
<input type="checkbox"/>	4.3	Bolted Connections
<input type="checkbox"/>	4.4	Labor
<input type="checkbox"/>	4.5	Equipment
<input type="checkbox"/>	4.6	3rd Party
<input type="checkbox"/>	5	Materials
<input type="checkbox"/>	5.1	Earthwork - Materials
<input type="checkbox"/>	5.2	Concrete - Materials
<input type="checkbox"/>	5.3	Structure Steel - Mate...

1 items selected

To (for net zero moves):

CBS position	Description	WBS phase code
<input type="checkbox"/>	3.1.8	Building N&O - Scrape...
<input type="checkbox"/>	4	Structural Steel
<input checked="" type="checkbox"/>	4.1	Erect Steel - Heavy
<input type="checkbox"/>	4.2	Erect Steel - Light
<input checked="" type="checkbox"/>	4.3	Bolted Connections
<input type="checkbox"/>	4.4	Labor
<input type="checkbox"/>	4.5	Equipment
<input type="checkbox"/>	4.6	3rd Party
<input type="checkbox"/>	5	Materials
<input type="checkbox"/>	5.1	Earthwork - Materials
<input type="checkbox"/>	5.2	Concrete - Materials
<input type="checkbox"/>	5.3	Structure Steel - Mate...

2 items selected

4. Click **Next**. The Budget move wizard opens to step 3, **Define relationships**.
5. For each cost item listed under the From section, select Define to do one of the following:
 - Select **Cost category, Qty or MHR adjustment only** to modify only the cost category, quantity or man-hours of the cost item (not the cost item's cost).
 - Select the cost item or items to move budget to that includes costs. You can click **Select All**

to select all the listed cost items.

The screenshot shows the 'Define relationships' step of a budget move wizard. At the top, there are six numbered steps: 1 Details, 2 Select from & to items, 3 Define relationships (highlighted), 4 Assign amounts, 5 Adjust cost categories, and 6. Below the steps, there are 'From:' and 'To:' sections. The 'From:' section contains a table with the following data:

1	CB total cost	Pending budget cost	CB total MHrs	CB total quantity
	\$ 200,000.00	\$ 0.00	4.0	

The 'To:' section lists target items: 4.1 [1074] Erect Steel - Heavy, 4.3 [1006] Bolted Connections, and 4.2 [1005] (with a close icon). A 'Define' dialog box is open, showing a checkbox for 'Cost category, Qty or Mhr adjustment only' (unchecked) and a section 'Budget move with Cost category, Qty or Mhr adjustment to:' with two checked items: 4.1 [1074] Erect Steel - Heavy and 4.3 [1006] Bolted Connections. There are 'Select All' and 'OK' buttons in the dialog. At the bottom right, there are 'Cancel', 'Draft', 'Back', and 'Next' buttons, with 'Next' highlighted.

6. Click **OK** to close the Define window. Now, for each cost item under the To section, it shows the cost items you associate to it from the From section.
7. Click **Next**. The Budget move wizard opens to step 4, **Assign amounts**.
8. In Assign amounts, you can move costs, quantities, and man-hours.
 - You can move costs and man-hours by entering values in the CB total cost and CB total MHrs fields under the To section. This automatically deducts the amounts from the assigned cost items under the From section.

- You can enter CB Total Quantity values on the To section. They do not automatically deduct from the From section because you could be moving between cost items with differing units of measure.
- You may need to add more or fewer man-hours than you deduct. To allow this, select **Advanced options** and switch the **Adjust MHRs (not net zero)** to *On*. The CB total MHRs of your From cost items will no longer automatically deduct when you make adjustments to your To cost items.

9. Click **Next**. The Budget move wizard opens to step 5, **Adjust cost categories**.

10. In Adjust cost categories, you can assign your pending budget changes to existing and new cost categories of your cost item. For each cost item under the To section, click the **Add cost category** button to reassign costs to different cost categories.

11. On the **Add cost categories** window, select a cost category, then click **OK**.

Add cost categories

Total :2 Selected

- Labor
- Construction Equipment
- FOM Rented Equipment
- Supplies
- Materials
- Subcontract
- Fees
- Allowance
- G & A
- Undefined

12. In the **Pending** fields, adjust the cost category amounts as needed.

To:

4.1 [1074] Erect Steel - Heavy		Available:	\$ 0.00
	CB total cost	Pending	New total
Labor:	\$ 800,000.00	8,000.00	\$ 808,000.00
Materials:	\$ 0.00	2,000.00	\$ 2,000.00
=	Totals	\$ 10,000.00	\$ 810,000.00

[+ Add cost category](#)

After making your adjustments, the Available amount should equal \$0.00.

13. Click **Next**. The Budget move wizard opens to step 4, **Summary**.

- In Summary, review your proposed changes, and then click **Submit** to send the budget move for approval.

Change Register > Budget Move

1 Details
2 Select From & To Items
3 Define Relationships
4 Assign Amounts
5 Adjust Cost Categories
6 Summary

From:

4.2 Erect Steel - Light

	CB total cost	CB total MHrs	CB total quantity
Before:	\$ 200,000.00	4,000.00	200.00
Pending:	(\$ 10,000.00)	-100.00	-20.00
	\$ 190,000.00	3,900.00	180.00

To:

4.4 Modluel 01 - Erect Steel Heavy

	CB total cost	CB total MHrs	CB total quantity
Before:	\$ 0.00	0.00	0.00
Pending:	\$ 10,000.00	100.00	20.00
	\$ 10,000.00	100.00	20.00

Cancel
Draft
Back
Submit

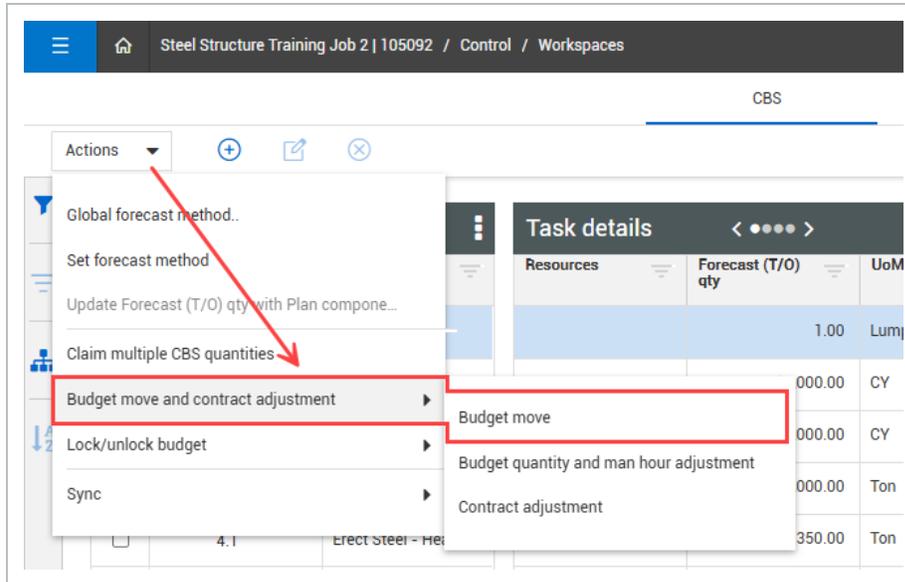
Select **Draft** if the budget move is not ready to be submitted and needs to be saved for later.

7.3.1 Associated Budget Move - Single Cost Item

At times, you might encounter changes that require you to make budget changes within the cost categories of a single cost item. For example, you may find that some items that you estimated to be self-performed work may be faster and cheaper if they were subcontracted out. Therefore, you can perform a budget move for a single cost item to redistribute the budgeted cost between different cost categories.

Perform an associated budget move within a single cost item

1. Select Actions > Budget move & contract adjustment > **Budget move**.



The Budget Move wizard opens to the step 1, **Details**.

2. In Details, select the **Associated** option and add budget move details as needed, and then click **Next**.

1 Details 2 Select from & to items 3 Define relationships 4 Assign amounts 5 Adjust cost categories 6 Summary

Choose your Budget move workflow

Associated
Define budget moves with a From and To process to provide ultimate traceability of budget moves.

Non-Associated
Define budget moves freely to provide the most flexibility.

Budget move details

Description 453
Move budget from light steel erection to heavy.

CCO 60
CCO

Issue # 57
056

Discipline 484
Structural Steel

The Budget move wizard opens step 2, **Select from & to items**.

3. In Select from & to items, select the same cost item under both the From and To sections, and then click **Next**.

Change Register > Budget Move

1 Details 2 **Select From & To Items** 3 Define Relationships 4 Assign Amounts 5 Adjust Cost Categories 6 Summary

From :

CBS position	Description	WBS phase code
<input type="checkbox"/> 1	Job Overhead	1002
<input type="checkbox"/> 2	Earthwork	1069
<input type="checkbox"/> 3	Concrete	1071
<input type="checkbox"/> 4	Structural Steel	1073
<input type="checkbox"/> 4.1	Erect Steel - Heavy	1074
<input type="checkbox"/> 4.2	Erect Steel - Light	1005
<input checked="" type="checkbox"/> 4.3	Bolted Connections	1006
<input type="checkbox"/> 4.4	Modluel 01 - Erect Steel Heavy	1087
<input type="checkbox"/> 5	Materials	1084
<input type="checkbox"/> 5.1	Earthwork - Materials	1085

1 items selected

To (for net zero moves):

CBS position	Description	WBS phase code
<input type="checkbox"/> 1	Job Overhead	1002
<input type="checkbox"/> 2	Earthwork	1069
<input type="checkbox"/> 3	Concrete	1071
<input type="checkbox"/> 4	Structural Steel	1073
<input type="checkbox"/> 4.1	Erect Steel - Heavy	1074
<input type="checkbox"/> 4.2	Erect Steel - Light	1005
<input checked="" type="checkbox"/> 4.3	Bolted Connections	1006
<input type="checkbox"/> 4.4	Modluel 01 - Erect Steel Heavy	1087
<input type="checkbox"/> 5	Materials	1084
<input type="checkbox"/> 5.1	Earthwork - Materials	1085

1 items selected

Cancel Draft Back **Next**

The Budget Move wizard opens to the step 3, **Define relationships**.

- In Define relationships, click the **Define** button, and then select **Cost category, Qty, or MHR adjustment only**.

Change Register > Budget Move

1 Details 2 Select From & To Items 3 Define relationships 4 Assign Amounts 5 Adjust Cost Categories 6 Summary

From: 4.3 Bolted Connections → To: 4.3 Bolted Connections

Define

Cost category, Qty or MHR adjustment only

OK

4.3 Adjust only

Selecting the Cost category, Qty, or MHR adjustment only option lets you move budgeted cost category values within a single cost item.

- Click **OK** to close the Define window, and then **Next**. The Budget move wizard opens to step 4, **Assign amounts**.
- In Assign amounts, click **Next** to skip the Assign amounts step because we are not changing the man-hours or quantities. The Budget move wizard opens to step 5, **Adjust cost categories**.
- Click the **Add cost category** button to assign your pending budget changes to existing and new cost categories of your cost item.

Change Register > Budget Move

1 Details 2 Select From & To Items 3 Define Relationships 4 Assign Amounts 5 Adjust Cost Categories 6 Summary

From: → To:

4.3 Bolted Connections

	Available:	\$ 0.00	
	CB total cost	Pending	New total
Labor	\$ 50,000.00	0.00	\$ 50,000.00
= Totals	\$ 50,000.00	\$ 0.00	\$ 50,000.00

+ Add cost category

Cancel Draft Back Next

8. On the Add cost categories window, select the cost categories to include in the adjustment, and then click **OK**.

9. Make adjustments in the cost category Pending fields as needed.

- The values shown in the Available and New total fields will automatically adjust based on the values entered in the To Pending fields
- The amount in the Available field must be \$0.00 to proceed to the next step.

		CB total cost	Pending	New total
4.3 Bolted Connections			Available:	\$ 0.00
	Labor:	\$ 50,000.00	-50,000.00	\$ 0.00
	Subcontract:	\$ 0.00	50,000.00	\$ 50,000.00
=	Totals	\$ 50,000.00	\$ 0.00	\$ 50,000.00

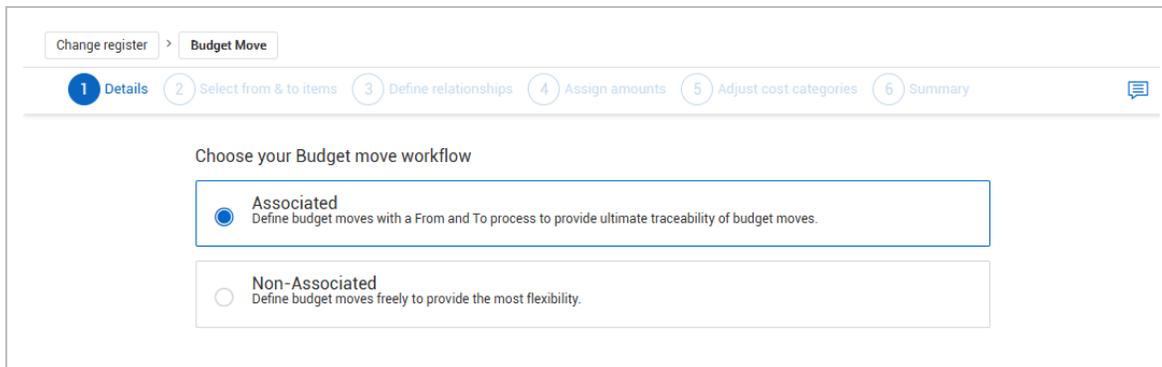
10. Click **Next**. The Budget move wizard opens to step 4, **Summary**.
11. In Summary, review your proposed changes, then click **Submit** to send the budget move for approval.

The budget move will now be listed in the project's Change Register with a status of *Pending*.

7.4 NON-ASSOCIATED BUDGET MOVE

During a project, you might need to move costs from one area of the budget to another to account for project changes, without changing the total budget amount. In Control, you can manage budget moves via a controlled approval process.

To launch a budget move in Control, from the CBS tab of the Workspaces module, select Actions > Budget move & contract adjustment > **Budget move**. This opens a Budget move record with the option to fill out the record following one of two workflows.



The following table provides information about each budget move workflow.

Budget move workflow	Description	Pros	Cons
Associated	Links each source cost item to a target cost item as a single transfer transaction.	<ul style="list-style-type: none"> • Clear audit trail – Shows both the source and destination of the funds in a single transaction, improving transparency. • Traceability – Easily see where the budget came from and where it went. • Reporting clarity – Helps financial and project controls teams track budget changes as purposeful reallocations rather than isolated changes. 	<ul style="list-style-type: none"> • More steps required – Typically involves selecting both a “from” and “to” item, with extra steps for assigning amounts and adjusting cost categories, which can be more time-consuming than a non-associated move. • Requires clear planning – You must know both ends of the move when performing it, which might not always be the case.

Budget move workflow	Description	Pros	Cons
Non-associated	Treats each adjustment (debit or credit) as a standalone action, without explicitly linking the source and destination.	<p>Flexibility – Can make quick, one-sided adjustments without needing to define where the funds are coming from or going to.</p> <p>Faster entry – Useful when you're adjusting budgets over time and the counterbalance to the move is handled later or separately.</p> <p>Auto-calculate – Only non-associated budget moves contain the feature to automatically generate CB budget adjustments from CE values and CE values from CB budget adjustments.</p>	<p>Lack of traceability – Harder to tell where money came from or where it went, which complicates reviews and audits.</p> <p>Potential for confusion – Can lead to misunderstanding or misreporting of why certain budget changes occurred.</p> <p>Reduced accountability – Without links, it's easier to lose the rationale for the budget changes, especially over a long project timeline.</p>

Performing a non-associated move makes cost adjustments at the total cost and cost category levels. In addition to cost adjustments, adjustments to man-hours and quantities can also be made.

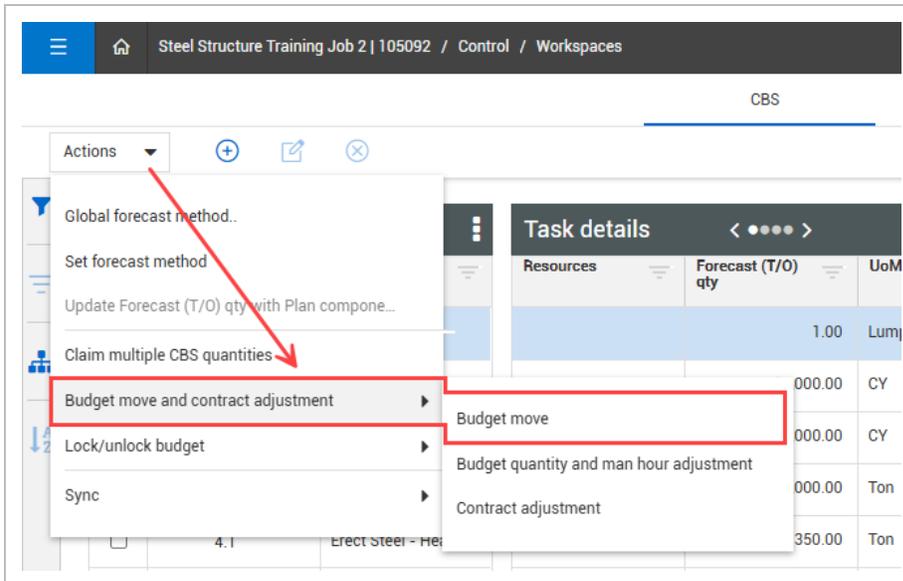
With the applicable permissions, you can approve budget moves. When you approve a budget move, a message shows confirming the budget move is approved.



Change order # 1.0 approved. successfully.

Perform a non-associated budget move

1. Select Actions > Budget move & contract adjustment > **Budget move**.



The Budget Move wizard opens to step 1, **Details**.

2. In Details, select the Non-Associated option and add budget move details as needed, and then click **Next**.

1 Details 2 Select from & to items 3 Define relationships 4 Assign amounts 5 Adjust cost categories 6 Summary

Choose your Budget move workflow

Associated
Define budget moves with a From and To process to provide ultimate traceability of budget moves.

Non-Associated
Define budget moves freely to provide the most flexibility.

Budget move details

Description 453
Move budget from light steel erection to heavy.

CCO 60
CCO

Issue # 57
056

Discipline 484
Structural Steel

The Budget move wizard opens step 2, Select **Assign amounts**.

- 3. In Assign amounts, click the **Add cost item** icon to select the applicable cost items.

Change register > Budget Move

1 Details 2 Assign amounts

CB position	Description	WBS phase code	CB total cost	Adjusted CB cost	CB total Mhrs	Adjusted CB Mhrs	CB total quantity	Adjusted CB qty
No cost items selected Click the add icon above to add cost items			No results found					
Subtotals 0			\$ 0.00	\$ 0.00	0.00	0.00		

Approve Cancel Draft Back Submit

- 4. Select the cost items, and then click **Add**.

Change register > Budget Move > Select cost items

CBS position	Description	WBS phase code
<input type="checkbox"/>	1	Job Overhead
<input type="checkbox"/>	2	Earthwork
<input type="checkbox"/>	3	Concrete
<input type="checkbox"/>	^ 4	Structural Steel
<input checked="" type="checkbox"/>	4.1	Erect Steel - Heavy
<input checked="" type="checkbox"/>	4.2	Erect Steel - Light
<input checked="" type="checkbox"/>	4.3	Bolted Connections
<input type="checkbox"/>	^ 5	Materials
<input type="checkbox"/>	5.1	Earthwork - Materials

Subtotals 32 (3 items selected)

Cancel Add

5. Enter adjustment amounts for each cost item. You can enter positive or negative adjustments into any of the fields labeled *Adjusted*, including *Adjusted CB cost*, *Adjusted CB Mhrs*, and *Adjusted CB qty*. See the following adjustment examples:

- Moving from one cost item to another:

Change register > Budget Move

1 Details 2 Assign amounts

CBS position	Description	WBS phase code	CB total cost	Adjusted CB cost	CB total Mhrs	Adjusted CB Mhrs	CB total quantity	Adjusted CB qty
<input type="checkbox"/>	4.1	Erect Steel - Heavy	\$ 800,000.00	(\$ 5,000.00)	16,000.00	-200.00	800.00	0.00
<input type="checkbox"/>	4.2	Erect Steel - Light	\$ 200,000.00	\$ 5,000.00	4,000.00	200.00	200.00	0.00
<input type="checkbox"/>	4.3	Bolted Connections	\$ 50,000.00	\$ 0.00	1,000.00	0.00	2,000.00	0.00
Subtotals 3			\$ 1,050,000.00	\$ 0.00	21,000.00	0.00		

Approve Cancel Draft Back Submit

- Moving one cost item to multiple cost items:

Change register > Budget Move

1 Details 2 Assign amounts

CBS position	Description	WBS phase code	CB total cost	Adjusted CB cost	CB total Mhrs	Adjusted CB Mhrs	CB total quantity	Adjusted CB qty
4.1	Erect Steel - Heavy	1074	\$ 800,000.00	(\$ 5,000.00)	16,000.00	-200.00	800.00	0.00
4.2	Erect Steel - Light	1005	\$ 200,000.00	\$ 4,000.00	4,000.00	200.00	200.00	0.00
4.3	Bolted Connections	1006	\$ 50,000.00	\$ 1,000.00	1,000.00	0.00	2,000.00	0.00
Subtotals 3			\$ 1,050,000.00	\$ 0.00	21,000.00	0.00		

Approve Cancel Draft Back Submit

- Make cost adjustments at the CB cost category level using any of the Adjusted CB cost category columns:

1 Details 2 Assign amounts

Description	WBS phase code	CB labor total cost	Adjusted CB labor cost	CB construction equipment to...	Adjusted CB construction equipment c...	CB FOM rented equipment total cost	Adjusted CB FOM rented equipment c...
Erect Steel - Heavy	1074	\$ 800,000.00	(\$ 4,000.00)	\$ 0.00	(\$ 1,000.00)	\$ 0.00	(\$ 500.00)
Erect Steel - Light	1005	\$ 200,000.00	\$ 3,000.00	\$ 0.00	\$ 1,000.00	\$ 0.00	\$ 500.00
Bolted Connections	1006	\$ 50,000.00	\$ 1,000.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

- The Adjusted CB total cost must equal zero to submit.
 - The Adjusted CB cost will automatically calculate as the total of all cost category values.
 - Costs entered directly in the Adjusted CB cost field are automatically allocated to the appropriate CB cost categories (for example, Adjusted CB labor cost, Adjusted CB material cost) based on where costs were originally allocated on the cost item.
- Assign amounts at the cost category level by right-clicking on the cost item, and then selecting **Cost category**.

Change register >
Budget Move

+
×
⊞

<input type="checkbox"/>	CBS position	Description	WBS phase code
<input type="checkbox"/>	4.1	Erect Steel - Heavy	1074
<input checked="" type="checkbox"/>	4.2	Erect Steel - Light	1005
<input type="checkbox"/>	4.3	Bolted Connectic	

Cost category

This gives you a view that makes it easy to see the pending adjustments of all your categories in a slide-out register and how they contribute to the total.

After making adjustments, click the **Close** icon at the top right corner to close the Cost category slide-out.

1 Details
2 Assign amounts
\$
⌵
📄
×

1005

4.2 Erect Steel - Light

CB total cost

\$ 200,000.00

Pending budget cost

(\$ 10,000.00)

CB total MHrs

4,000.00

CB total quantity

200.00

Cost category	CB total cost	Pending
^ Total	\$ 200,000.00	(\$ 1,000.00)
v Labor	\$ 200,000.00	\$ 0.00
v Construction Equipment	\$ 0.00	\$ 0.00
v FOM Rented Equipment	\$ 0.00	\$ 0.00
v Supplies	\$ 0.00	\$ 0.00
v Materials	\$ 0.00	(\$ 1,000.00)
v Subcontract	\$ 0.00	\$ 0.00
v Fees	\$ 0.00	\$ 0.00
v Allowance	\$ 0.00	\$ 0.00
G & A	\$ 0.00	\$ 0.00
Undefined	\$ 0.00	\$ 0.00

The Adjusted CB cost subtotal must equal zero to submit. In other words, the cost adjustments must be net-zero to proceed.

6. Review your proposed changes, and then click **Submit** to send the budget move for approval. Click **Draft** if the budget move is not ready to be submitted and needs to be saved for later.

The hours and quantities subtotals do not need to equal zero to submit.

7.4.1 Auto-Calculate budget move values

Non-Associated budget moves include a time-saving feature that auto-calculates values when performing the following tasks:

- **Update CB from CE** – Automatically generates CB adjustments in the non-associated budget move record to match existing current estimate values of the cost items selected.
- **Update CE from CB** - When approved, automatically updates current estimate values in the CBS based on adjustment values defined on the non-associated budget move.

7.4.1.1 Update current budget (CB) adjustments from current estimate (CE)

Prior to generating a budget move record for approval, a common best practice to help you work through project changes and have traceability should questions arise, is to make your budget move adjustments directly in the CE fields of your cost items on the CBS tab.

When the time comes to get approval, you can create a non-associated budget move and use the Auto-calculate feature to generate the CB adjustments on your budget move record automatically.

Perform a budget move using Auto-calculate > Update CB from CE

These steps assume budget move adjustments have already been made in the Current Estimate.

1. Select Actions > Budget move & contract adjustment > **Budget move**. The Budget Move wizard opens to step 1, **Details**.
2. In Details, select the **Non-Associated** option and add budget move details as needed, and then click **Next**. The Budget Move wizard opens to step 2, **Assign amounts**.

3. In Assign amounts, click the **Add** button to select the cost items that are part of the budget move.
4. Click the **Auto-calculate** icon, and then select **Update CB from CE**.
5. . Select the values to auto-calculate, and then click **Apply**.

The screenshot shows the 'Budget Move' interface with a table of items and an 'Auto calculate' dialog box. The table has the following data:

CBS position	Description	WBS phase code	CB total cost	Adjusted CB cost	CB total MHrs	Adjusted CB MHrs	CB total quantity	Adjusted CB qty	U..	CB cost
4.1	Update CE from CB	ect Steel - Heavy	\$ 800,000.00	\$ 0.00	16,000.00	0.00	800.00	0.00	Ton	
4.2	Building &J - Bridge C	1005	\$ 200,000.00	\$ 0.00	4,000.00	0.00	200.00	0.00	CY	
4.3	Concrete - Building K&L	1006	\$ 50,000.00	\$ 0.00	1,000.00	0.00	2,000.00	0.00	Lump S...	

The 'Auto calculate' dialog box is open, showing the following options:

- Select all
- Cost
- Quantity
- Man hours

Buttons: Cancel, Apply

Subtotals (3 rows selected): \$ 1,050,000.00, \$ 0.00, 21,000.00, 0.00

Buttons: Approve, Cancel, Draft, Back, Submit

6. Click **Yes** when prompted to confirm.
7. Click **Submit** to submit the budget move for approval. Click **Draft** if the budget move is not ready to be submitted and needs to be saved for later.

7.4.1.2 Update Current Estimate from Adjusted Current Budget

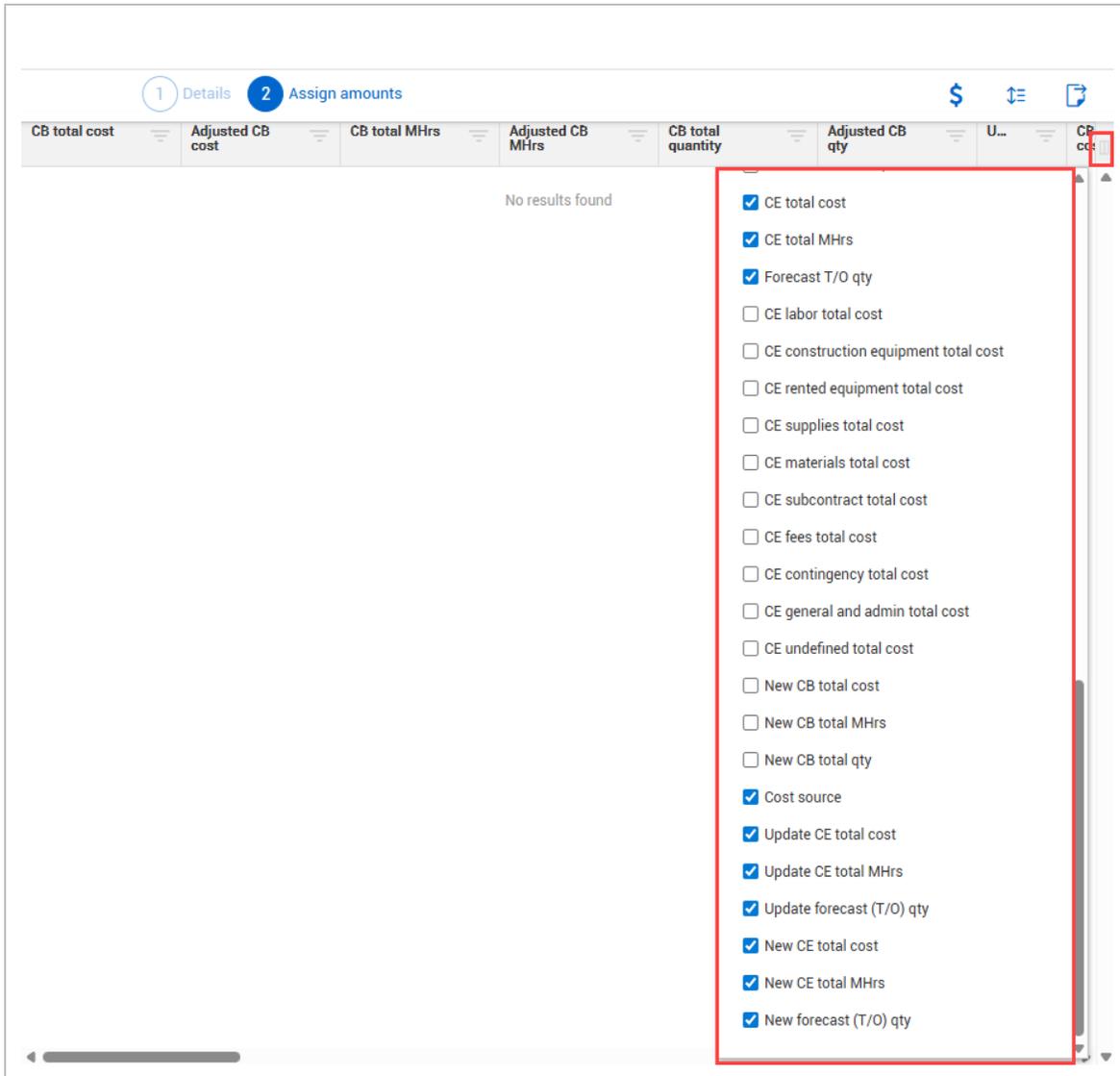
You can update your current estimate values based on the adjusted current budget values for contract non-associated budget moves.

To view adjusted current budget values in relation to current estimate values, add the following columns to your view:

- Cost source
- Update CE total cost
- Update CE total MHrs
- Update forecast (T/O) qty
- CE total cost

- CE total MHrs
- Forecast T/O qty
- New CE total cost
- New CE total MHrs
- New forecast (T/O) qty

To add these columns, initiate a non-associated budget move, go to the **Assign Amounts** step, click the **Column chooser** icon, and then select your columns.



7.4.1.3 Select cost items to update

The check boxes under the Update CE total cost, Update CE total MHrs, and Update forecast (T/O) qty allows you to update the current estimate based on what is adjusted in the current budget after the budget move is approved.

	CBS position	Cost source	Update CE total cost	Update CE total MHrs	Update forecast (T/O) qty
Unassigned cost items					
<input type="checkbox"/>	1.1.1.7	Detail	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	1.1.1.8	Plug	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	1.1.1.9	Plug	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	1.1.1.10	Plug	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Subtotals 4					

The Update CE total cost and Update CE total MHrs check boxes are active for plug cost source only. The Update CE total cost and Update CE total MHrs check boxes cannot be edited for Detail cost items because cost is driven by your associated resources.

For example, if the Update CE total cost box is checked, the Adjust CB cost is added to the CE total cost after the contract adjustment is approved. You can preview the results in the New CE total cost, New CE total MHrs, and New forecast (T/O) qty columns.

Cost source	Update CE total cost	Update CE total MHrs	New CE total cost	New CE total MHrs	New forecast (T/O) qty
Plug	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1,000.00	1,000.00	1.00

7.4.1.4 Select automatic updates for multiple cost items

You can select automatic updates for multiple cost items to save you time from selecting check boxes manually for each cost item.

The Auto-calculate tool automatically checks the adjustment boxes for all the cost items that you select.

To use the Auto-calculate feature select the cost items you wish to update. Click the **Auto-calculate** icon, and then select **Update CE from CB**. In the Auto calculate dialog box, select whether to update Cost, Qty, Man hours, or Select all for the selected cost items, and then click **Apply**.

Change register > Budget Move

1 Details 2 Assign amounts

CBS position	Description	WBS phase code	CB total cost	Adjusted CB cost	CB total Mhrs	Adjusted CB Mhrs	Cl	qi
4.1	Struct Steel - Heavy	1074	\$ 800,000.00	\$ 0.00	16,000.00	0.00		
4.2	Building I&J - Bridge C	1005	\$ 200,000.00	\$ 0.00	4,000.00	0.00		
4.3	Concrete - Building K&L	1006	\$ 50,000.00	\$ 0.00	1,000.00	0.00		

Update CB from CE

Update CE from CB

Auto calculate
Match current budget values with current estimate values

- Select all
- Cost
- Quantity
- Man hours

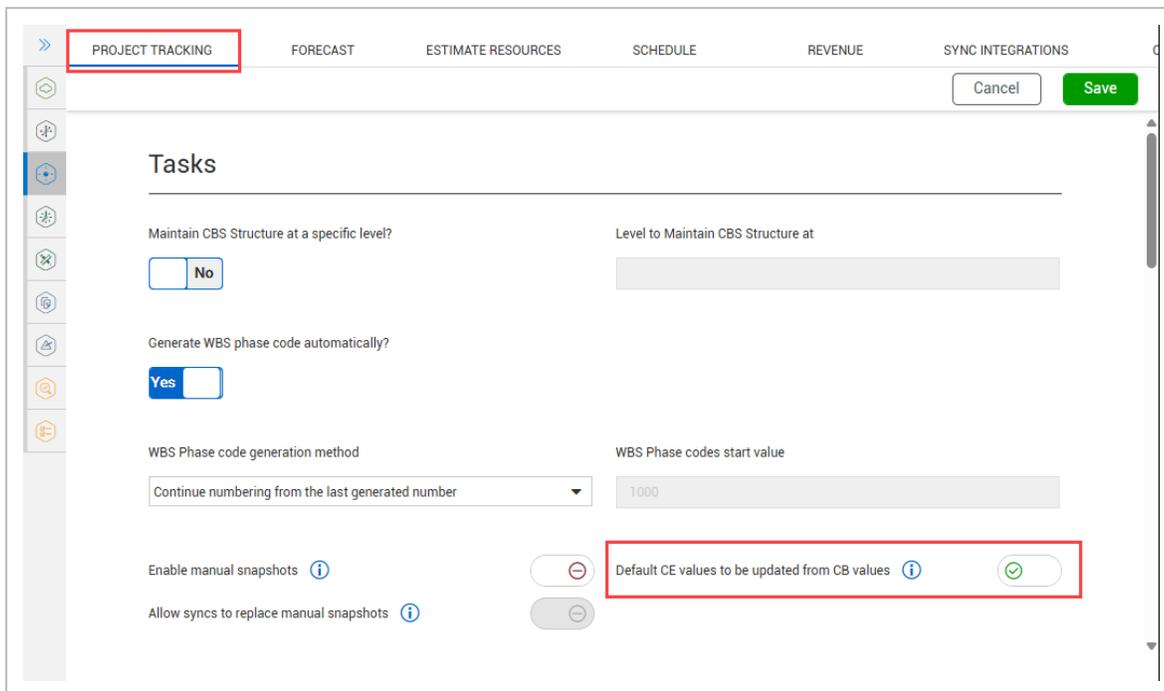
Cancel Apply

The applicable check boxes are now automatically selected to adjust your current estimate values for the selected cost items.

7.4.1.5 Set setting for default current estimate update

You can have the current estimate cost, man-hours, and quantity check boxes selected by default to be updated with adjusted current budget cost, man-hours, and quantity values when doing change orders.

In Settings > Control > **Project Tracking**, you can switch the **Default CE values to be updated from CB values** toggle to *ON*. When enabled, all applicable check boxes are selected by default. This is a quick way to keep CE and CB values in sync without having to double enter values.



For more information, see the **Default CE values to be updated from CB values** section in Project Tracking, [Tasks](#) settings.

7.5 BUDGET QUANTITY / MAN-HOUR ADJUSTMENT

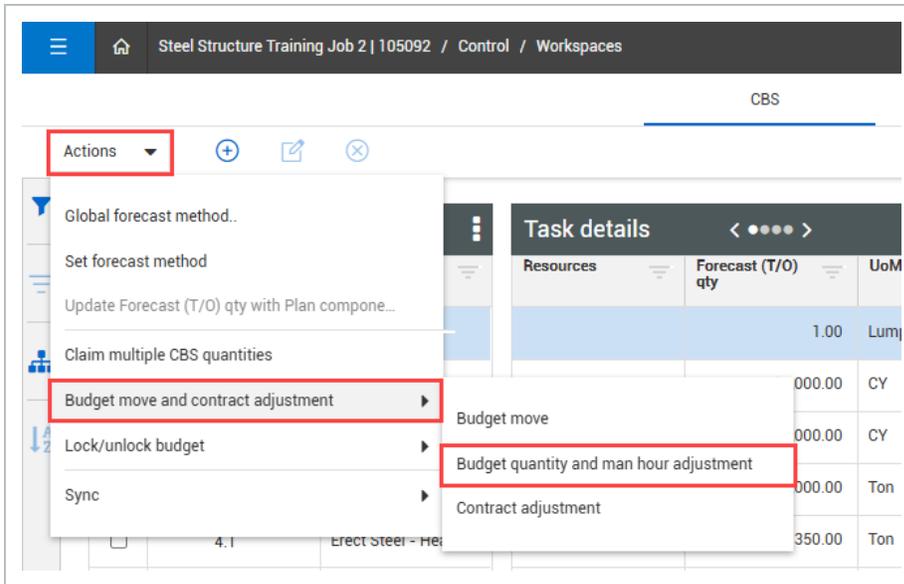
During the course of a project, it is typical to have scope modifications that warrant changes to quantities or labor hours.

It is important to remember that changing man-hours or quantities will affect budgeted values of MH/QTY, QTY/MH, and Unit-Costs, but will not change the overall dollar value of your budget.

Within InEight Control, you can perform budget quantity and man-hour adjustments using a controlled approval process.

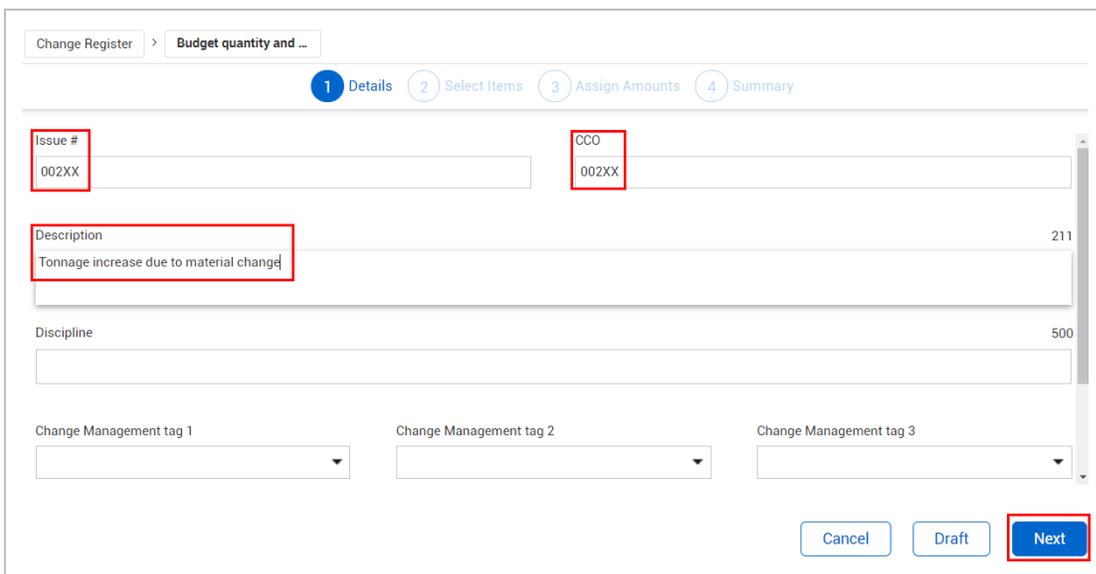
Perform a Budget Quantity / Man-Hour Adjustment

1. Select Actions > Budget move & contract adjustment > **Budget quantity and man hour adjustment.**



The budget adjustment wizard opens to step 1, **Details**.

2. In Details, add details as needed, and then click **Next**.



The budget adjustment wizard opens to step 2, **Select Items**.

3. In Select Items, select a cost item from the list.

Change Register > Budget quantity and ...

1 Details 2 Select Items 3 Assign Amounts 4 Summary

CBS position	Description	WBS phase code
3	Concrete	1071
4	Structural Steel	1073
4.1	Erect Steel - Heavy	1074
4.2	Erect Steel - Light	1005
4.3	Bolted Connections	1006
<input checked="" type="checkbox"/> 4.4	Module 01 - Erect Steel Heavy	1087

You can select more than one cost item to adjust; however, these changes will be grouped as a single line item in the Change Register.

- Click **Next**. The budget adjustment wizard opens to step 3, **Assign amounts**.
- In Assign Amounts, enter the change to the man-hours or quantities into the applicable field, and then click **Next**.

Change Register > Budget quantity and ...

1 Details 2 Select Items 3 Assign Amounts 4 Summary

4.4 Module 01 - Erect Steel Heavy

	MHrs	Quantity
Original:	0.00	0.00
Pending:		5,000.00
New total:	0.00	5,000.00

The budget adjustment wizard opens to step 4, **Summary**.

- In Summary, review your proposed changes, and then click **Submit** to send the budget move for approval.

Change Register >
Budget quantity and ...

1 Details
2 Select Items
3 Assign Amounts
4 Summary

4.4 Module 01 - Erect Steel Heavy

	MHrs	Quantity
Before:	0.00	0.00
Pending:	0.00	5,000.00
After:	No change	5,000.00

Cancel
Draft
Back
Submit

You can select **Draft** if the budget move is not ready to be submitted and needs to be saved for later. With applicable permissions, you can select **Approve** to approve the budget move.

7.6 CONTRACT ADJUSTMENT FROM INEIGHT CHANGE OVERVIEW

A contract adjustment, often referred to as a change order, represents a change to the scope of the contract that results in a change to the project's budgeted costs, man-hours, and contract price. These adjustments typically involve adding or revising cost and pay items to accurately estimate the financial and labor impacts of the change.

When you integrate InEight Change with InEight Control, you can track project changes using a more robust, transparent, and auditable process than using just the Control application.

7.7 CHANGE APPROVAL PROCESS

After budget moves are submitted, they must be reviewed and approved before their values are added to the current budget. The Change Register allows users with applicable permissions to review the details of contract adjustments, budget moves, and quantity or man-hour adjustments. They can revise, reject, or approve the changes.

To access the Change Register in Control Workspaces, select the Change Register tab.

ID	Description	CCO	Creation date	Issue #	Last changed by	Last changed on	Notes	Status	Total budget cost adjustment	Total budget MH adjustment	Total contract price adjustment	Type
8.0	Concrete issue	CCO-003	07/01/2025	2	Paul benni...	07/01/2025		CCO-Pending	\$ 259,000.00	3,000.00	\$ 284,900.00	Contract adjustmen
7.0	Cracked weld		06/26/2025	3	Paul benni...	07/01/2025		Issue-Draft	\$ 0.00	0.00	\$ 0.00	Budget move
6.0	Steel alignment issue	CCO-002	06/26/2025	1	Paul benni...	06/30/2025		CCO-Draft	\$ 11,000.00	20.00	\$ 1,000.00	Contract adjustmen
3.1	Additional Steel Work	CCO-001	07/01/2025	079	Paul benni...	07/03/2025		Draft	\$ 225,000.00	2,900.00	\$ 250,900.00	Contract adjustmen
3.0	Additional Steel Work		06/25/2025	079	Paul benni...	07/01/2025		Revised	\$ 225,000.00	2,900.00	\$ 250,900.00	Contract adjustmen
2.0	Structural steel budget move		06/19/2025		Paul benni...	07/01/2025		Approved	\$ 0.00	0.00	\$ 0.00	Budget move
1.0	Erect steel budget move		06/18/2025		Paul benni...	07/03/2025		Pending	\$ 0.00	0.00	\$ 0.00	Budget move

The Change Register includes the following columns:

Column name	Description
ID	Auto-assigned by the system to uniquely identify each change entry. When a submitted change is revised, a duplicate record is created with the ID indicating a new version of the original. For example, if the original change has an ID of 2.0, the new revision entry will have an ID of 2.1.
Description	The description entered on the Detail step of the change’s record.
CCO	Text field for entering a change order number. Contract adjustments generated from InEight Change will automatically have this filled with the number defined in the executed CCO. This is only editable within the CCO in Change.
Creation date	The date the change record was created in the Change Register.
Issue #	Text field for entering the issue number. Change records generated in InEight Change will automatically contain the number as defined on the issue/PPO/CCO in Change. This is only editable within the CCO in Change.
Last changed by	Indicates the user who last made a change to the record.
Last changed on	Indicates the date when the last change was made.
Notes	Clicking on the icon in this field opens a slide out panel where notes can be entered and reviewed in a “text feed” format.
Status	Indicates the state of the change record (for example draft, pending,

Column name	Description
	approved). More information about statuses is covered in a separate table below.
Total budget cost adjustment	Indicates the total amount of adjusted cost estimated on the change record.
Total budget MH adjustment	Indicates the total adjusted man-hours estimated on the change record.
Total contract price adjustment	Indicates the total contracted price adjustment estimated on the change record.
Type	Indicates whether the change record is a Budget move, Budget Qty & MH adjustment, or Contract adjustment.

Entries in the Change Register will have different statuses depending on what step of the process they are in and where the change was created (for example, Change or Control). The following table lists the possible statuses and what they indicate.

Status	Description
Draft	A change record that is not yet submitted. This allows a change record to be started and saved for later, until it is ready to submit. A change record that came from Change is indicated as Issue-Draft for budget moves or CCO-Draft for executed change orders.
Pending	A change record that has been submitted but not yet approved. A change record that came from Change is indicated as Issue-Pending for budget moves or CCO-Pending for executed change orders.
Approved	A change record that has been approved by someone with the appropriate permissions. An approved change makes the proposed budget cost and contract price adjustments final, updating the Current Budget accordingly. An approved change record that came from Change is indicated as Issue-Approved for budget moves or CCO-Approved for executed change orders.

Status	Description
Rejected	A change record that has been rejected by someone with the appropriate permissions. Rejecting a change ends the change process and prevents the proposed changes from updating cost items and pay items in the Current Budget. A rejected change record that came from Change is indicated as Issue-Rejected for budget moves or CCO-Rejected for executed change orders.
Revised	An approved change record that has been revised. Revising an approved record results in a new version of the change record with a new version number. For example, if an original change record has an ID of 2.0 and has its status changed to Revised, it results in a new change record being created automatically with an ID of 2.1 and a status of Draft. A revised change record that originally came from Change is indicated as Issue-Revised for budget moves or CCO-Revised for executed change orders.

7.7.1 Managing changes in the Change Register

With the applicable permissions, you can review project changes as they are recorded as entries in the Change Register and either approve, reject, or revise them as needed. The Change Register includes both change records that are in progress (status of Draft) and changes that have been submitted (status of Pending).

To review a change record, click within the row representing the change. A slide-out panel opens that summarizes the details of the change. The options available on the slide-out panel depend on the change record's status.

7.7.1.1 Draft changes review

On the slide-out panel for Draft changes, you can select Review, Delete, or Revise.

ACS PAY ITEMS **CHANGE REGISTER** AUDIT LOG

\$ ⚙ ⏴ 📄 📄 ⏵ 🔍

3.1 🗨️ ✕
Additional Steel Work

Type	Status	Originated on	Originated by
Contract adjustment (Cost ite...	Draft	07/01/2025	Paul bennion

Last changed on	Last changed by	Approved on	Approved by	Approval probability
07/02/2025	Paul bennion	N/A	N/A	N/A

Pay item details

Pay item number	Description	Current billing method	Adjusted current price	Adjusted current unit price	Adjusted current pay qty	Locked date
003	Steel - Labor & Material	Unit price	\$ 164,500.00	\$ 0.00	0.09	
4	Additional steel work	Unit price	\$ 86,400.00	\$ 800.00	108.00	
			\$ 250,900.00	\$ 800.00		

Cost item details

CBS position	Description	WBS pha...	Adjusted CB cost	Adjusted CB Mhrs	Adjusted CB atv	Locked date

- **Review** - Opens the change record in a read-only state. All the steps of the change can be reviewed, but no changes can be made. This may be a helpful option to give users permission to review changes without having the access to approve or reject them.
- **Delete** - Permanently deletes the draft. When clicking Delete, a prompt comes up to make sure you want to delete the record.
- **Revise** - Opens the change record with full functionality to edit the record. After editing, if the record is ready for approval, on the Summary step you can click **Submit**. If the record is still not ready, you can select Draft to save it for future editing.

7.7.1.2 Pending changes review

On the slide-out panel for changes with a Pending status, you can select Review, Reject, Revise, or Approve.

ACS
PAY ITEMS
CHANGE REGISTER
AUDIT LOG

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🔍

1.0

Erect steel budget move

Type

Budget move (Associated)

Status

↻ Pending

Originated on

06/18/2025

Originated by

Paul bennion

Last changed on

07/03/2025

Last changed by

Paul bennion

Approved on

n/a

Approved by

n/a

From/To	CBS position	Description	W... ph... co...	Adjusted CB cost	Adjusted CB Mhrs	Adjusted CB qty	Locked
From	4.2	Erect Steel - Light	1005	(\$ 10,000.00)	-200.00	0.00	
To	4.1	Erect Steel - Heavy	1074	\$ 10,000.00	+200.00	0.00	
From	4.2	Erect Steel - Light	1005	(\$ 1,000.00)	0.00	0.00	
To	4.3	Bolted Connections	1006	\$ 1,000.00	0.00	0.00	

\$ 0.00

Review

Reject

Revise

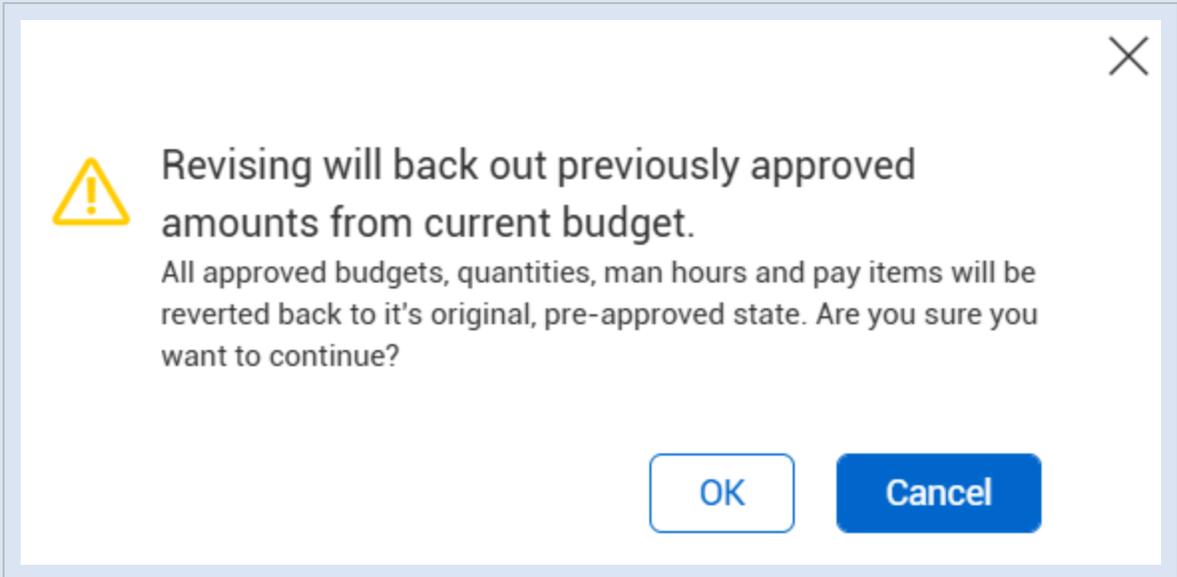
Approve

- **Reject** - Changes the status of the change record to Rejected, ending the change process and preventing the proposed change from updating cost items or pay items. From that point on, the change record is read-only. Once rejected, the change cannot be revised.
- **Approve** - Changes the status of the change to Approved, making the proposed changes final and updating the Current Budget and contract price with the changes. Once approved, you can review or revise the change.
- **Revise** - Opens the change record with full functionality to edit the record. If you revise a Pending record, you can resubmit maintaining the Pending status, or select Draft to save with a status of Draft.

If you revise an approved record, the status of the record will change to Revised and become read only, and a new draft of the record will be created with a new version number.

2.1	Cracked foundations	07/03/2025	Paul benni...	07/03/2025	🗨️	📄 Draft
2.0	Cracked foundations	07/01/2025	Paul benni...	07/03/2025	🗨️	📄 Revised

Revising an approved record will back out all approved budget, quantity, man-hour, and pay item amounts from the Current Budget. A revising warning message shows to confirm that you want to proceed.



7.7.2 Group By option

You can activate the Group by icon to show certain change columns in groups of like information. Like the CBS, you can activate the Group By icon to categorize certain columns in the Change Register.

ID	Description	CCD	Crea_date	Issue #	Last cha_by	Last changed on	Notes	Status	Total budget cost adjustment	Total budget MH adjustment	Total contract price adjustment	Type
8.0	Concrete issue	CCO-003	07/01/2025	2	Paul benni...	07/01/2025		CCO-Pending	\$ 259,000.00	3,000.00	\$ 284,900.00	Contract adjustment
7.0	Cracked weld		06/26/2025	3	Paul benni...	07/01/2025		Issue-Draft	\$ 0.00	0.00	\$ 0.00	Budget move
6.0	Steel alignment issue	CCO-002	06/26/2025	1	Paul benni...	06/30/2025		CCO-Draft	\$ 11,000.00	20.00	\$ 1,000.00	Contract adjustment
3.1	Additional Steel Work	CCO-001	07/01/2025	079	Paul benni...	07/03/2025		Draft	\$ 225,000.00	2,900.00	\$ 250,900.00	Contract adjustment
3.0	Additional Steel Work		06/25/2025	079	Paul benni...	07/01/2025		Revised	\$ 225,000.00	2,900.00	\$ 250,900.00	Contract adjustment
2.0	Structural steel budget move		06/19/2025		Paul benni...	07/01/2025		Approved	\$ 0.00	0.00	\$ 0.00	Budget move
1.0	Erect steel budget move		06/18/2025		Paul benni...	07/03/2025		Rejected	\$ 0.00	0.00	\$ 0.00	Budget move

Select a column header, drag it into the gray section above the column headers, and then drop it. Multiple column headers can be placed in the Group By field.

CCO	Creation date	Issue #	Last changed by	Last changed on	Notes	Status	Total budget cost adjustment	Total budget MH adjustment	Total contract price adjustment
CCO-003	07/01/2025	2	Paul benni...	07/01/2025		CCO-Pending	\$ 259,000.00	3,000.00	\$ 284,900.00
	06/26/2025	3	Paul benni...	07/01/2025		Issue-Draft	\$ 0.00	0.00	\$ 0.00
CCO-002	06/26/2025	1	Paul benni...	06/30/2025		CCO-Draft	\$ 11,000.00	20.00	\$ 1,000.00
CCO-001	07/01/2025	079	Paul benni...	07/03/2025		Draft	\$ 225,000.00	2,900.00	\$ 250,900.00
	06/25/2025	079	Paul benni...	07/01/2025		Revised	\$ 225,000.00	2,900.00	\$ 250,900.00
	06/19/2025		Paul benni...	07/01/2025		Approved	\$ 0.00	0.00	\$ 0.00
	06/18/2025		Paul benni...	07/03/2025		Rejected	\$ 0.00	0.00	\$ 0.00

After the Group by icon is activated, and one or more columns are grouped, such as the Status column, you can see all the change records in their respective groupings. You can also see a subtotal for each of the groupings (if applicable).

ID	Description	CCO	Creation date	Issue #	Last changed by	Last changed on	Net Qty cha...	Stat...	Notes	Cha... man... tag 1	Cha... man... tag 2
▲ Status:Pending(Count:6)											
8.0			09/23/2021		Paul trippi	09/23/2021	0.00	Pend...			
7.0			09/23/2021		Paul trippi	09/23/2021	10,000.00	Pend...			
6.0			09/23/2021		Paul trippi	09/23/2021	0.00	Pend...			
5.0			09/23/2021		Paul trippi	09/23/2021	0.00	Pend...			
4.0			09/23/2021		Paul trippi	09/23/2021	0.00	Pend...			
2.1	3	3	09/23/2021	3	Paul trippi	09/23/2021	0.00	Pend...			
Count:6											
▲ Status:Draft(Count:1)											
3.0			07/26/2021	5	Paul trippi	07/26/2021	100.00	Draft			
Count:1											
▲ Status:Revised(Count:1)											
2.0	3	3	01/19/2021	3	Paul trippi	09/23/2021	0.00	Revis...			
Count:1											

Exercise 7.1 – Change Management

Now that you have covered the key tasks related to change management, you can practice making changes on your own. You can use your own project (if available) or the training project used in this lesson.

1. Review the project and determine a scenario that would require a contract change.

2. Perform a Contract Adjustment per your scenario, including the creation of a pay item.

3. Once completed, approve the Contract Adjustment.

Congratulations, you have completed this exercise!

Review

1. Where can you review the details of your contract adjustment or budget move and choose to either revise, reject, or approve the change?
 - a. Change Register
 - b. Approval Screen
 - c. CBS Log
 - d. Contract Change Log

 2. When creating a budget move, what is recommended?
 - a. Issue number
 - b. Description
 - c. Dollar amount
 - d. All of the above
-

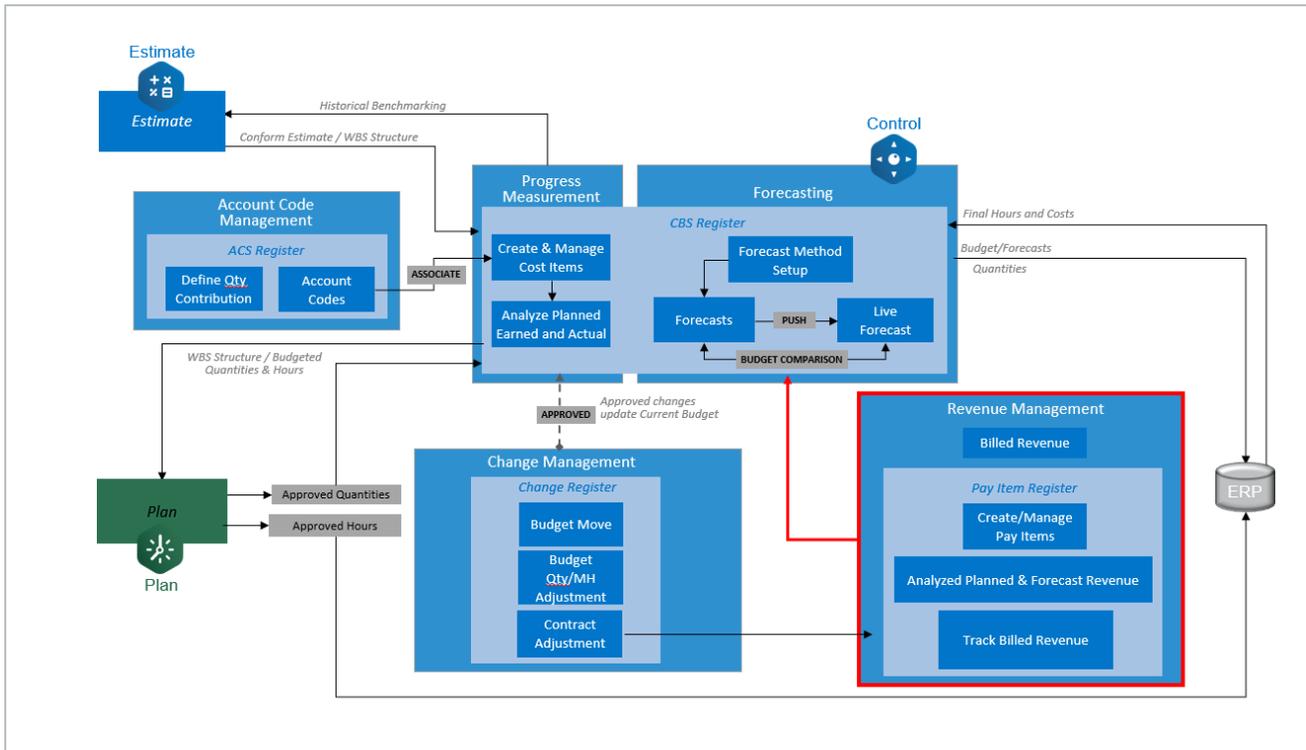
Summary

As a result of this lesson, you can:

- Explain the change management process
- Complete a cost budget move
- Complete a quantity budget move
- Complete a man-hour adjustment
- Create an adjustment to the contract
- Describe the change order approval process

CHAPTER 8 – REVENUE MANAGEMENT

8.1 REVENUE MANAGEMENT WORKFLOW



8.2 PAY ITEMS

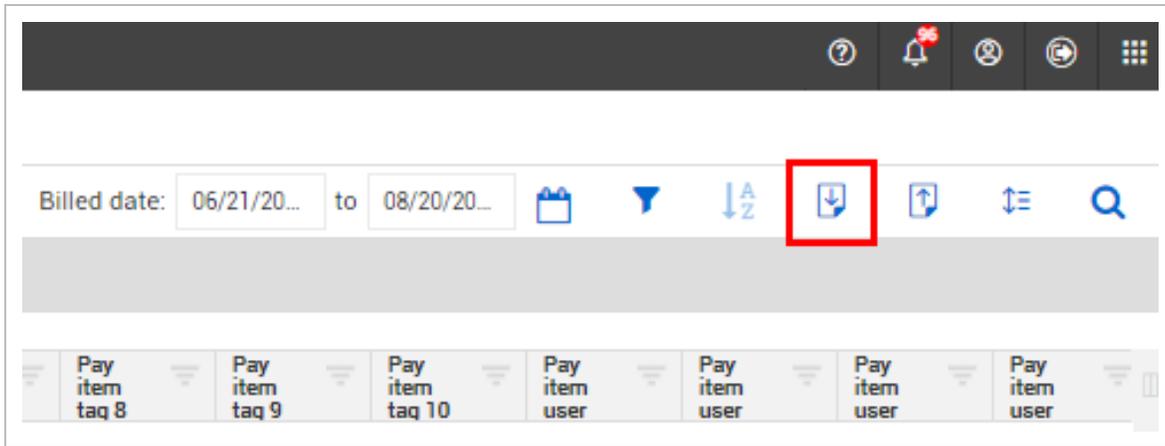
VIDEO | [Pay Item Details](#)

Pay items distribute the cost calculated in the Cost Breakdown Structure along with all markups, fees and contingencies calculated in the pay items. You can manage pay items on the Pay Items tab. For more information, see the [Pay Items](#) section in the Workspaces topic.

8.3 BULK IMPORT PAY ITEMS

You can import pay items in mass directly into the Pay Item and Proposal register, similar to how cost items can be imported directly into the CBS.

You can access the Excel import feature by clicking on the Import icon on the far right toolbar of Control > Workspaces > Pay Items.



When you click on the Import icon within the Pay Items tab of the Workspaces page, the Import Pay Items window is shown.

Overview - Import Pay Items window

Title		Description
1	Import from Excel	You can either drag and drop or browse to the file to import. Microsoft Excel files (.xlsx, .xls) and Comma Separated Value (.csv) files can be imported.
2	Import Type	You can add new pay items into the Pay Item and Proposal register.
3	Information message	Explains that once an import file is specified, the next step will allow you to match the columns in your spreadsheet to the appropriate columns in Control.

Import Pay items

Import from Excel (.xlsx, .xls) or Comma separated value (.csv)

Drag and drop the file here
or browse

Browse

Options

* Import type

Pay Items

New import

i The import file is read and field mapping can be specified. Mapping uses row 1 headers from the source document

Cancel
Next

Clicking Next brings you to the Map columns window, where you can map your Excel columns to the applicable column in Control.

Overview - Map Columns Window

	Title	Description
1	Template	After you map the import file columns to the Pay Item columns in Control, you can save your settings as a template for future use. This is helpful when you need to make scope changes or updates on a regular basis.
2	Control field	The names of the column headers in Control that you can map your data to.
3	Mapped	A green checkmark indicates the column in your import file is mapped correctly to the Pay Item's column. The Green key indicates the matching code you specified is locked.

Overview - Map Columns Window (continued)

Title	Description
4 File columns	The names of the column headers in your import file that you can map to the pay item columns in Control.

Import Pay items - payItems.csv

Map columns

1
Template
Unsaved template

📄
✎
✕

2 Control field	3 Mapped	4 File columns
Pay items		
Current billing method		Blank-do not import
Current forecast t/o qty	✓	Current forecast (T/O) qty
Current pay qty		Blank-do not import
Current price	✓	Current price
Current unit price		Blank-do not import
Description	✓	Description
Line number		Blank-do not import
* Pay item number	🔍	Pay item number
Pay item tag 1		Blank-do not import

* Required fields

Reset
Cancel
Back
Next

8.3.1 Spreadsheet Rules

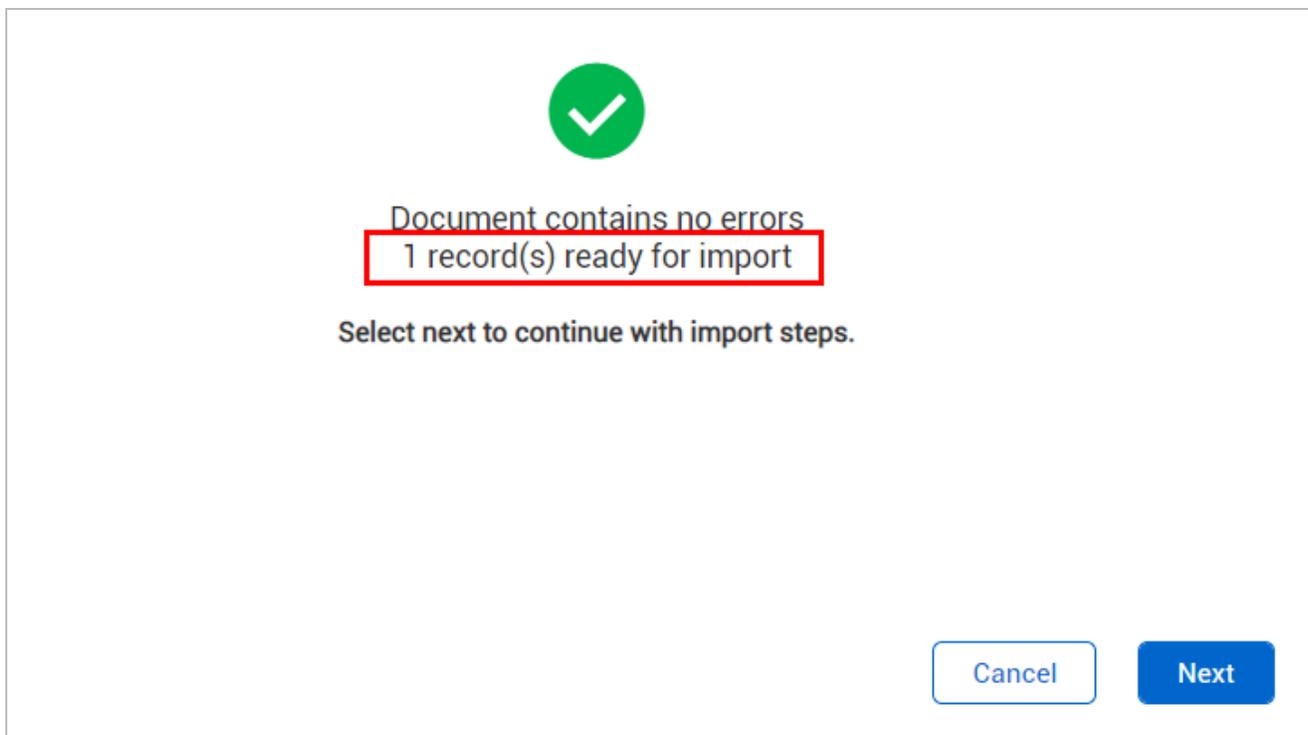
For the import to work correctly, the items in your Excel spreadsheet need to be formatted in a certain way so that Control can recognize them. The following table indicates important spreadsheet rules to follow to make sure your data imports successfully:

Attribute	Rules
Import	Reads the first worksheet within the referenced workbook.

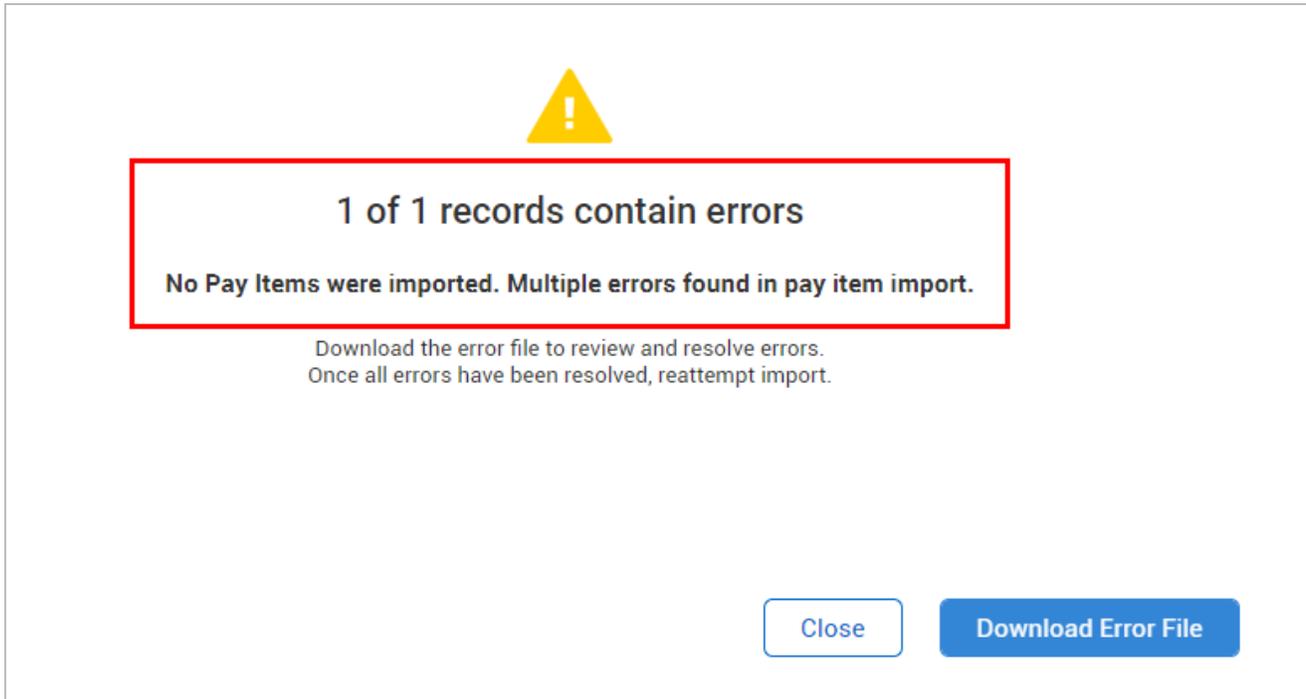
Attribute	Rules
function	Stops the import process when a blank row is encountered, so consolidating the data to be imported is required.
First row of data	This is the header row of the data. This becomes the titles that are referenced during the mapping process. During import, headers are not read if a blank header cell is encountered.
Numbers	Need to be the actual number, not the summation of cells. Cannot contain the \$ or other currency symbol.
Second row of data	This is the first row of data import.

If you make changes in the spreadsheet, you must save the spreadsheet before importing. Only saved data are imported.

After clicking the Next button, the system reads your Excel file and attempts to import pay items. A successful import shows a message stating the number of files to be imported.

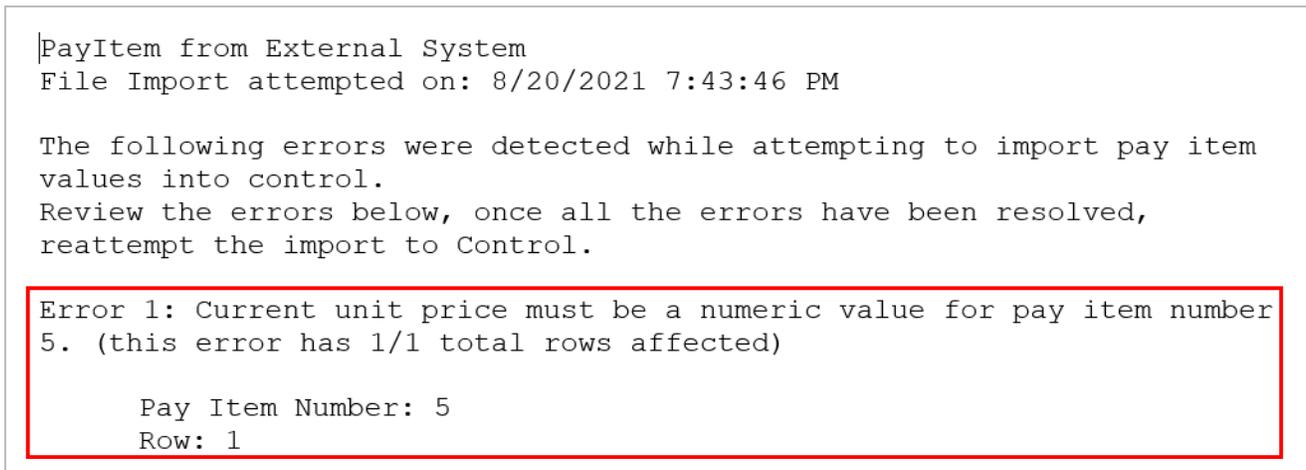


If the import is not successful, a message is shown stating that errors exist. An error file is provided for you to download, review, make corrections to your Excel file, then eventually continue with the pay item import again.



The image shows a warning dialog box with a yellow triangle icon containing an exclamation mark. The main text reads "1 of 1 records contain errors" and "No Pay Items were imported. Multiple errors found in pay item import." Below this, it says "Download the error file to review and resolve errors. Once all errors have been resolved, reattempt import." At the bottom right, there are two buttons: "Close" and "Download Error File".

The import error download file shows exactly where the error(s) exist within the Excel file.



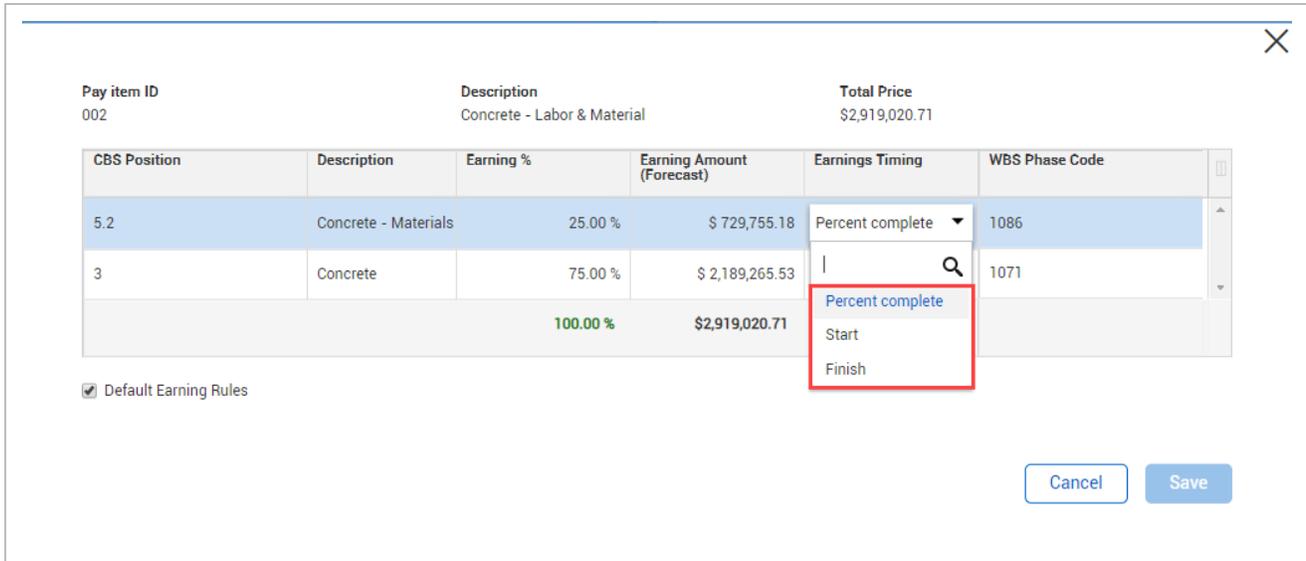
The image shows the content of an error file. It starts with "PayItem from External System" and "File Import attempted on: 8/20/2021 7:43:46 PM". It then states: "The following errors were detected while attempting to import pay item values into control. Review the errors below, once all the errors have been resolved, reattempt the import to Control." A red box highlights the following error: "Error 1: Current unit price must be a numeric value for pay item number 5. (this error has 1/1 total rows affected)". Below this, it lists "Pay Item Number: 5" and "Row: 1".

8.4 EARNING RULES

On the Cost Items tab the **Update earning rules** icon updates the earning rules for all associated cost items. For each cost item associated to a pay item, you can adjust the earning rules by Earning % and

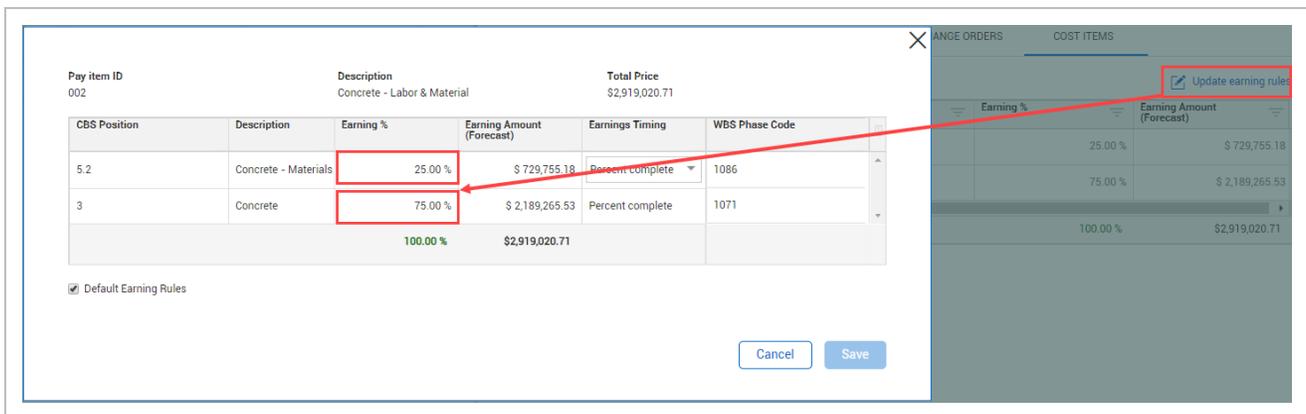
Earnings Timing. The Earnings timing indicates when you can earn revenue for a specific cost item associated to a pay item. You can select from the following earnings timing options:

- **Percent complete** – You will earn revenue based on the % complete of the cost item
- **Start** – You will earn all the revenue when the work of the cost item is started (e.g., Mobilization)
- **Finish** – You will not earn any revenue for the cost item until all the work is completed (e.g., QC item)



In this case for your Structural Steel Project, cost item 3 has an earning rule that equals 75% of the Earning Amount (Forecast) of the pay item’s final revenue. Respectively, cost item 5.2 has an earning rule of 25% of the Earning Amount (Forecast).

Since the Total Price of this pay item is \$2,919,020.71, it is expected that cost item 3 will earn 75% of this amount, and cost item 5.2 will earn 25%.



Billing method of Cost plus

When the billing method of the pay item is set to Cost Plus, then the Update earnings rules option will be disabled. Therefore, the associated cost items of the pay item will earn revenue based on the assigned estimate resources' billing rates and the % complete of the cost item.

Adjusting Pay Item Earning Rules

1. On the Pay Items tab, select a pay item.
2. Hover over to the right of the Description and click on the **three black dots**.
3. Select **Pay item details**.
4. Select the **Cost Items** tab.
5. Click the **Update earning rules** icon.
6. Change the Earning % percentages for each associated cost item so the total will equal 100%..
7. Click **Save**.

8.5 BILLED REVENUE

You can track revenue for your cost items in the Billed revenue details panel. The timing and basis for billing revenue varies depending on your contractual agreement. Options include billing by a time period or milestone, or based on a schedule.

The Billed revenue details slide-out panel records and tracks billed revenue.

002
✕

Concrete - Labor & Material

BILLED
RETENTION
BILLED HISTORY

Pending billable qty	Pending billable revenue	Retainage %
0.18	\$ 530,386.06	0.00 %

Billed revenue

Cost category

Retention withheld: \$ 0.00
Net bill: \$ 0.00

Billed quantity

*** Billed date**

Cost item

Change order

Notes 250

+ Add billed

Cancel
Apply

In the Billed revenue details slide-out panel you can navigate to the following tabs:

- Billed
- Retention
- Billed History

To open the Billed revenue details slide-out panel, from the Pay Items register, click the ellipses next to the pay item description, and then select **Billed revenue details**. The Billed revenue details slide-out panel opens, where you can record and track what you bill to the client.

Pay item position	Pay item number	Description	Forecast total revenue	Forecast revenue unit cost	Revenue forecast method	Current billing method	Is billed	Billed revenue	Billed qty	Revenue earned	Quantity earned	Pending billable revenue	Pending billable qty	Net billed revenue
Unapproved revenue			\$ 93,159.69											
	1	001	Earthwork - Labor & Material	\$ 759,887.01	\$ 759,887.01	Default	Unit price	\$ 0.00	0.00	\$ 217,444.37	0.29	\$ 217,444.37	0.29	\$ 0.00
<input checked="" type="checkbox"/>	2	002	Concrete - Labor & Material	\$ 2,919,020.71	\$ 2,919,020.71	Default	Unit price	\$ 0.00	0.00	\$ 530,386.06	0.18	\$ 530,386.06	0.18	\$ 0.00
	3	003	Steel - Labor & Material	\$ 1,092.28		Default	Unit price	\$ 0.00	0.00	\$ 221,183.01	0.18	\$ 221,183.01	0.18	\$ 0.00
Subtotals 3 (1 pay items selected)			\$ 5,593,159.69					\$ 0.00		\$ 1,069,013.45		\$ 1,069,013.45		\$ 0.00

The Billed Revenue Details slide-out panel opens by default to the Billed tab.

8.6 REVENUE FORECASTING

Revenue forecasting is used to determine the projected revenue a contractor will receive for completing a project or scope of work. The amount of revenue earned compared to the total cost spent determines how much profit and % margin is made. Therefore, understanding projected revenue is critical to determine the profitability and health of a project.

It is often necessary to compare forecasted cost to expected revenue at a cost item level. Within Control, you can view this comparison using the revenue columns available in the CBS. The revenue fields in the CBS auto calculate based on the billing method of each line item or can be overridden by manually entering a revenue forecast.

8.6.1 Pay Item Position Code Column

The Pay Item tab contains a Pay Item Position column that lets you view, sort, and group pay items in a hierarchical manner much like you can in the CBS. This feature lets you expand and collapse pay items by clicking the down-arrow, while also letting you group scopes of work together into a hierarchy.

Pay item position	Pay item number	Descri...	Line num...	Row num...	Curr... price	Curr... unit price	Curr... pay qty
▼ 1	Pay 1	Pay 1	1	26	\$ 80,20...		
▼ 2	16Pay 2	Pay 2	17	15	\$ 0.000...		
▼ 3	17Pay 3	Pay 3	18	16	\$ 0.000...		
4	Testpay	Set new pay...	37	27	\$ 0.000...	\$ 1.50000...	0.0000000...

Adjusting the pay item position code column lets you see the parent-child rollup relationship between pay items, terminal pay items, and the revenue forecast method, in addition to any other price and revenue columns. This lets you see how the values for the child pay items all roll up to its parent pay item, then see the totals at a parent pay item level.

<input type="checkbox"/>	Pay item position	Pay item number	Descri...	Line num...	Is term...	Row num...	Current price	Revenue forecast method
<input type="checkbox"/>	^ 1	Pay 1	Pay 1	1	<input type="checkbox"/>	26	\$ 80,200.00000000010	Rollup
<input type="checkbox"/>	^ 1.1	Pay 1.1	Pay 1.1	2	<input type="checkbox"/>	1	\$ 79,300.00000000010	Rollup
<input type="checkbox"/>	1.1.1	3Pay 1.1.1	Pay 1.1.1	3	<input checked="" type="checkbox"/>	2	\$ 55,300.00000000000	Manual
<input type="checkbox"/>	1.1.2	4Pay 1.1.2	Pay 1.1.2	4	<input checked="" type="checkbox"/>	3	\$ 11,000.00000000010	Manual
<input type="checkbox"/>	1.1.3	5Pay 1.1.3	Pay 1.1.3	5	<input checked="" type="checkbox"/>	4	\$ 9,000.00000000000	Default
<input type="checkbox"/>	1.1.4	6Pay 1.1.4	Pay 1.1.4	6	<input checked="" type="checkbox"/>	5	\$ 1,000.00000000000	Billed
<input type="checkbox"/>	^ 1.1.5	7Pay 1.1.5	Pay 1.1.5	7	<input type="checkbox"/>	6	\$ 3,000.00000000000	Rollup
<input type="checkbox"/>	1.1.5.1	9Pay 1.1.5.1	Pay 1.1.5.1	9	<input checked="" type="checkbox"/>	8	\$ 3,000.00000000000	Default
<input type="checkbox"/>	1.1.5.2	10Pay 1.1.5.2	Pay 1.1.5.2	10	<input checked="" type="checkbox"/>	9	\$ 0.00000000000	Default
<input type="checkbox"/>	1.1.6	8Pay 1.1.6	Pay 1.1.6	8	<input checked="" type="checkbox"/>	7	\$ 0.00000000000	Default
<input type="checkbox"/>	^ 1.2	11Pay 1.2	Pay 1.2	11	<input type="checkbox"/>	10	\$ 900.00000000000	Rollup
<input type="checkbox"/>	1.2.1	14Pay 1.2.1	Pay 1.2.1	15	<input checked="" type="checkbox"/>	13	\$ 900.00000000000	Default
<input type="checkbox"/>	1.2.2	15Pay 1.2.2	Pay 1.2.2	16	<input checked="" type="checkbox"/>	14	\$ 0.00000000000	Default

8.6.2 Cost Item Revenue View

It’s important to see forecasted cost and forecasted revenue side by side, in order to compare the costs and revenue on individual cost items as a subtotal of the overall project.

In Control, you can create a custom revenue data block containing six revenue-related columns. Permissions can be established to limit who may view these Revenue columns. You can view this data block within the same view as a forecasted costs data block for a side-by-side comparison.

Tasks			Task details			Revenue						Pay Item/CB/FC						
CBS position	Description	WBS phase code	WBS phase code	Pay item assignment	CBS contribute qty	Forecast total cost	Forecast total margin	Forecast total revenue	Forecast % margin	Forecast remaining revenue	Forecast revenue earned	Forecast revenue unit cost	Pay item assignment	Forecast total cost	Actual cost (to date)	% complete	CB total cost	CF total cost
1	Job Overhead	1002	1002			\$ 250,000.00	\$ 0.00	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00		\$ 250,000.00	\$ 0.00	0.00 %	\$ 0.00	\$ 250,000.00
2	Earthwork	1069	1069	001		\$ 400,000.00	\$ 20,575,002,116.13	\$ 20,575,402,116.13	100.00 %	\$ 20,575,402,116.13	\$ 0.00	\$ 467,522.78	001	\$ 400,000.00	\$ 0.00	0.00 %		\$ 400,000.00
3	Concrete	1071	1071	002		\$ 0.00	\$ 0.00	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00	002	\$ 0.00	\$ 0.00	100.00 %		\$ 1,000,000.00
4	Structural Steel	1073	1073			\$ 1,050,000.00	(\$ 847,200.00)	\$ 202,800.00	-81.78 %	\$ 202,800.00	\$ 0.00	\$ 0.00		\$ 1,050,000.00	\$ 0.00	0.00 %	\$ 0.00	\$ 1,050,000.00
4.1	Erect Steel - Heavy	1074	1074	002		\$ 800,000.00	(\$ 800,000.00)	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00	002	\$ 800,000.00	\$ 0.00	0.00 %		\$ 800,000.00
4.2	Erect Steel - Light	1075	1075	003		\$ 200,000.00	\$ 2,000.00	\$ 202,000.00	1.38 %	\$ 202,000.00	\$ 0.00	\$ 0.00	003	\$ 200,000.00	\$ 0.00	0.00 %		\$ 200,000.00
4.3	Bolted Connections	1086	1086	002		\$ 50,000.00	(\$ 50,000.00)	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00	002	\$ 50,000.00	\$ 0.00	0.00 %		\$ 50,000.00
4.4	Labor	1088	1088	001		\$ 0.00	\$ 0.00	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00	001	\$ 0.00	\$ 0.00	0.00 %		\$ 0.00
4.5	Equipment	1089	1089	001		\$ 0.00	\$ 0.00	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00	001	\$ 0.00	\$ 0.00	0.00 %		\$ 0.00
4.6	3rd Party	1090	1090			\$ 0.00	\$ 0.00	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00		\$ 0.00	\$ 0.00	0.00 %		\$ 0.00
5	Materials	1084	1084			\$ 1,750,000.00	\$ 12,896,376,323.87	\$ 12,896,126,323.87	99.99 %	\$ 12,896,126,323.87	\$ 0.00	\$ 0.00		\$ 1,750,000.00	\$ 0.00	0.00 %	\$ 0.00	\$ 1,750,000.00
5.1	Earthwork - Mater...	1085	1085	001		\$ 250,000.00	\$ 12,896,376,323.87	\$ 12,896,26,323.87	100.00 %	\$ 12,896,26,323.87	\$ 0.00	\$ 252,264.23	001	\$ 250,000.00	\$ 0.00	0.00 %		\$ 250,000.00
5.2	Concrete - Mater...	1086	1086	002		\$ 1,000,000.00	(\$ 1,000,000.00)	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00	002	\$ 1,000,000.00	\$ 0.00	0.00 %		\$ 1,000,000.00
5.3	Structure Steel - ...	1087	1087	003		\$ 500,000.00	\$ 0.00	\$ 500,000.00	0.00 %	\$ 500,000.00	\$ 0.00	\$ 0.00	003	\$ 500,000.00	\$ 0.00	0.00 %		\$ 500,000.00
Subtotal: 14						\$ 4,400,000.00	\$ 33,432,533,240.00	\$ 33,433,733,240.00	99.99 %	\$ 33,433,733,240.00	\$ 0.00	\$ 0.00		\$ 4,400,000.00	\$ 0.00	0.00 %	\$ 0.00	\$ 4,400,000.00

The Revenue columns can only be populated if the associated cost items have an assigned pay item. In the example below, cost item 1 Job Overhead, does not have a corresponding pay item assignment, therefore the Revenue columns are not populated. The opposite is true for Cost item 2 which has a corresponding pay item assignment.

Tasks			Task details			Revenue						
CBS position	Description	WBS phase code	WBS phase code	Pay item assignment	CBS contribute qty	Forecast total cost	Forecast total margin	Forecast total revenue	Forecast % margin	Forecast remaining revenue	Forecast revenue earned	Forecast revenue unit cost
1	Job Overhead	1002	1002			\$ 250,000.00	\$ 0.00	\$ 0.00	0.00 %	\$ 0.00	\$ 0.00	\$ 0.00
2	Earthwork	1069	1069	001		\$ 400,000.00	\$ 20,575,002,116.13	\$ 20,575,402,116.13	100.00 %	\$ 20,575,402,116.13	\$ 0.00	\$ 467,522.78

8.6.3 Cost item revenue calculation by allows as-built

For parent cost items where the allow as-built is not equal to *None*, where cost or quantities are being tracked, revenue values are now being calculated at the parent cost item level rather than always rolling up children revenue values to the parent. If the costs or quantities are being tracked at the terminal cost items, then those revenue values are calculated at the terminal cost items and roll up to the parent.

Tasks			Task details			Revenue					
CBS position	Description	WBS phase code	Change status	As-built lock	Allow as-built	Forecast revenue unit cost	Forecast total margin	Forecast total revenue	Forecast remaining revenue	Forecast revenue earned	Forecast % margin
1	Financi...	1000		<input checked="" type="checkbox"/>	All	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	0.000000000000 %
2	Misc. R...	1103		<input type="checkbox"/>	None	(\$ 43,529,564,498.00)	\$ 545,695501000000	\$ 0.00083358262	\$ 545,69466741738	-7,976,896349380...	
2.1	Misc. R...	1104		<input checked="" type="checkbox"/>	All	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	0.000000000000 %
2.2	Escalati...	1101		<input type="checkbox"/>	Costs	\$ 0.000000000000	\$ 8,661833000000	\$ 8,661833000000	\$ 0.000000000000	\$ 8,661833000000	100.000000000000 %
2.2.1	General ...	1102		<input checked="" type="checkbox"/>	Quantities	\$ 0.000000000000	\$ 454,304498000000	\$ 454,304498000000	\$ 0.000000000000	\$ 454,304498000000	100.000000000000 %
2.3	Directs	1001		<input type="checkbox"/>	None	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	\$ 0.000000000000	0.000000000000 %

8.7 REVENUE FORECAST PROBABILITY

Revenue can come from Control or Change. Only Contract Adjustments have revenue. You can also adjust your pay item values in a Contract Adjustment. For example a drop down field called Approval Probability is a drop down of all your revenue categories and their associated probability. This drop down field displays the Approval probability by percentage and associated name.

Follow the steps below to select an approval probability.

Approval Probability

1. Select the **Actions** drop down menu.
2. Hover over **Budget move and contract adjustment**, then click **Contract Adjustment**.
3. In the Approval probability drop down, select the percentage and associated name.
4. In step 3, select the add icon to add either new or existing pay items.
5. Enter a value into the **Adjusted total price** text box.
6. Either save as **Draft** or select the **Submit** button. Now it shows the selected approval probability in the Change Register. It also displays in the line item slideout. This updates automatically based on status changes.
7. If your line item is approved, it has a 100.00% in the Approval Probability column.

- If a Contract Adjustment has been **revised** or **rejected**, then the line item has a 0.00% in the Approval Probability column.

That Contract Adjustment's revenue is never going to be earned or added to the pay items because a new Contract Adjustment has been created.

- If your line item is in a **Draft** or **Pending** state, the Approval Probability column displays the approval probability you selected for that line item.

If you don't select an approval probability, the Approval Probability column is blank.

Your Approval Probability drives the price you include in your Forecast Final Revenue. For this next example, we are going to include the Unapproved Revenue into the Forecast Final Revenue. In the Pay Items Register, the Unapproved Revenue column calculates all the Contract Adjustments. The column adds up all Contract Adjustments that include the pay item and the adjusted price that has not yet been approved. The Unapproved Revenue column calculates anything that is in a **Draft** or **Pending** state.

Pay item number	Description	Pay Item User	Forecast final revenue	Fore... unit reve...	% Mar...	Billed reve..	Billed qua...	Rev... fore... mt...	Rev... earn...	Quantity earned	Unapproved revenue	Pending billable quantity
1			\$ 212.00	\$ 26.50	100.00 %	\$ 0.00	-1.00	Default	\$ 0.00	0.00		1.00 \$ 0.
001	Pay Item 1		\$ 112,594,397.58	\$ 0.91	100.00 %	\$ 10,020.12	888,910.12	Default	\$ 112,594,...	123,458.77		-765,451.35 \$ 1.
005	Danielle test		\$ 105,062.40	\$ 105.06	-4,278.83 %	\$ 105,062...	822.00	Billed	\$ 875,767...			\$ 7.
123	123		\$ 4,014,854.93	\$ 1,003,71...	100.00 %	\$ 220,485...	219.67	Default	\$ 3,954,88...	3.94		-215.73 (\$
12345	12345		\$ 3,010.00	\$ 3,010.00	100.00 %	\$ 124.00	1.00	Default	\$ 0.00	0.00	\$ 1,000.00	-1.00 (\$

In Pay Item Details, the Change Orders, you can view the following details:

- Total price change
- Total unit price change
- Total pay quantity change
- Approval probability
- Adjusted forecast final revenue
- Status

12345			✕			
12345		Pay Quantity		Unit Price		
\$ 3,000.00		1.00		\$ 3,000.00		
DETAILS		ATTRIBUTES		CHANGE ORDERS		
COST ITEMS						
Issue #	Total price change	Total unit price change	Total pay qty change	Approval probability	Adjusted forecast final revenue	Status
	\$ 1,000.00	\$ 0.00	0.33	1.00 %	\$ 10.00	Draft
	\$ 0.00	(\$ 3,000.00)	0.00	0.00 %	\$ 0.00	Pending
	\$ 0.00	(\$ 3,000.00)	0.00	0.00 %	\$ 0.00	Revised
	\$ 3,000.00	\$ 3,000.00	1.00	100.00 %	\$ 3,000.00	Approved

The Forecast Final Revenue is the sum of all the Adjusted Forecast final revenue. Calculating the Unapproved Revenue with the Forecast Final Revenue provides you with a more accurate look at the revenue you will see when the Contract Adjustment is approved. Nothing is added into the Total Pay Item Price until it is approved.

Approval Probability drop down is only available in the Contract Adjustment. Everywhere else it is read only. To manually adjust the Contract Adjustment, go to the **Change Register**. Then right click the line item you want to change and select **Revise**. The Contract Adjustment can also automatically change based on status changes.

The Revenue Category Name and probability percentage drives the Approval Probability. The Revenue Category Name draws from the Revenue Categories in the Master Data libraries.

English				Español	
Revenue category name	Revenue change status name	Probability percentage	State	Revenue category name	Revenue change status name
<input type="checkbox"/> ss1	ss		11 Active	ss1	ss
<input type="checkbox"/> ss	ss		11 Active	ss	ss
<input type="checkbox"/> @222222222	sdsad		111 Active	@222222222sda	sdsad
<input type="checkbox"/> New Demo S72 EN1	English1		410 Inactive	New Demo S72 EN1	English1
<input type="checkbox"/> New Demo S72 EN	Englishas		10 Active	New Demo S72 EN	English
<input type="checkbox"/> 0918	0918		9.18 Active	0918	0918
<input type="checkbox"/> HVT_18/09/2020_edit	HVT_18/09/2020		23 Active	HVT_18/09/2020	HVT_18/09/2020
<input type="checkbox"/> Count1			10 Active	Count1	
<input type="checkbox"/> Count	Count		18 Active	Count	Count
<input type="checkbox"/> 23ASDA	23ASDA		23 Active	asda	qw
<input type="checkbox"/> 123123123123123	123123123123		23 Active	123123123123123	123123123123
<input type="checkbox"/> lo	lo		9 Active	lo	lo
<input type="checkbox"/> Rev_eng	Rev_eng		99 Active	Rev_eng	Rev_eng
<input type="checkbox"/> Check_1_eng	Check_1_eng		100 Active	Check_1_eng	Check_1_eng

The Revenue Categories show the Revenue category name and probability percentage for only **active** revenue.

8.8 TIME-PHASED BUDGET

Time-phased budget lets you plan out where to spend money in the months of the active fiscal calendar for the project.

The point of being able to time phase your budget is so that you can plan out your budget cost per cost item. You are spreading out your budget over the course of the project for each cost item.

8.8.1 Budget organization setting

The time-phased budget feature includes an organization setting located in the Project tracking tab of the Control settings. The organization setting sets the default for all the projects within that organization.

You can also change the budget setting at the project level. If you are starting new projects in your organization, you need to have Time phasing budget switched on.

By default all the projects that are created under that organization also have the time phased budget enabled. This is the same for when budget is disabled.

Time phasing

Enable time phasing for the following:

Budget 	<input checked="" type="checkbox"/>	Edit past Time phased budget values	<input type="checkbox"/>
--	-------------------------------------	-------------------------------------	--------------------------

8.8.2 Edit Past Time-Phased Budget Values

The Edit past Time phased budget values toggle lets you edit past fiscal period time phased budget values.

Time phasing

Enable time phasing for the following:

Budget   Edit past Time phased budget values 

When this setting is enabled, you can edit your past time phased budget values via a budget move or a contract adjustment in the time phased budget step, with the proper permissions.

Change register > Contract adjustment

Net budget change	Net quantity change	Net man hour change	Markup	Fee	Net contract change	Approval probability
\$ 0.00	No	0.00	\$ 0.00	\$ 0.00	\$ 0.00	

1 Details 2 Cost items 3 Time phased budget 4 Pay items 5 Summary

CBS position	Description	WBS phase code	Start	Finish	Cc	January 2022		February 2022		
						Cost	Adjusted cost	Cost	Adjusted cost	
<input type="checkbox"/>	2.3.1.1.1	Resurface Existing Access road	1004	10/16/2022	11/15/2022	Lir	\$ 212.33	(\$ 212.33)	\$ 191.78	\$ 212.33
<input type="checkbox"/>	2.3.1.1.2	Maintain Access Road	1005	10/16/2022	11/15/2022	Lir	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00

Selecting the new Rebaseline icon resets the cost item's time-phased budget distribution based on the Start and Finish dates against that cost item. Rebaselining lets you amend your time-phased budget distribution costs for a cost item.

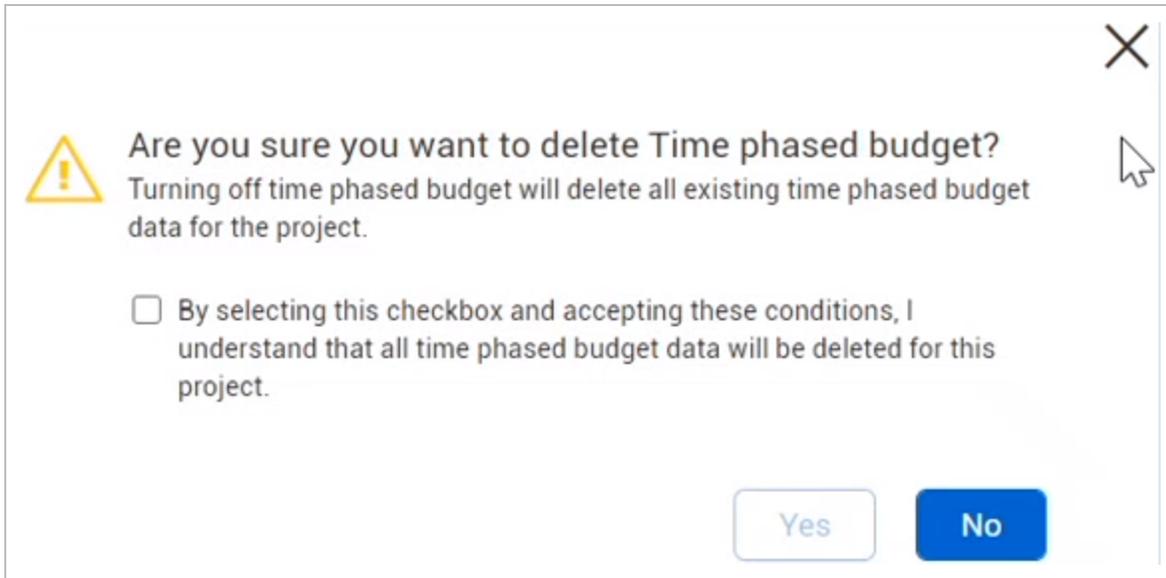
You can also edit any of the Adjusted cost values manually for past months.

CBS position	Description	Start	Finish	April 2022		May 2022		
				Cost	Adjusted cost	Cost	Adjusted cost	
<input type="checkbox"/>	2.3.1.1.1	Resurface Existing Access	10/16/2022	11/15/2022	\$ 205.48	\$ 0.00	\$ 212.33	\$ 0.00
<input checked="" type="checkbox"/>	2.3.1.1.2	Maintain Access Road	05/01/2022	12/31/2022	\$ 0.00	\$ 471.92	\$ 0.00	\$ 975.31

At the project level, the time-phased budget inherits the organization settings, but still lets you switch the budget setting *On* or *Off* at the project level. For example, you can have time phased budget turned on at the organization level and you can turn it off at the project level.

8.8.3 Switching off time-phasing budget

If the Time phasing budget is switched on, that means there is time-phasing budget data in the database. If you turn it off time phasing budget at the project level, it gives you the following warning message:



All of your time-phased budget data is going to be deleted if you switch time phased budget off. You must select the check box in the warning dialog acknowledging that you understand and accept these conditions.

If you still want to turn off the time phasing budget, you can select **Yes** and then click **Save**. This will delete the time-phasing budget data from the database.

8.8.4 Switching on the time-phasing budget

If you want to turn on time phased budget, the following dialog box appears if there are any missing start or end dates:

Cost items are missing start and end dates.

How would you like to populate the missing cost item start and end dates?

Default all budget to current fiscal period

Default to project start and end dates

Go back and populate the missing dates

Cancel

Confirm

Every cost item in your project needs the start and finish date entered to use that data in the time-phase budget.

When time-phased budget data is calculated, the calculation is based off of the data in the current budget and total cost for the cost item. Then, the cost is distributed to the cost items start date, finish date, and cost curve.

Time phased budget				
CB total cost	Start	Finish	Cost curve	Pending budget cost
\$ 48,790.00	01/01/2020	03/31/2022	Linear	\$ 150.00
\$ 25,020.00	01/01/2020	07/30/2021	Back Loaded	(\$ 5,060.00)
\$ 5,050.00	12/30/2020	12/31/2020	Front Loaded	\$ 4,640.00
\$ 5,120.00	01/01/2021	05/31/2021	Linear	\$ 540.00
\$ 1,600.00	12/01/2020	03/31/2021	Custom curve 1	\$ 10.00
\$ 1,000.00	12/01/2020	05/15/2021	Bell Shaped	\$ 10.00
\$ 11,000.00	12/01/2020	03/31/2022	Custom curve 2	\$ 10.00

8.8.4.1 Default all budget to current fiscal period

The first option you have is to default all of the budget to the current fiscal period. Then, all cost items that don't have defined start and finish dates have the current budget going to the current fiscal

period.

For example, if you look at WBS phase code 1007, you would have \$100,000 put into December 2020.

Tasks				Time phased budget				
<input type="checkbox"/>	CBS position	Description	WBS phase code	CB total cost	Start	Finish	Cost curve	Pending budget cost
<input type="checkbox"/>	1	Electrical devices	1000	\$ 48,790.00	01/01/2020	03/31/2022	Linear	\$ 150.00
<input type="checkbox"/>	1.1	Install conduit	1002	\$ 25,020.00	01/01/2020	07/30/2021	Back Loaded	(\$ 5,060.00)
<input type="checkbox"/>	1.2	Fiber optic cable-1	1001.1	\$ 5,050.00	12/30/2020	12/31/2020	Front Loaded	\$ 4,640.00
<input type="checkbox"/>	1.3	Pull cable	1003	\$ 5,120.00	01/01/2021	05/31/2021	Linear	\$ 540.00
<input type="checkbox"/>	1.4	CCTV devices	1004	\$ 1,600.00	12/01/2020	03/31/2021	Custom curve 1	\$ 10.00
<input type="checkbox"/>	1.5	Terminations	1005	\$ 1,000.00	12/01/2020	05/15/2021	Bell Shaped	\$ 10.00
<input type="checkbox"/>	1.6	Light poles	1006	\$ 11,000.00	12/01/2020	03/31/2022	Custom curve 2	\$ 10.00
<input type="checkbox"/>	2	Indirects	1008	\$ 305,000.00			Linear	\$ 0.00
<input type="checkbox"/>	2.1	Staff	1010	\$ 305,000.00			Linear	\$ 0.00
<input type="checkbox"/>	2.1.1	PM	1007	\$ 100,000.00			Linear	\$ 0.00
<input type="checkbox"/>	2.1.2	PE	1009	\$ 85,000.00			Linear	\$ 0.00
<input type="checkbox"/>	2.1.3	Super	1011	\$ 120,000.00			Linear	\$ 0.00
<input type="checkbox"/>	3	Staff training	1012	\$ 5,500.00			Linear	\$ 0.00
<input type="checkbox"/>	4	Craft training	1013	\$ 17,500.00			Linear	\$ 0.00
<input type="checkbox"/>	5	ST&S	1014	\$ 45,000.00			Linear	\$ 0.00
Subtotals 64				\$ 431,790.00				\$ 150.00

8.8.4.2 Default to project start and end dates

The next option is to default to the start and end dates. On the project details page you define all the project start and end dates. After those are defined, then we can default all of those missing start and end dates to just the project start and end dates.

8.8.4.3 Populate missing dates manually

You can also return to the Time phased budget step and manually populate the missing dates. If you choose this option, the budget setting turns off again (if it wasn't already turned off and on again in previous sections). You then have to go into the CBS and manually enter all the start and finish dates. Then, you could turn the budget setting back on and it should distribute the budget.

Time-phased budget data currently can only be seen in the CBS contract adjustment.

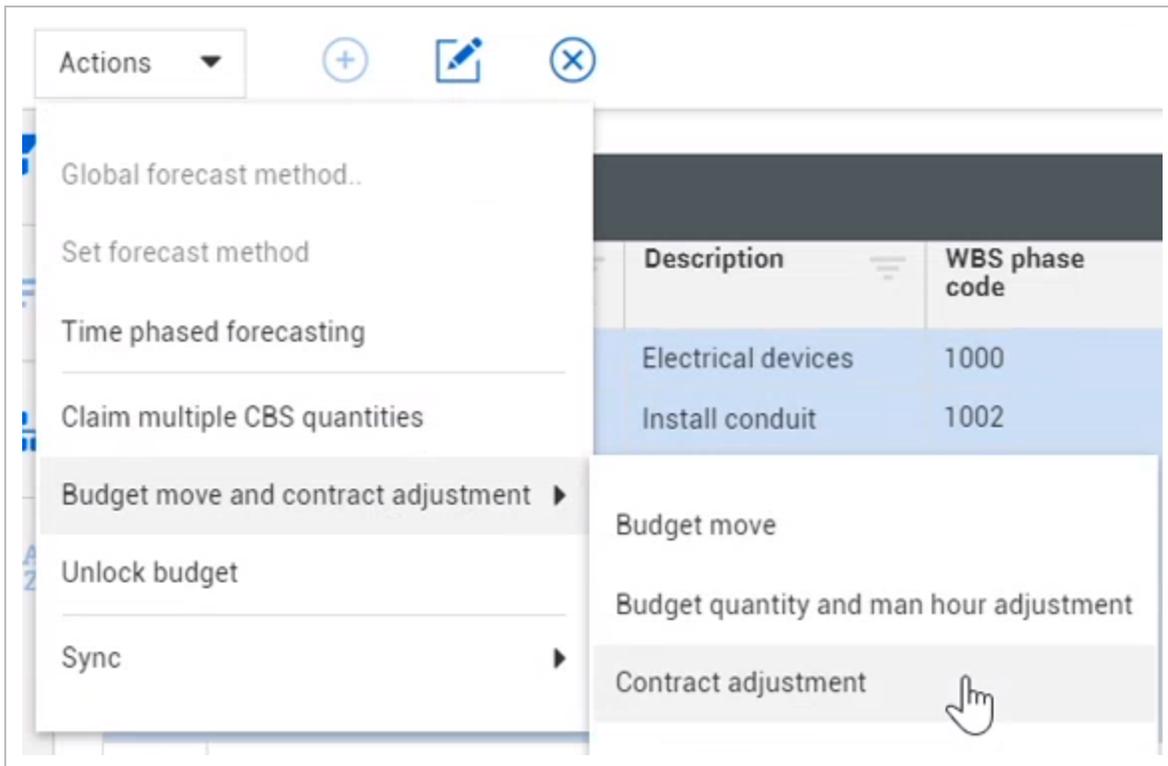
For more information about settings for time-phasing budget, see [Time-phasing](#).

8.8.5 Time-phased budget in contract adjustment

From the CBS, select cost items to adjust in the contract adjustment.

Tasks				Time phased budget				
CBS position	Description	WBS phase code	CB total cost	Start	Finish	Cost curve	Pending budget cost	
1	Electrical devices	1000	\$ 48,790.00	01/01/2020	03/31/2022	Linear	\$ 150.00	
1.1	Install conduit	1002	\$ 25,020.00	01/01/2020	07/30/2021	Back Loaded	(\$ 5,060.00)	
1.2	Fiber optic cable-1	1001.1	\$ 5,050.00	12/30/2020	12/31/2020	Front Loaded	\$ 4,640.00	
1.3	Pull cable	1003	\$ 5,120.00	01/01/2021	05/31/2021	Linear	\$ 540.00	
1.4	CCTV devices	1004	\$ 1,600.00	12/01/2020	03/31/2021	Custom curve 1	\$ 10.00	

Then select the **Actions** drop-down, hover over the **budget move and contract adjustment** and then select **Contract adjustment**.



In the contract adjustment, there is an area called Change order attributes. This area lets you set your change orders/contract adjustment to the following:

- Start date
- Finish date
- Cost curve

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Choose your Contract adjustment workflow

Start with Cost items
Enter markup and fees on cost items to generate pay item price

Start with Pay items
Adjust pay item price before adjusting cost item budgets

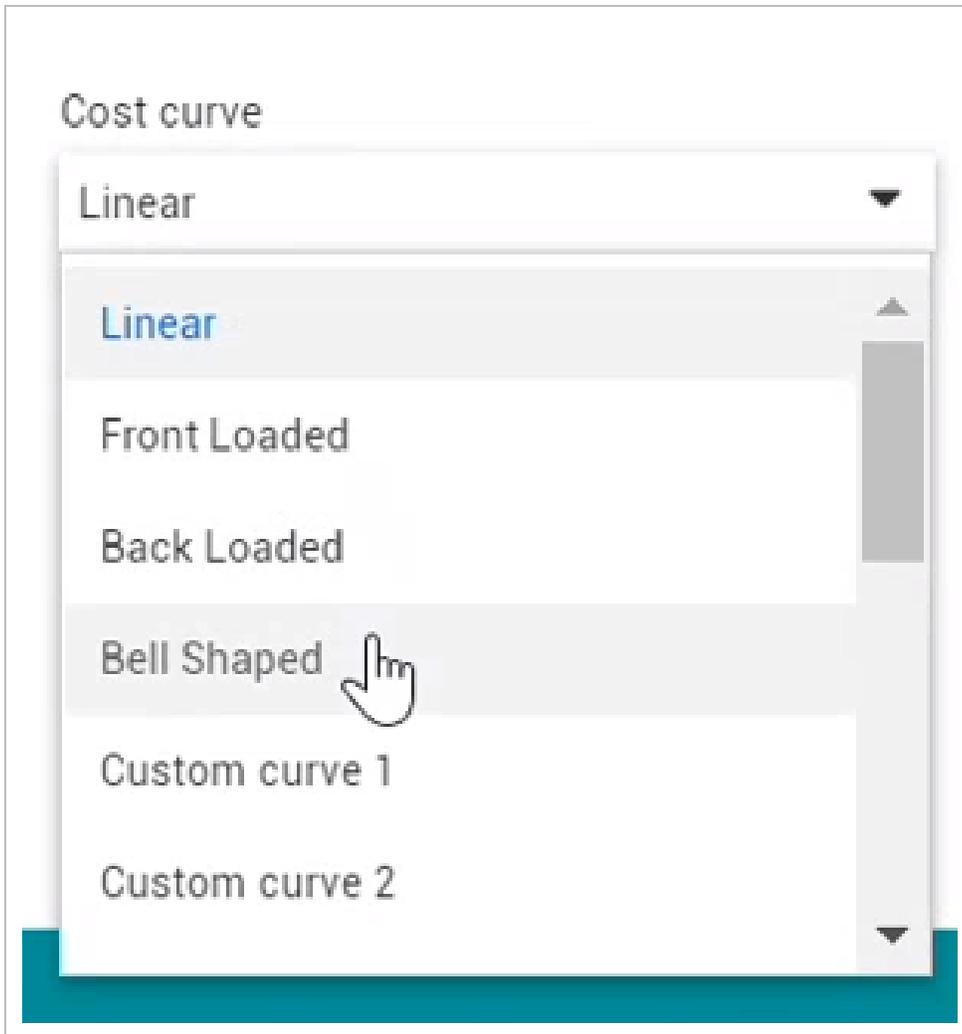
Change order attributes

Start date: 2020 December Finish date: 2020 December Cost curve: Linear

Contract adjustment details

Issue # CCO

Cost Curve can be adjusted in many ways. If you select **Bell Shaped** the cost adjustments increase during the summer months and then decreases in the winter months.



In step 3 of the contract adjustment, the Time phased budget step can be used for both Start with Cost items work flow and the Start with Pay items work flow. You can adjust your time phased budget in either contract adjustment work flow.

The only time your time-phased budget should change is when you get change orders and you have to change your overall budget amount.

For the Start dates, you cannot put budget in the past. If you try to select a month that has already passed, you will get an error stating Start date must be in an open fiscal period.

Change order attributes

Start date: 2020 January Finish date: 2021 December Cost curve: Linear

Start date must be in an open fiscal period

Finish date has to be greater than your start date otherwise you get the following error.

Finish date: 2020 December Cost curve: Linear

Finish date cannot be earlier than start date

Move onto step 2 Cost Items. You can add Adjusted CB total cost. In this example we are adding \$100 to each cost item.

1 Details 2 Cost items 3 Time phased budget

Assign cost to

	CBS position	Description	WBS phase code	CB total cost	Adjusted CB total cost	Markup %
^ Unassigned cost items						
<input type="checkbox"/>	1.2	Fiber optic cable-1	1001.1	\$ 5,050.00	\$ 100.00	
<input type="checkbox"/>	1.1	Install conduit	1002	\$ 25,020.00	\$ 100.00	
<input type="checkbox"/>	1.3	Pull cable	1003	\$ 5,120.00	\$ 100.00	
<input type="checkbox"/>	1.4	CCTV devices	1004	\$ 1,600.00	\$ 100.00	
<input type="checkbox"/>	1.5	Terminations	1005	\$ 1,000.00	\$ 100.00	
<input checked="" type="checkbox"/>	1.6	Light poles	1006	\$ 11,000.00	\$ 100.00	

In the Time phased budget step, the 100 dollars now has to be distributed. Scroll over to the Distribution type column.

In step 3, only TERMINAL cost items will be brought into that grid. Non-terminal cost items do not show on the Cost items grid of the contract adjustment.

1 Details 2 Cost items 3 Time phased budget 4 Pay items 5 Summary										
CBS position	Description	Start	Finish	Cost curve	Distribution type	CB total cost	November 2020		December 2020	
							Cost	Adjusted cost	Cost	Adjusted cost
1.1	Install conduit	12/27/2020	12/25/2021	Linear	Change order	\$ 25,020	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
1.2	Fiber optic cable-1	12/27/2020	12/25/2021	Linear	Change order	\$ 5,050	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
1.3	Pull cable	12/27/2020	12/25/2021	Linear	Change order	\$ 5,120	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
1.4	CCTV devices	12/27/2020	12/25/2021	Linear	Change order	\$ 1,600	\$ 0.00	\$ 0.00	\$ 327.43	\$ 0.00
1.5	Terminations	12/27/2020	12/25/2021	Linear	Change order	\$ 1,000	\$ 0.00	\$ 14.43	\$ 0.00	\$ 0.00
1.6	Light poles	12/27/2020	12/25/2021	Linear	Change order	\$ 11,000	\$ 0.00	\$ 588.48	\$ 0.00	\$ 0.00

There are three different Distribution types:

- Change order (default setting)
- Cost Item
- Manual

When Distribution type is set to **Change order**, it means it is pulling in the start date, finish date, and cost curve from the details step of your change order.

The changes to the Adjusted total cost column are then distributed throughout the start and finish date and shows in the Adjusted Cost column.

If your cost curve was set to **linear**, roughly the same amount of cost goes into the same fiscal period. Since some months are longer than others, they will have additional cost.

1 Details 2 Cost items 3 Time phased budget 4 Pay items 5 Summary												
CBS position	Description	WBS phase code	Start	Finish	Cost curve	Distribution type	October 2021		November 2021		December 2021	
							Cost	Adjusted cost	Cost	Adjusted cost	Cost	Adjusted cost
1.1	Install conduit	1002	12/27/2020	12/25/2021	Linear	Change order	\$ 0.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 7.69
1.2	Fiber optic cable-1	1001.1	12/27/2020	12/25/2021	Linear	Change order	\$ 0.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 7.69
1.3	Pull cable	1003	12/27/2020	12/25/2021	Linear	Change order	\$ 0.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 7.69
1.4	CCTV devices	1004	12/27/2020	12/25/2021	Linear	Change order	\$ 0.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 7.69
1.5	Terminations	1005	12/27/2020	12/25/2021	Linear	Change order	\$ 0.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 7.69
1.6	Light poles	1006	12/27/2020	12/25/2021	Linear	Change order	\$ 792.18	\$ 9.62	\$ 633.74	\$ 7.69	\$ 633.74	\$ 7.69

8.8.6 Time-phased budget at the budget move

Time-phased budget is included for both the non-associated and associated budget move.

The total adjusted CB total cost must be zero before you can move budget. This shows as a net zero budget adjustment when you are moving budget from cost items to other cost items. You can also move the time-phased budget.

You can set the start date, finish date, and cost curve for the budget move change orders.

1 Details 2 Assign amounts 3 Time phased budget 4 Summary

Choose your Budget move workflow

Associated
Define budget moves with a From and To process to provide ultimate traceability of budget moves.

Non-Associated
Define budget moves freely to provide the most flexibility.

Change order attributes

Start date: 2021 April Finish date: 2021 December Cost curve: Linear

Budget move details

Issue #: Issue # CCO: CCO

Description: 500

The Time phased budget step is similar to the Time phased budget step for Contract adjustment. The distribution type on this step is where you can select to distribute by the change order attributes or the cost item attributes. You can also manually adjust your cost.

Change register > Budget Move

1 Details 2 Assign amounts 3 Time phased budget 4 Summary

\$ 0.00 Feb 2021 - Aug 2021 View Cost column

CBS position	Description	WBS phase code	Start	Finish	Cost curve	Distr type	February 2021	March 2021	April 2021		
							Cost	Adjusted cost	Cost	Adjusted cost	Cost
<input checked="" type="checkbox"/>	41 Cost item 1	01	05/01/2021	12/31/2021	Linear	Cost I	\$ 0.00	\$ 1,500.00	\$ 0.00	\$ 0.00	\$ 0.00
<input checked="" type="checkbox"/>	42 Cost item 2	02	05/01/2021	05/01/2022	Front Loaded	Cost II	\$ 0.00	\$ 200.00	\$ 0.00	\$ 0.00	\$ 0.00

Cancel Draft Back Next

When you adjust the budgeted cost either through a contract adjustment or a budget move, you can adjust the cost over the different fiscal periods and decide where to place the adjusted cost.

8.8.7 Time-phased budget grids

In the left side grid, you have many of the cost item details in columns. This includes the following columns:

- CBS position
- Description
- WBS phase code
- Start
- Finish
- Cost curve
- Distribution type
- CB total cost
- Adjusted CB total cost
- Pending budget cost: any outstanding budget cost that has not yet been approved. For example, if you have another pending contract adjustment, it adds those values in this column.
- Phased budget cost delta

<input type="checkbox"/>	CBS position	Description	CB total cost	Adjusted CB total cost	Pending budget cost	Phased budget cost delta
<input type="checkbox"/>	1.1	Install conduit	\$ 25,020.00	\$ 100.00	(\$ 5,060.00)	\$ 0.00
<input type="checkbox"/>	1.2	Fiber optic cable-1	\$ 5,050.00	\$ 100.00	\$ 4,640.00	\$ 0.00
<input type="checkbox"/>	1.3	Pull cable	\$ 5,120.00	\$ 100.00	\$ 540.00	\$ 0.00
<input type="checkbox"/>	1.4	CCTV devices	\$ 1,600.00	\$ 100.00	\$ 10.00	\$ 0.00
<input type="checkbox"/>	1.5	Terminations	\$ 1,000.00	\$ 100.00	\$ 10.00	\$ 0.00
<input type="checkbox"/>	1.6	Light poles	\$ 11,000.00	\$ 100.00	\$ 10.00	\$ 0.00

You can adjust the amount of columns you see using the slider to move between the left side grid and the right side grid.

The right side grid shows your cost and adjusted cost columns. Your cost columns show current cost that has been approved.

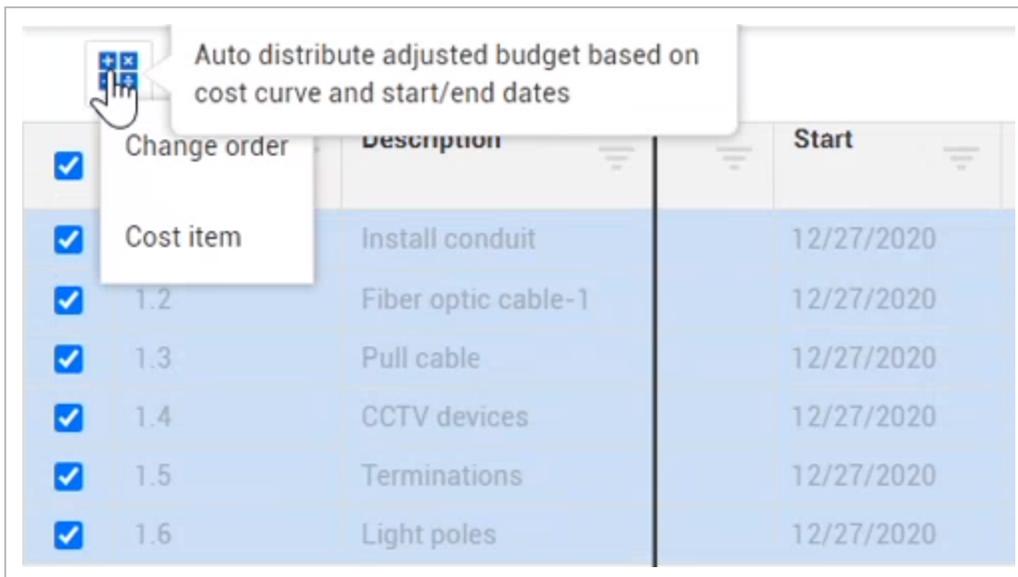
For example, in the **CB total cost** column, if you have \$1,000 approved, the cost columns for each month distributes that cost throughout each month.

CBS position	Description	CB total cost	Adjusted CB total cost	December 2020		January 2021		February 2021		March 2021	
				Cost	Adjusted cost	Cost	Adjusted cost	Cost	Adjusted cost	Cost	Adjusted cost
1.1	Install conduit	\$ 25,020.00	\$ 100.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 0.00
1.2	Fiber optic cable-1	\$ 5,050.00	\$ 100.00	\$ 0.00	\$ 0.00	\$ 5,050.00	\$ 9.62	\$ 0.00	\$ 7.69	\$ 0.00	\$ 0.00
1.3	Pull cable	\$ 5,120.00	\$ 100.00	\$ 0.00	\$ 0.00	\$ 1,017.22	\$ 9.62	\$ 949.40	\$ 7.69	\$ 949.40	\$ 0.00
1.4	CCTV devices	\$ 1,600.00	\$ 100.00	\$ 327.43	\$ 0.00	\$ 440.77	\$ 9.62	\$ 352.62	\$ 7.69	\$ 428.81	\$ 0.00
1.5	Terminations	\$ 1,000.00	\$ 100.00	\$ 14.43	\$ 0.00	\$ 187.95	\$ 9.62	\$ 387.76	\$ 7.69	\$ 312.69	\$ 0.00
1.6	Light poles	\$ 11,000.00	\$ 100.00	\$ 588.48	\$ 0.00	\$ 792.18	\$ 9.62	\$ 633.74	\$ 7.69	\$ 633.74	\$ 0.00

8.8.8 Changing Distribution type to cost item

You can change the auto distribute type to Cost item if you want your adjusted budget to use attributes from the CBS.

To do this, you can select one, many, or all of your cost items in the left side grid, and then click on the **auto distribute** icon. Then select **Cost item**.



Your Distribution type has changed to cost item. You are now distributing your adjusted budget based on the cost item attributes that are pulling in from the CBS.

<input type="checkbox"/>	CBS position ↑	Description	Finish	Cost curve	Distribution type	CB total cost
<input checked="" type="checkbox"/>	1.1	Install conduit	020 07/30/2021	Back L...	Cost item	\$ 25,020
<input checked="" type="checkbox"/>	1.2	Fiber optic cable-1	020 12/31/2020	Front ...	Cost item	\$ 5,050
<input checked="" type="checkbox"/>	1.3	Pull cable	021 05/31/2021	Linear	Cost item	\$ 5,120
<input checked="" type="checkbox"/>	1.4	CCTV devices	020 03/31/2021	Custo...	Cost item	\$ 1,600
<input checked="" type="checkbox"/>	1.5	Terminations	020 05/15/2021	Bell Sh...	Cost item	\$ 1,000
<input checked="" type="checkbox"/>	1.6	Light poles	020 03/31/2022	Custo...	Cost item	\$ 11,000

This also changes how the Cost curve distributes the adjusted cost. As you can see from the screenshot above, some cost curves have been adjusted.

8.8.9 Manual distribution of cost adjustment

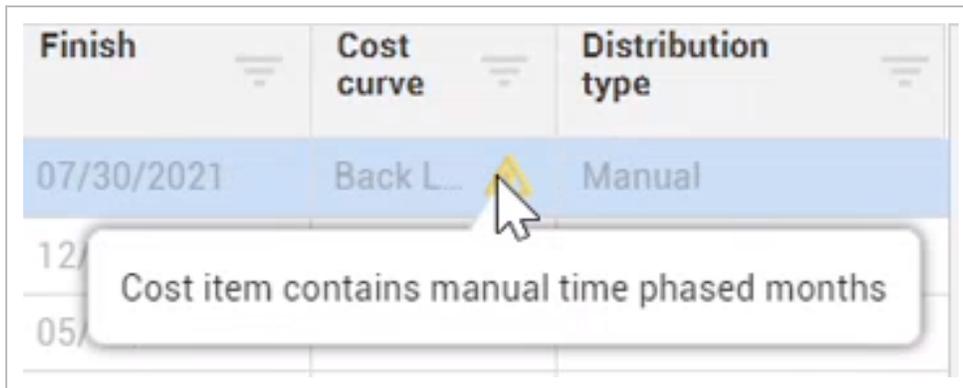
You can change a specific cost item's cost adjustment to zero and then manually redistribute that zeroed cost to other months. If you do not distribute the cost to other months, the following missing amount for the adjustment cost is highlighted in orange.

December 2020		January 2021		February 2021	
Cost	Adjusted cost	Cost	Adjusted cost	Cost	Adjusted cost
\$ 0.00	\$ 10.00 ●	\$ 0.00	\$ 50.00 ●	\$ 0.00	\$ 0.00
\$ 0.00	\$ 0.00	\$ 5,050.00	\$ 100.00	\$ 0.00	\$ 0.00
\$ 0.00	\$ 0.00	\$ 1,017.22	\$ 19.87	\$ 949.40	\$ 18.54
\$ 327.43	\$ 20.46	\$ 440.77	\$ 27.55	\$ 352.62	\$ 22.04
\$ 14.43	\$ 1.44	\$ 187.96	\$ 18.80	\$ 387.76	\$ 38.78
\$ 588.48	\$ 5.35	\$ 792.18	\$ 7.20	\$ 633.74	\$ 5.76

After redistribution, there are some manual indicators showing what the value was before the change.

Start	Finish	Cost curve	Distribution type	December 2020		January 2021		February 2021	
				Cost	Adjusted cost	Cost	Adjusted cost	Cost	Adjusted cost
01/01/2020	07/30/2021	Back L... ⚠	Manual	\$ 0.00	\$ 10.00 ●	\$ 0.00	\$ 50.00 ●	\$ 0.00	\$ 0.00
12/30/2020	12/31/2020	Front ...	Cost item	\$ 0.00	\$ 0.00	\$ 5,050.00	\$ 100.00	\$ 0.00	\$ 0.00
01/01/2021	05/31/2021	Linear	Cost item	\$ 0.00	\$ 0.00	\$ 1,017.22	\$ 19.87	\$ 949.40	\$ 18.54
12/01/2020	03/31/2021	Custo...	Cost item	\$ 327.43	\$ 20.46	\$ 440.77	\$ 27.55	\$ 352.62	\$ 22.04
12/01/2020	05/15/2021	Bell Sh...	Cost item	\$ 14.43	\$ 1.44	\$ 187.96	\$ 18.80	\$ 387.76	\$ 38.78
12/01/2020	03/31/2022	Custo...	Cost item	\$ 588.48	\$ 5.35	\$ 792.18	\$ 7.20	\$ 633.74	\$ 5.76

The warning indicator on the cost curve column lets you know that your cost item contains manual time-phased months and is not technically back loaded anymore.



8.8.10 Deltas in a adjusted cost columns

Deltas appear on a contract adjustment when the adjusted cost for a cost item does not match the current budget total cost.

You are not allowed to submit or approve a cost item adjustment that has a delta.

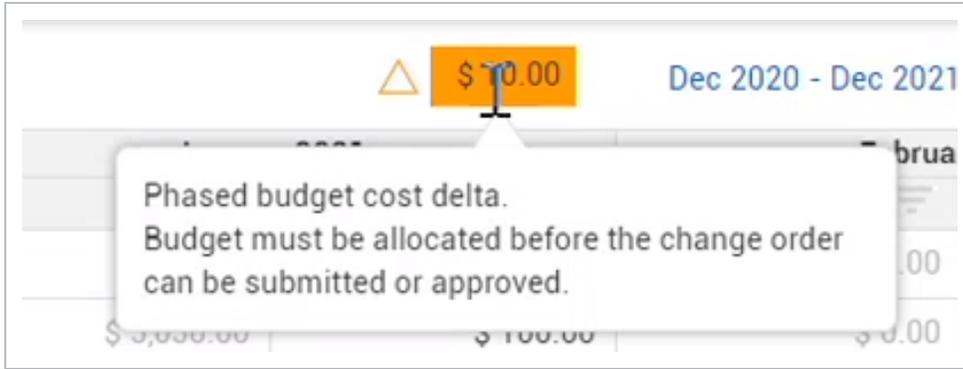
That is where the **phased budget cost delta** column displays any missing or over budgeted costs for any one cost item.

This column sums up all of your adjusted cost in the right side grid and compares it to the Adjust CB total cost.

For example, if you have \$10 not distributed, you need to add it to the adjusted cost in that same cost item before moving onto the next step. If the current budget total cost has \$100, you must spread that total cost amount throughout your months.

Adjusted CB total cost	Pending budget cost	Phased budget cost delta	December 2020		January 2021		February 2021	
			Cost	Adjusted cost	Cost	Adjusted cost	Cost	Adjusted cost
\$ 100.00	(\$ 5,060.00)	\$ 10.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 50.00	\$ 0.00	\$ 40.00
\$ 100.00	\$ 4,640.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 5,050.00	\$ 100.00	\$ 0.00	\$ 0.00

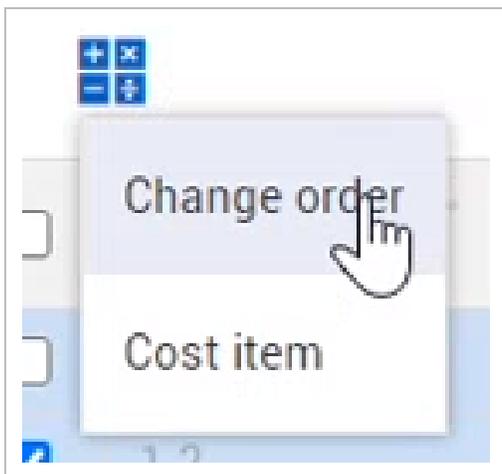
Hovering over the delta warning in the right side grid shows where the error in cost is occurring. If you have multiple deltas in different cost items, the delta cost would then sum up all delta costs.



If you attempt to submit or approve the contract adjustment with deltas and you return to the Time phased budget step, the **Phased budget cost delta** column shows which cost items have a delta. You need to resolve the deltas and redistribute the costs in the **Adjusted cost** columns in the right side grid before moving forward.

CBS position	Description	Adjusted CB total cost	Pending budget cost	Phased budget cost delta	December 2020		January 2021	
					Cost	Adjusted cost	Cost	Adjusted cost
1.1	Install conduit	\$ 0.00	\$ 100.00	(\$ 5,060.00)	\$ 0.00	\$ 0.00	\$ 0.00	\$ 50.00
1.2	Fiber optic cable-1	\$ 0.00	\$ 100.00	\$ 4,640.00	\$ 0.00	\$ 10.00	\$ 5,050.00	\$ 100.00
1.3	Pull cable	\$ 0.00	\$ 100.00	\$ 540.00	\$ 0.00	\$ 0.00	\$ 1,017.22	\$ 19.87
1.4	CCTV devices	\$ 0.00	\$ 100.00	\$ 10.00	\$ 327.43	\$ 20.46	\$ 440.77	\$ 27.55

You can also adjust your delta costs using the same Auto distribution button from earlier and selecting **Change order**. Change order always distributes without a delta.



Now you can submit and approve your contract adjustment. All those values are going to be committed into your time-phased budget.

For example, if you sync into your ERP, you can receive all changes made in the contract adjustment right after those changes have been approved.

8.8.11 View cost columns

If you want to view just your adjusted cost columns, select the **View Cost column** slider to turn off your cost columns. Only the adjusted cost columns shows. These columns show what you are adjusting in the active project months for the contract adjustment.

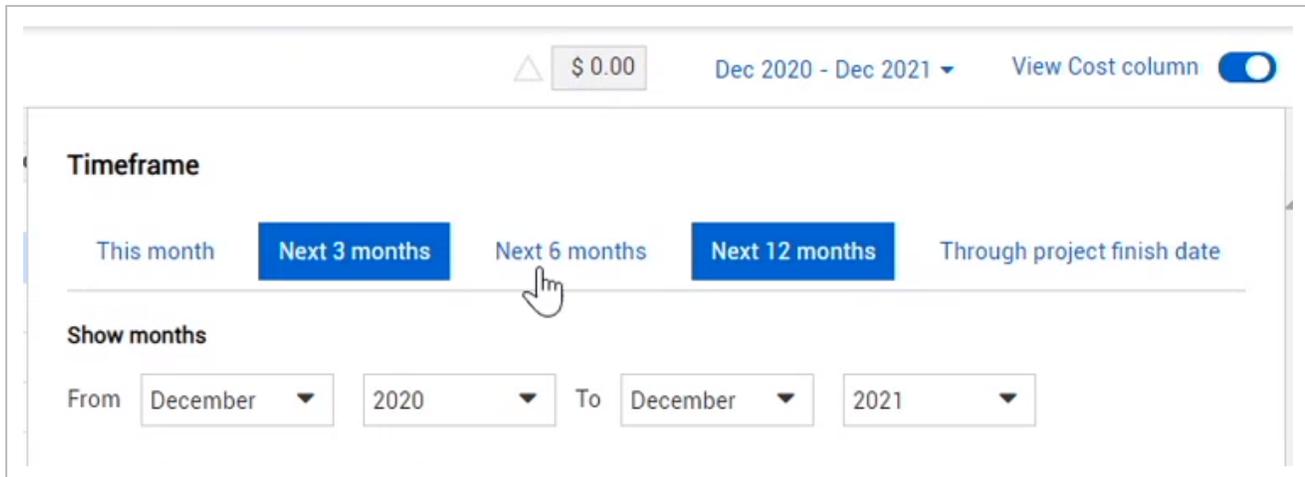


December 2020	January 2021	February 2021	March 2021	April 2021	May 2021	June 2021	July 2021
Adjusted cost							
\$ 0.00	\$ 9.62	\$ 7.69	\$ 7.69	\$ 7.69	\$ 9.62	\$ 7.69	\$
\$ 0.00	\$ 9.62	\$ 7.69	\$ 7.69	\$ 7.69	\$ 9.62	\$ 7.69	\$
\$ 0.00	\$ 9.62	\$ 7.69	\$ 7.69	\$ 7.69	\$ 9.62	\$ 7.69	\$
\$ 0.00	\$ 9.62	\$ 7.69	\$ 7.69	\$ 7.69	\$ 9.62	\$ 7.69	\$
\$ 0.00	\$ 9.62	\$ 7.69	\$ 7.69	\$ 7.69	\$ 9.62	\$ 7.69	\$
\$ 0.00	\$ 9.62	\$ 7.69	\$ 7.69	\$ 7.69	\$ 9.62	\$ 7.69	\$

8.8.12 Date range filter

The date range filter lets you filter the right side grid to show only the months you want to see. You can view the project months based on the following options:

- This month (current fiscal month you are in)
- Next 3 months
- Next 6 months
- Next 12 months
- Through project finish date



The screenshot shows a user interface for selecting a timeframe. At the top, there is a currency display showing '\$ 0.00', a date range 'Dec 2020 - Dec 2021', and a toggle for 'View Cost column'. Below this, the 'Timeframe' section contains five buttons: 'This month', 'Next 3 months', 'Next 6 months', 'Next 12 months', and 'Through project finish date'. The 'Next 3 months' and 'Next 12 months' buttons are highlighted in blue. A mouse cursor is hovering over the 'Next 6 months' button. Below the timeframe buttons is a 'Show months' section with two rows of dropdown menus. The first row is labeled 'From' and contains 'December' and '2020'. The second row is labeled 'To' and contains 'December' and '2021'.

You can also manually select the months you want to view using the **Show months** drop-down lists.

8.8.13 Approving budget warnings

You can't approve budget set in the past. If you have any adjusted cost set for the current month (December) and the contract adjustment is approved in the next month (January), the approver receives a warning stating *you have budget in past or closed periods*.

The contract adjustment can still be approved, but the adjusted cost from the closed month moves to the following month.

The other option the approver has is to revise the adjusted cost. When revising, the adjusted cost from December has already moved into the adjust cost column for January. If you do not want all of the previous month added into a single month, you can manually move the additional adjusted cost from January into the other open fiscal period months.

Review

1. Revenue columns can only be populated for a cost item that has an assigned ____?
 - a. UOM
 - b. Unit price
 - c. Pay item
 - d. Cost curve

2. What are the four tabs within the Pay Item slide out?
 - a. Details, Attributes, Revenue, Cost Items
 - b. Revenue, Cost Curves, Change Orders, Cost Items
 - c. Details, Cost Curves, Change Orders, Cost Items
 - d. Details, Attributes, Change Orders, Cost Items

3. In the Pay item details slide out panel, which tab contains the Update earning rules option?
 - a. Details
 - b. Cost Items
 - c. Attributes
 - d. Change Orders

4. The _____ slide out panel is where you can record what you bill to the client
 - a. Billed revenue details
 - b. Pay item details
 - c. Forecast revenue details
 - d. Cost curve details

Summary

As a result of this lesson, you can:

- Forecast revenue and determine profit
- Manage pay item details
- Adjust pay item earning rules
- Bill customers per pay item or in mass
- Track billed revenue

CHAPTER 9 – SCHEDULING

9.1 SCHEDULING OVERVIEW

You can use features in Control to track schedule dates at a CBS level. The ability to easily add and modify this information allows you to accurately track your operations planned and completed dates.

The schedule data can either be mass imported through a Microsoft Excel upload, created and modified directly within the CBS, or by way of Primavera schedule integration through and XER file import.

9.2 SCHEDULE DATA BLOCK

The schedule data block is where all information regarding schedule dates is contained. Some of the key fields inside this data block are:

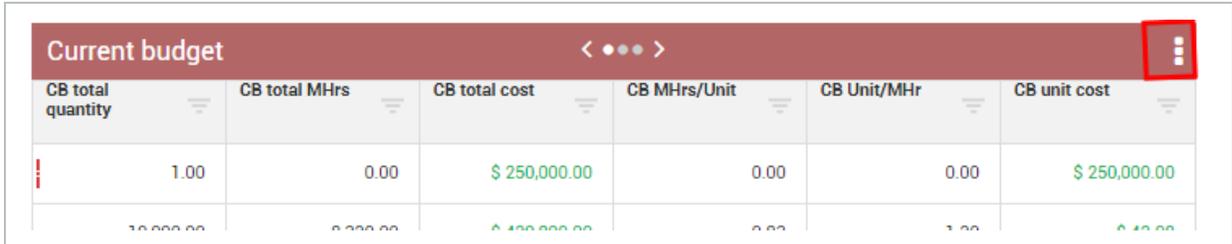
- Schedule ID
- Planned Start Date
- Planned Finish Date
- Early Start Date
- Early Finish Date
- Late Start Date
- Late Finish Date
- Actual Start Date
- Actual Finish Date

You can add and edit this information directly inside the Schedule data block. However, this will only allow you to modify one CBS line item at a time.

The following Step by Step shows you how to add the Schedule data block, save a Scheduling view, and add various dates for a specific CBS item.

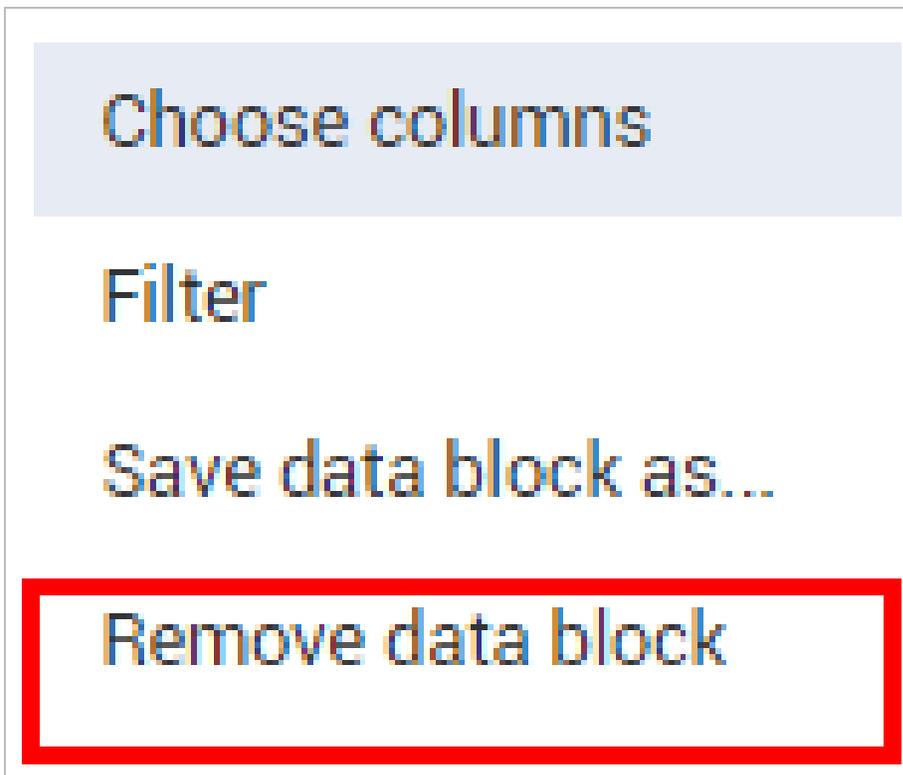
Schedule Data Block

1. From the Workspaces page of the Steel Structure Job, remove each data block from the page, except for the Tasks and Task Details data blocks, by right clicking on the **context menu**.



Current budget						
CB total quantity	CB total Mhrs	CB total cost	CB Mhrs/Unit	CB Unit/Mhr	CB unit cost	
1.00	0.00	\$ 250,000.00	0.00	0.00	\$ 250,000.00	
10,000.00	0.000.00	\$ 400,000.00	0.00	1.00	\$ 40,000.00	

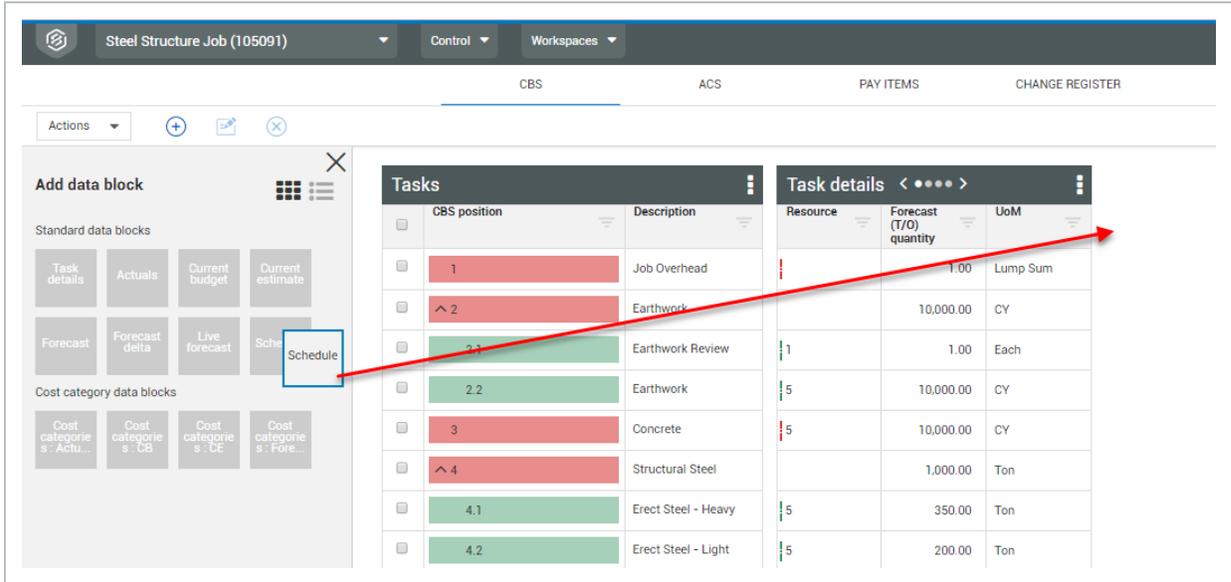
2. For each data block you plan to remove, select **Remove Data Block**



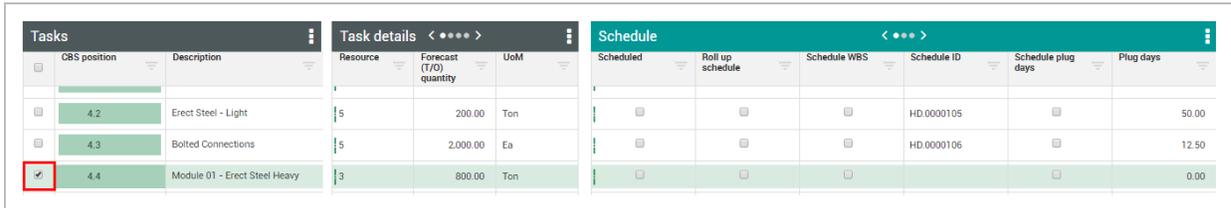
3. Once the data blocks are removed, click the **Add Data Block** button.



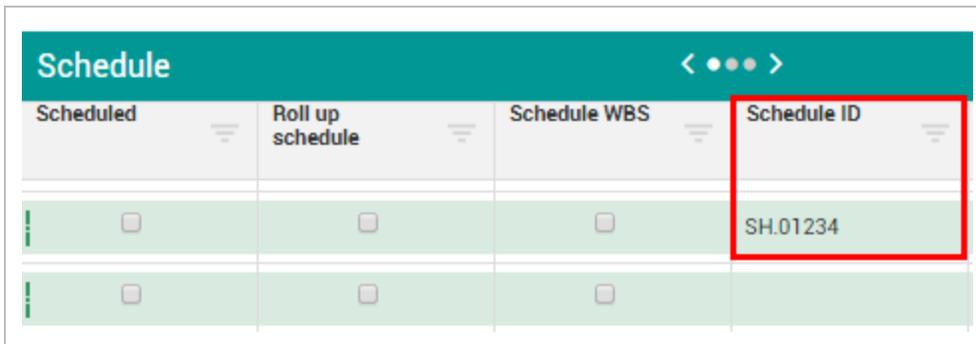
4. Drag and drop the **Schedule Data Block** to the right of Task Details.



5. Select **Module [your initials] – [description.]**



6. In the schedule data block, type **your Initials.01234** in the Schedule ID field.



7. Click the **right arrow** to move to next set of columns in the schedule data block.

Schedule			
Scheduled	Roll up schedule	Schedule WBS	Schedule ID

8. Double click into each field and enter the following:

- Start = **10/05/2020**
- Finish = **10/15/2020**
- Early Start = **10/01/2020**
- Early Finish = **10/15/2020**
- Late Start = **10/07/2020**
- Late Finish = **10/15/2020**

Start	Finish	Early start	Early finish	Late start	Late finish
10/05/2020	10/15/2020	10/01/2020	10/15/2020	10/07/2020	10/15/2020

- Entering dates on any terminal CBS item will auto-populate the parent's dates. If there are multiple terminal items under one parent, any start dates will take the earliest and any finish dates will take the latest
- Once all the initial schedule dates are entered, the schedule data block also allows for the project to track actual dates

9. Click the **Right Arrow** to move to next set of columns in the schedule data block.

- You will leave these columns blank for this Step by Step

Schedule	
Actual start	Actual finish

9.3 SCHEDULE EXCEL IMPORT

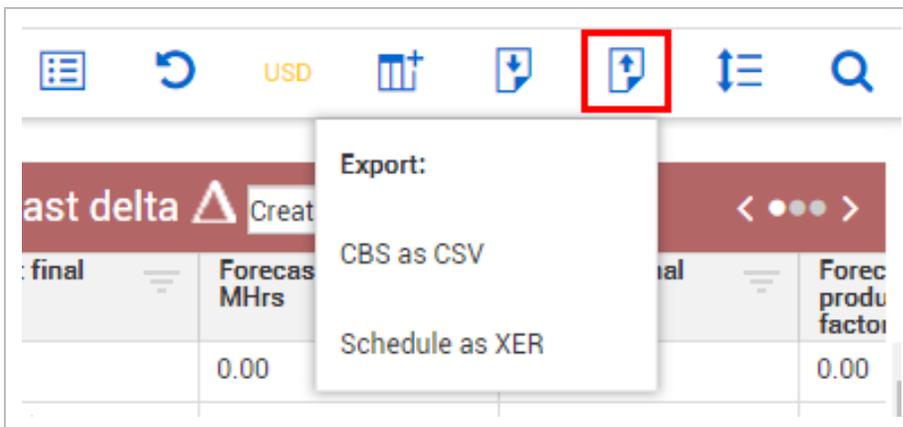
The Control application allows for an Excel import to import data into the Schedule data block. This is especially useful when bringing in large sets of data for multiple CBS items.

Excel imports can sometimes 'hang' while attempting to import CBS data. If this happens, it's possible to cancel an Excel import while the system continues the attempt to import the data.

The following Step by Step covers downloading this Excel sheet, entering the necessary data, and importing it back it into Control.

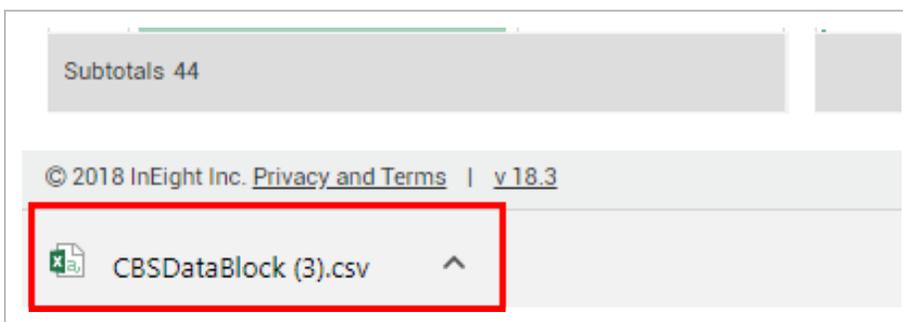
Excel Import

1. From the Workspaces page, using the **Schedule** view on the CBS tab, click the **Export** button, then **CBS as CSV**.

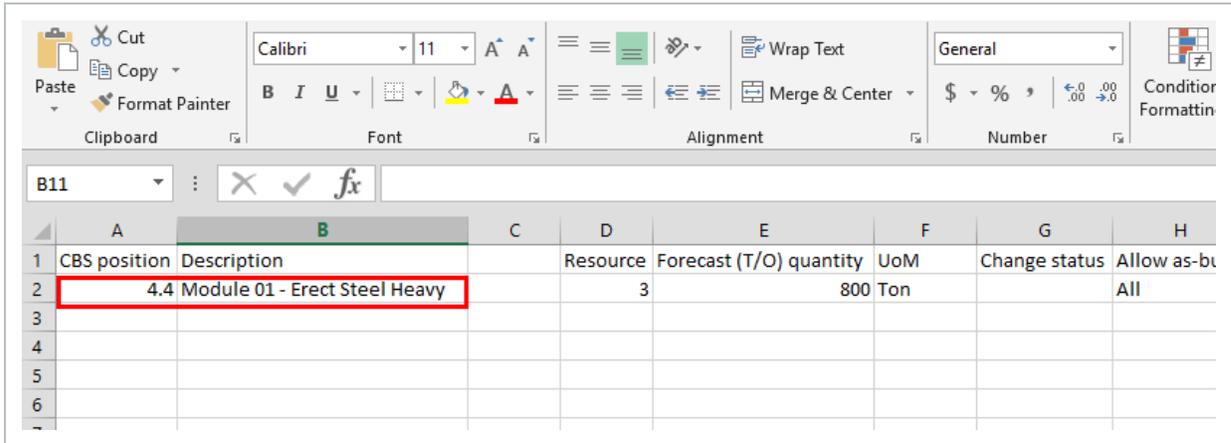


- This creates a CBSDataBlock folder in your Downloads folder

2. Open the **CBSDataBlock.csv** file.



3. Inside the Excel spreadsheet, delete all rows except for **Module [your initials] – [description]**.



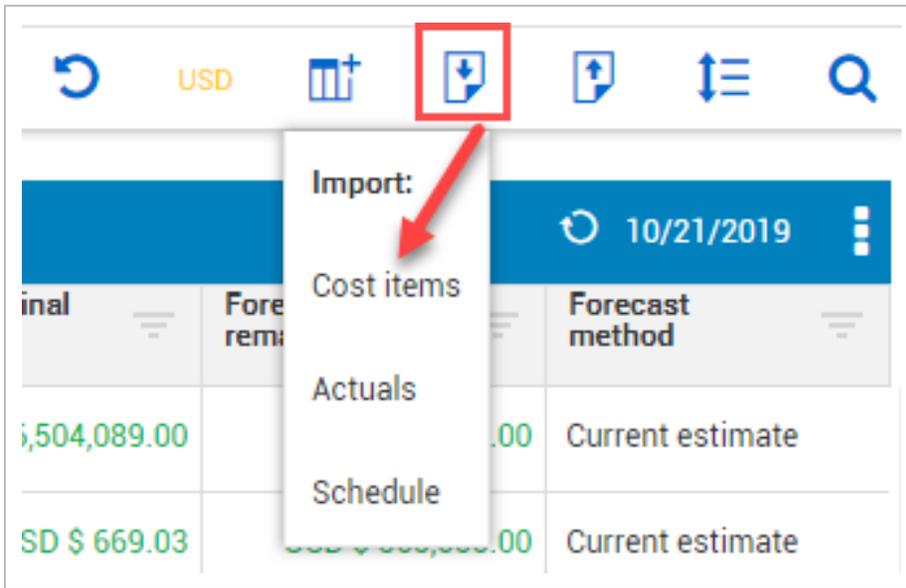
4. Enter the following:

- Actual Start = **10/03/2020**
- Actual Finish = **10/12/2020**

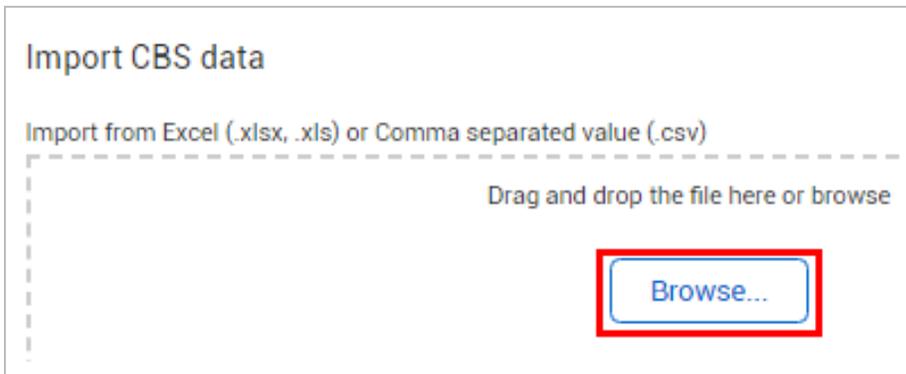
AB	AC	AD	AE
Late finish	Actual start	Actual finish	Cost curve
10/14/2020	10/03/2020	10/12/2020	Linear

5. **Save** the file to your computer (as .xlsx, .xls, or .csv).

6. From the Control > Workspaces page, click the **Import** button for Cost Items.



7. Click **Browse** to select your Excel file.



8. Select **Cost Items and cost item attributes, Update Existing Items and CBS position.**

Options

* Import type

Cost items and cost item attributes ▼

Update existing and new items

Cost item matching criteria

CBS position ▼

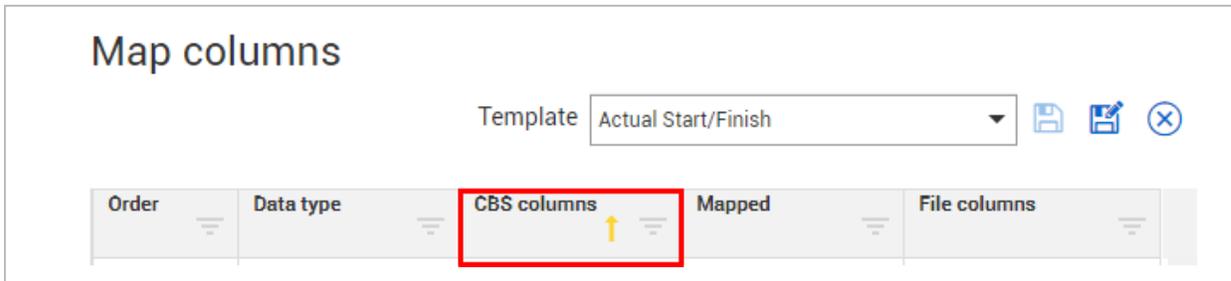
Update existing items

New items

9. Click **Next**.

Cancel **Next**

10. Next, you will map which columns from the Excel sheet get imported to which columns in Control. Click on **CBS Columns** to sort A-Z.



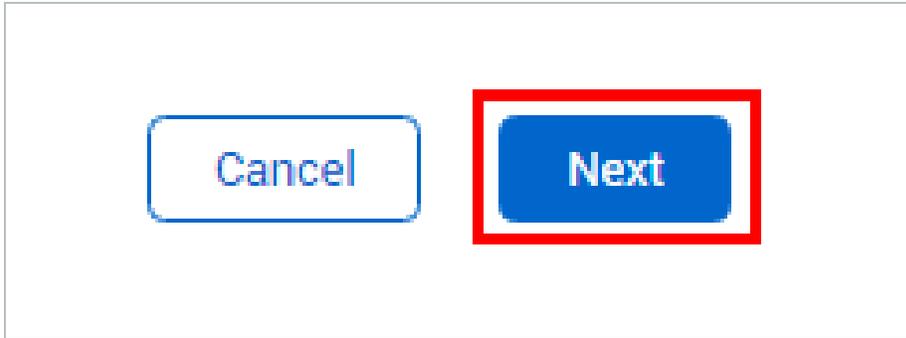
11. Under **File Columns**, match Actual Finish and Actual Start to the CBS columns description.

CBS columns	Mapped	File columns
Actual finish	✓	Actual finish
Actual start	✓	Actual start

12. Do the same for WBS Phase Code.

CBS columns	Mapped	File columns
User defined 6		Blank-do not import
User defined 7		Blank-do not import
User defined 8		Blank-do not import
WBS client code 1		Blank-do not import
WBS client code 2		Blank-do not import
WBS phase code	✓	WBS phase code

13. Click **Next**.



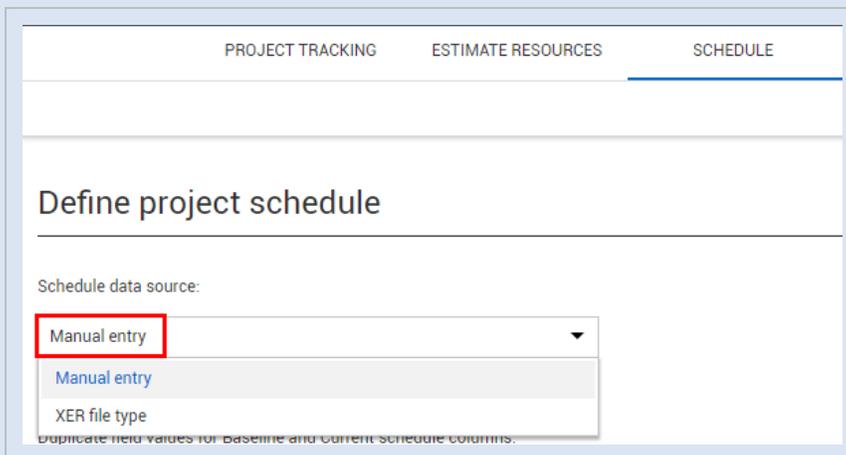
- The actual dates you specified import into the Schedule data block

The screenshot shows a software interface with three main panels: 'Tasks', 'Task details', and 'Schedule'. The 'Schedule' panel contains a table with the following data:

Actual start	Actual finish	Cost cur
10/03/2020	10/12/2020	
10/03/2020	10/12/2020	

The row with dates 10/03/2020 and 10/12/2020 is highlighted with a red border.

The Excel import can only be accomplished if the Control > Settings > Schedule setting is set to Manual Entry.



9.4 PRIMAVERA SCHEDULE INTEGRATION

The XER (file extension used by Primavera containing project file related data) import functionality allows the milestones and schedule dates (baseline and current) to be integrated into planning activities. Schedule IDs in Control are used to map Primavera Activity IDs to import and export the project information. The status of construction activities and progress are then integrated back into the InEight scheduling tools.

The Primavera schedule integration not only allows for XER file import of schedule dates but is also capable of a cost item bi-directional push and pull between Control and Primavera. XER imports integrate critical milestones and schedule dates into planning activities in the InEight cloud platform.

It's also possible for you to map the existing Control 25 CBS tag fields, and also the existing 15 user defined fields to P6. Conversely, you can create new fields in P6 based on tagging scheme. This allows you to filter Primavera and Control in similar ways, with the same sets of dates within both applications.

You also can push (Physical) % complete to P6. As you are progressing in Plan or Progress, and as quantities drive the percent complete in Control, it's possible to push the percent complete back to the associate activity in P6.

9.4.1 Primavera Schedule Integration Settings

The setting to change the schedule data source to Manual entry or an **XER file type** is in Settings > Control > Schedule > Define project schedule.

Under the Schedule data source, it's possible to manually enter schedule dates, or you can utilize the XER file type.

Define project schedule

Schedule data source:

XER file type

Manual entry → Option 1

XER file type → Option 2

After selecting your Schedule data source, you will have the option of making sure that your schedule IDs are similar across your baseline and current schedule.

Duplicate field values for Baseline and Current schedule columns:

- Schedule ID and Baseline schedule ID
- Scheduled and Baseline Scheduled
- Schedule WBS and Baseline schedule WBS
- Roll up schedule and Baseline roll up schedule

If you uncheck one of these options, and then check it back, you will be given the option to copy existing Schedule ID column values to Baseline schedule ID column, and vice versa. This is a way to ensure that data consistencies remain in check for both baseline and current monthly schedule.

 Select one:

- Copy existing Schedule ID column values to Baseline schedule ID column
- Copy existing Baseline schedule ID column values to Schedule ID column

Close OK

Under Percent complete, you can either update the XER file with physical percent complete from Control, or not.

Under the second dropdown for Update XER activities, you have the option to update XER with tags and user defined fields from Control, or not to.

Percent complete:	Update XER activities with cost item tags and user defined fields from Control:
Do not update percent complete ▼	Do not update tags or user defined fields ▼
Update XER with physical percent complete from Control	Update XER with tags and user defined fields from Control
Do not update percent complete	Do not update tags or user defined fields

If you choose to update XER with tags and user defined fields, the Define tags and user defined export rules table appears. The 3 options to choose from are to match using Control field name, match using external system field name, or do not export.

If you choose to map to an external system field (as shown below using Tag 15 for the second record), you will need to manually type in the name of the field first. Because this is not an API, the system is not aware the existing fields within P6. Therefore, you need to self-determine which Control values you want to populate in P6.

Percent complete: Update XER activities with cost item tags and user defined fields from Control:

Do not update percent complete Update XER with tags and user defined fields from Control

Define XER tags and user defined export rules:

Column names in external scheduling system must be an exact match. If the specified name does not have a match with the external system, then a new column will be added at the project level.

Match using External system field name		
	Export Rule	*External system field
<input type="checkbox"/>	Do not export	
<input type="checkbox"/>	EN_CBS tag 8(CBS tag 8)	Match using External system field name Tag 15
<input type="checkbox"/>	EN_CBS tag 17(CBS tag 17)	Match using Control field name EN_CBS tag 17(CBS tag 17)
<input type="checkbox"/>	EN_CBS tag 19(CBS tag 19)	Do not export
<input type="checkbox"/>	EN_CBS tag 25(CBS tag 25)	Do not export
<input type="checkbox"/>	EN_CBS user defined 6(CBS user defined 6)	Do not export
<input type="checkbox"/>	EN_CBS user defined 12(CBS user defined 12)	Do not export
<input type="checkbox"/>	EN_CBS tag 4(CBS tag 4)	Do not export
<input type="checkbox"/>	EN_CBS tag 10(CBS tag 10)	Do not export
<input type="checkbox"/>	EN_CBS tag 15(CBS tag 15)	Do not export

* Required fields

9.4.1.1 Primavera XER Schedule Integration Prerequisites

1. XER file type or manual entry must be selected in Settings > Control > Schedule, in the Schedule data source section.

PROJECT TRACKING ESTIMATE RESOURCES **SCHEDULE** OTHERS

Define project schedule

Schedule data source:

XER file type

Manual entry

XER file type

- 2. On the Schedule data block, the **Scheduled** column must be checked prior to importing a schedule.

Schedule					
Scheduled	Schedule ID	Sched plug days	Plug days	Start	Finish
<input checked="" type="checkbox"/>	PS.1	<input checked="" type="checkbox"/>	21,682.50	07/18/2019	07/18/2019
<input checked="" type="checkbox"/>	PS.2	<input checked="" type="checkbox"/>	0.00	07/18/2019	07/18/2019
<input checked="" type="checkbox"/>	XYZ	<input type="checkbox"/>	0.00	07/18/2019	07/18/2019

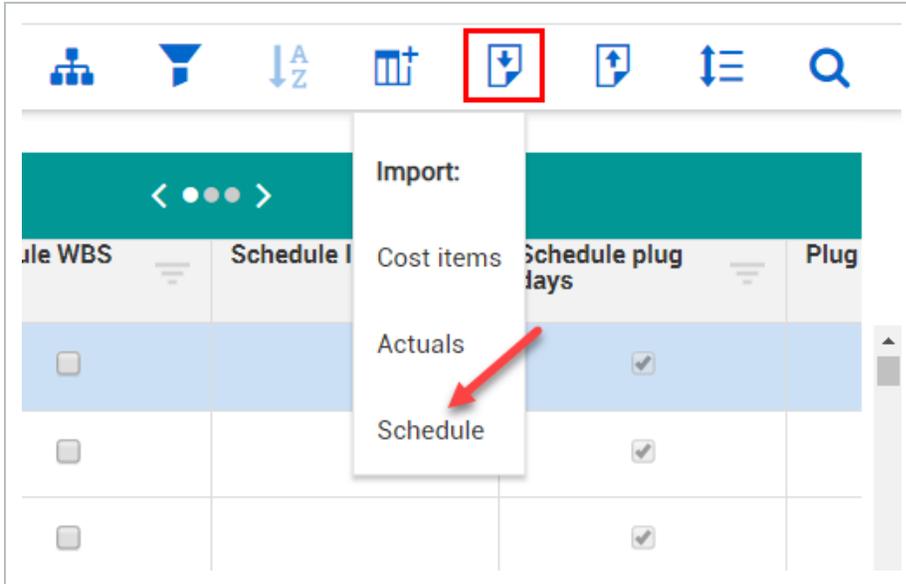
- 3. The **Schedule ID** in Control must match the **Activity ID** in the XER file.

Schedule					
Scheduled	Schedule ID	Sched plug days	Plug days	Start	Finish
<input checked="" type="checkbox"/>	PS.1	<input checked="" type="checkbox"/>	21,682.50	07/18/2019	07/18/2019
<input checked="" type="checkbox"/>	PS.2	<input checked="" type="checkbox"/>	0.00	07/18/2019	07/18/2019
<input checked="" type="checkbox"/>	XYZ	<input type="checkbox"/>	0.00	07/18/2019	07/18/2019

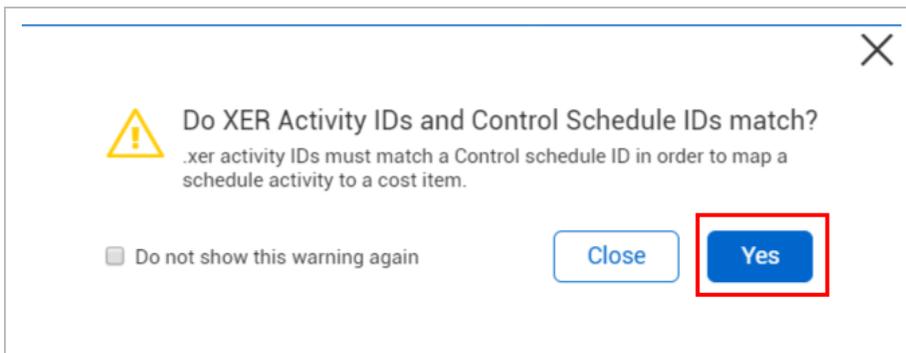
The following steps walk you through how to import a Primavera .XER file into Control.

Schedule Integration Import

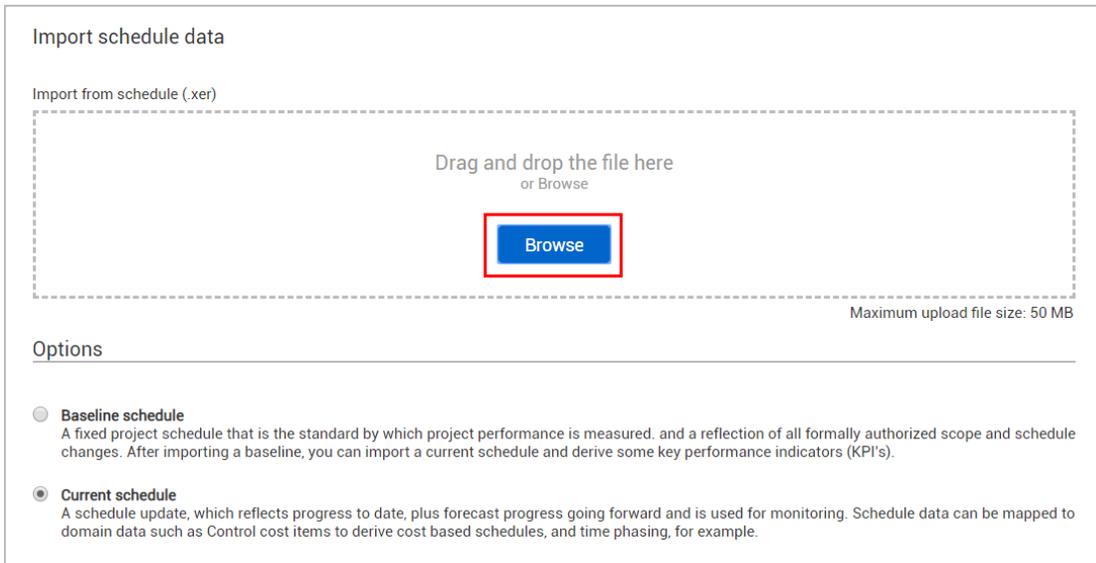
1. From the CBS tab of the Control Workspaces page, select the **Import icon** on the top right menu bar, then click **Schedule**.



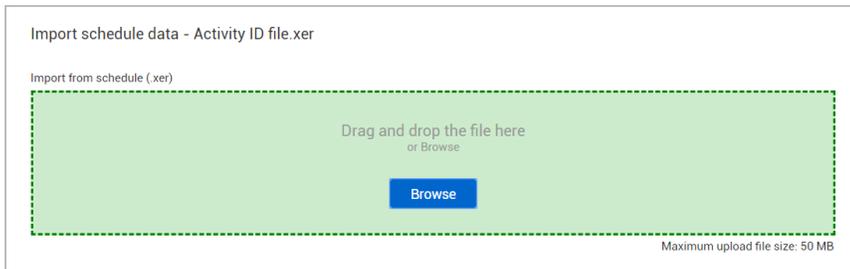
2. A warning message appears asking if the XER Activity IDs and Control IDs match. Click **Yes** if both IDs match before continuing.



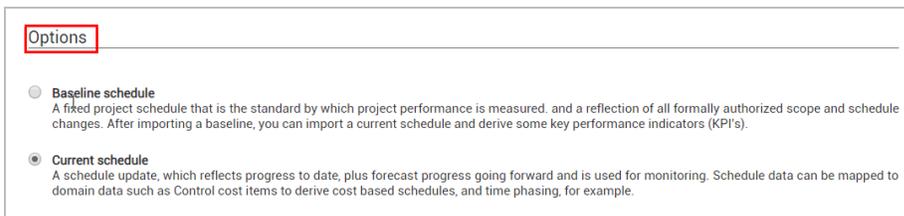
3. In the Import schedule data window, click on the **Browse** icon in the Drag and drop file portion of the screen.



4. In the Import schedule data window, click on the **Browse** icon in the Drag and drop file portion of the screen.
5. Select the desired **.XER file** that was generated in Primavera.
 - Once the **.XER file** is uploaded, the Browse box turns green



6. In **Options**, select either the Baseline schedule or Current schedule for the schedule type that you want to import.



7. Select **Next**.
8. Select **Import** after reviewing the Schedule summary.

Import schedule data - Activity ID file.xer

Schedule summary

Schedule name: Schedule type:

Total schedule records	
Schedule WBS	107
Schedule activities	306

i Import may take some time. You may continue to make changes to your project while the import is processing.

- The **Importing data** process screen displays the current status for each step of the .XER data import.

Processing schedule data import - Activity ID file.xer ("3058" OPG WSFN Shoreline Protection-A00131-1)

Importing data

Step	Status
Step 1: Preparing data to be sent	<input checked="" type="checkbox"/> Complete
Step 2: Placing data in queue	<input type="checkbox"/> Processing - 1mins
Step 3: Writing data to master library	
Step 4: Sending data to project	
Step 5: Mapping master data to project data	
Step 6: Inserting data to project tables	

i This may take some time. You may continue to make changes to your project while the import is processing.
 Status update is also available in the Import history

- If there are errors in any of the steps, you can click on the **Pending unmapped items found** link to make the corrections

Importing data

Step	Status
Step 1: Preparing data to be sent	✔ Complete
Step 2: Placing data in queue	✔ Complete
Step 3: Writing data to master library	✔ Complete
Step 4: Sending data to project	✔ Complete
Step 5: Mapping master data to project data	⚠ Pending, unmapped items found
Step 6: Inserting data to project tables	

- You can also navigate to Audit Log > Import history to view the import status, which includes the **Total line items** imported

File name	Status	Processing Details	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date
NEWPROJ.xer (D...	✔ Complete	All steps	18	0	19	0	0	Asmita Ray	08/02/2019 10:0...

- If there are corrections to be made, once completed, you can select **Import** to re-import the data.

Audit log > Import history > Activity ID file.xer ("*-...")

Cancel **Import**

Status details			Schedule details		Cost item details		
Map status	XER activity ID	Control schedule ID	Description	CBS position	Description	WBS phase code	Scheduled
⚠ No match found		HD 0000003		1	Job Overhead	1002	<input type="checkbox"/>
⚠ No match found		HD 0000019		2	Earthwork	1069	<input type="checkbox"/>
⚠ No match found		HD 0000044		3	Concrete	1071	<input type="checkbox"/>

- When the import is successful, select the **Close** button.

Processing schedule data import - NEWPROJ.xer (Duplicate-NEWPROJ)

Importing data

Step	Status
Step 1: Preparing data to be sent	✔ Complete
Step 2: Placing data in queue	✔ Complete
Step 3: Writing data to master library	✔ Complete
Step 4: Sending data to project	✔ Complete
Step 5: Mapping master data to project data	✔ Complete
Step 6: Inserting data to project tables	✔ Complete

i This may take some time. You may continue to make changes to your project while the import is processing.

Status update is also available in the Import history

✔ Job ended successfully Close

- Check the Control: **Schedule block** for newly imported **scheduled dates**
- This is a quick audit to make sure that the desired Primavera dates imported successfully into Control

Tasks		Schedule					
CBS position	Description	Scheduled	Schedule ID	Schedule plug days	Plug days	Start	Finish
^ 1	Financial Results A...	✔	PS.1	✔	21,682.50	07/18/2019	07/18/2019
^ 1.1	10 - Commercial C...	✔	PS.2	✔	0.00	07/18/2019	07/18/2019
1.1.1	Dependent G&A	✔	XYZ	☐	0.00	07/18/2019	07/18/2019

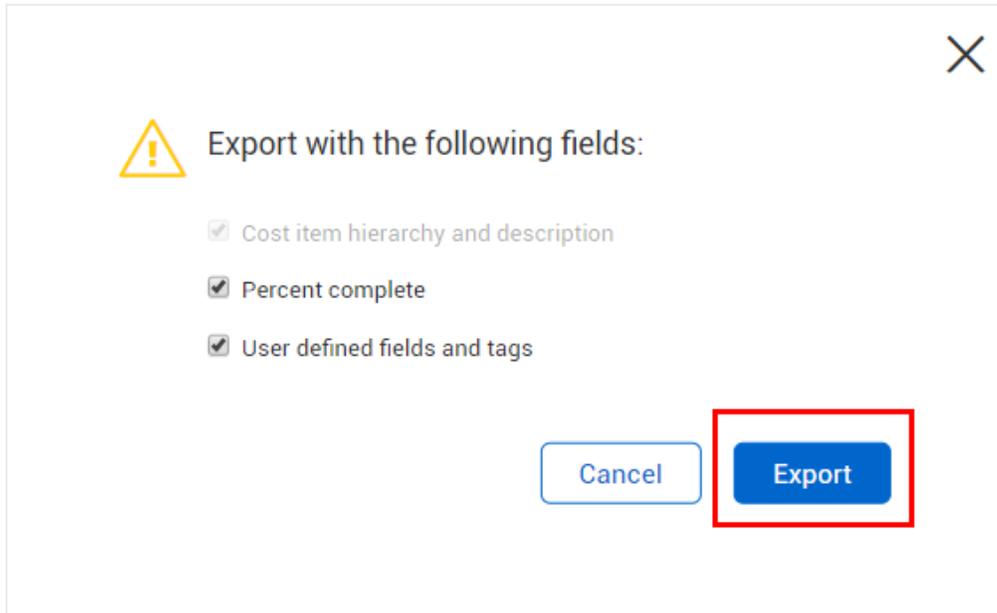
The following steps walk you through how to export a Primavera .XER file from Control.

Primavera Schedule Integration Export

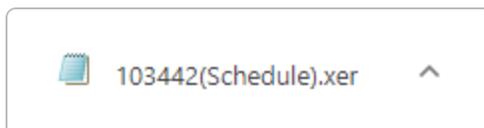
1. From the CBS tab of the Control Workspaces page, select the **Export icon** on the top right menu bar, then click **Schedule as XER**.

2. Assuming you have Percent Complete and User defined Fields and tags turned on in your settings, click **Export**.

- Depending on what you'd like to export, you can always uncheck undesired options



- After selecting Export, an XER file will generate and be placed within your C:/Downloads folder. The file will be named <job name>(Schedule).xer



- At this point you are ready to import the XER file into Primavera

9.4.2 Percent Complete column updates in CBS

If you are progressing your schedule in P6, it's possible to import this progress data directly into Control using the Schedule Integration Import process. The % Complete column records within the CBS can receive updates from the P6 XER file. The XER file can originate from Primavera or InEight Schedule. As long as the % Complete data is captured within the XER file, it will update the CBS with this new schedule information.

Tasks				Actuals 9/2/2019 to 1/12/2020				
CBS position	Description	WBS phase code	Schedule ID	% Complete	Qty complete (to date)	Start	Finish	
^ 1	Financial Results An...	1000	PS.001	0.45 %	0.00	10/01/2019	08/25/2020	
^ 1.1	INDIRECTS & UNASS...	1001	PS.002	0.76 %	0.01	10/01/2019	08/25/2020	
^ 1.1.1	Commercial Cost	1002	PS.003	2.30 %	0.00	10/01/2019	10/15/2019	
1.1.1.1	Direct Pickup	1016	PS.013	100.00 %	30.50	10/01/2019	11/29/2019	

By not using this feature, the % Complete column updates from P6 will not populate the % Complete column within Control. You would need to update the CBS with the % Complete or claimed quantity via other methods for completing progress measurement which are addressed in the [Progress Measurement & Forecasting User Guide](#).

This feature allows for the Schedule Import process to align the P6's schedule % complete with the cost item's % Complete.

After running the Schedule Integration Import process, you can check the CBS and verify the progress results in the % Complete column.

Review

1. Where can you enter schedule dates for your cost items?
 - a. Cost item details
 - b. Task details data block
 - c. Schedule data block
 - d. On the Schedule tab
 - e. On the Schedule slide out panel

2. Using the Control Import feature, you can import which of the following types of data?
 - a. Tasks
 - b. Current Estimate
 - c. Schedule
 - d. Cost Categories
 - e. All of the above

3. When importing a Primavera schedule, the **Schedule ID** in Control must match the _____ in the XER file.
 - a. Import ID
 - b. Current Estimate ID
 - c. Task Details ID
 - d. Activity ID
 - e. Start Date ID

4. When using the **Define project schedule: Schedule data source** feature, which option allows you to export a Primavera formatted file to eventually be used to import directly into Primavera?
 - a. Manual entry file
 - b. XER file type
 - c. Activity ID file type

- d. Task Details file type
 - e. Schedule file type
-

Summary

As a result of this lesson, you can:

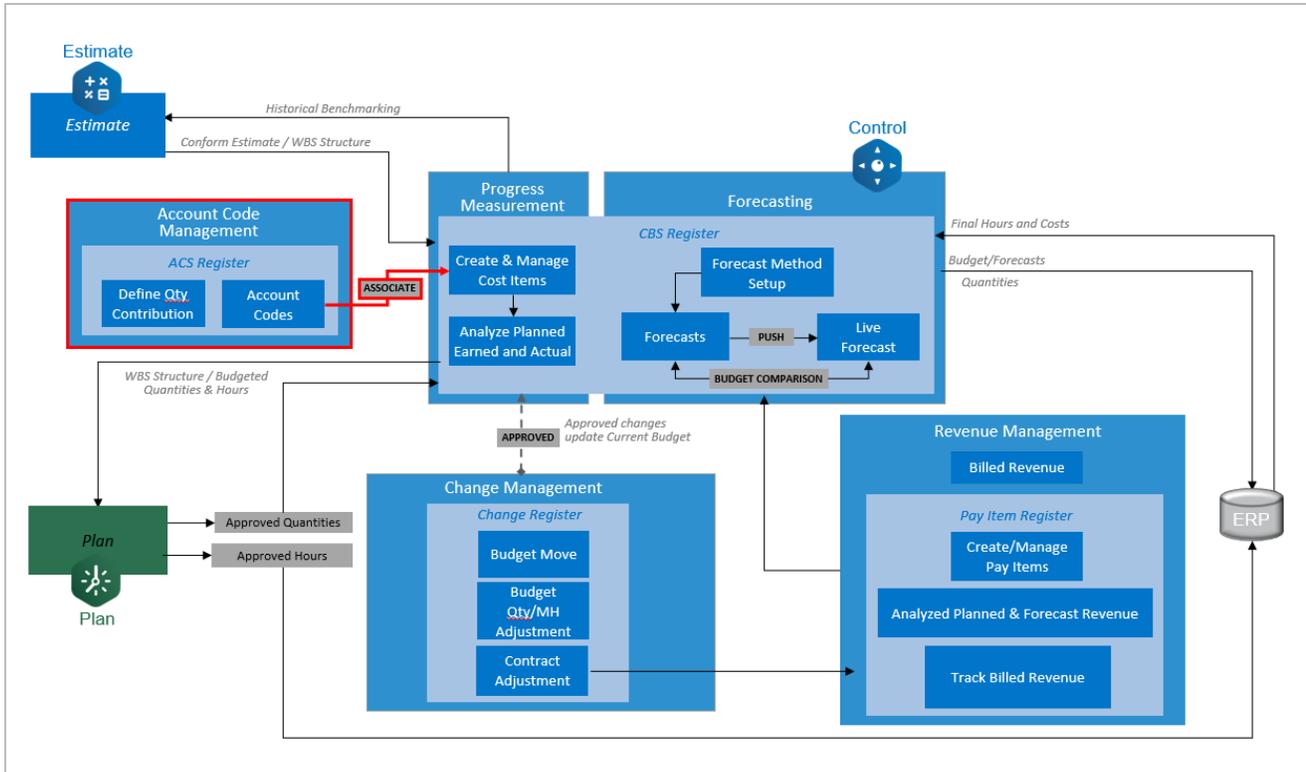
- Navigate to the Schedule data block
- Edit schedule data inside the CBS
- Edit schedule data using Excel import
- Integrate planning activities
- Schedule using Primavera

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CHAPTER 10 – ACCOUNT CODE STRUCTURE (ACS)

- 10.1 Account code structure workflow 422
- 10.2 What is an Account Code? 422
- 10.3 Account Code Setup 423
 - 10.3.1 Staging vs. Published Account Codes 423
 - 10.3.2 Account code permissions 430
- 10.4 Account Code Assignment 439
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 - 10.5.2 ACS 440
 - 10.5.3 Integration 441
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10.1 ACCOUNT CODE STRUCTURE WORKFLOW



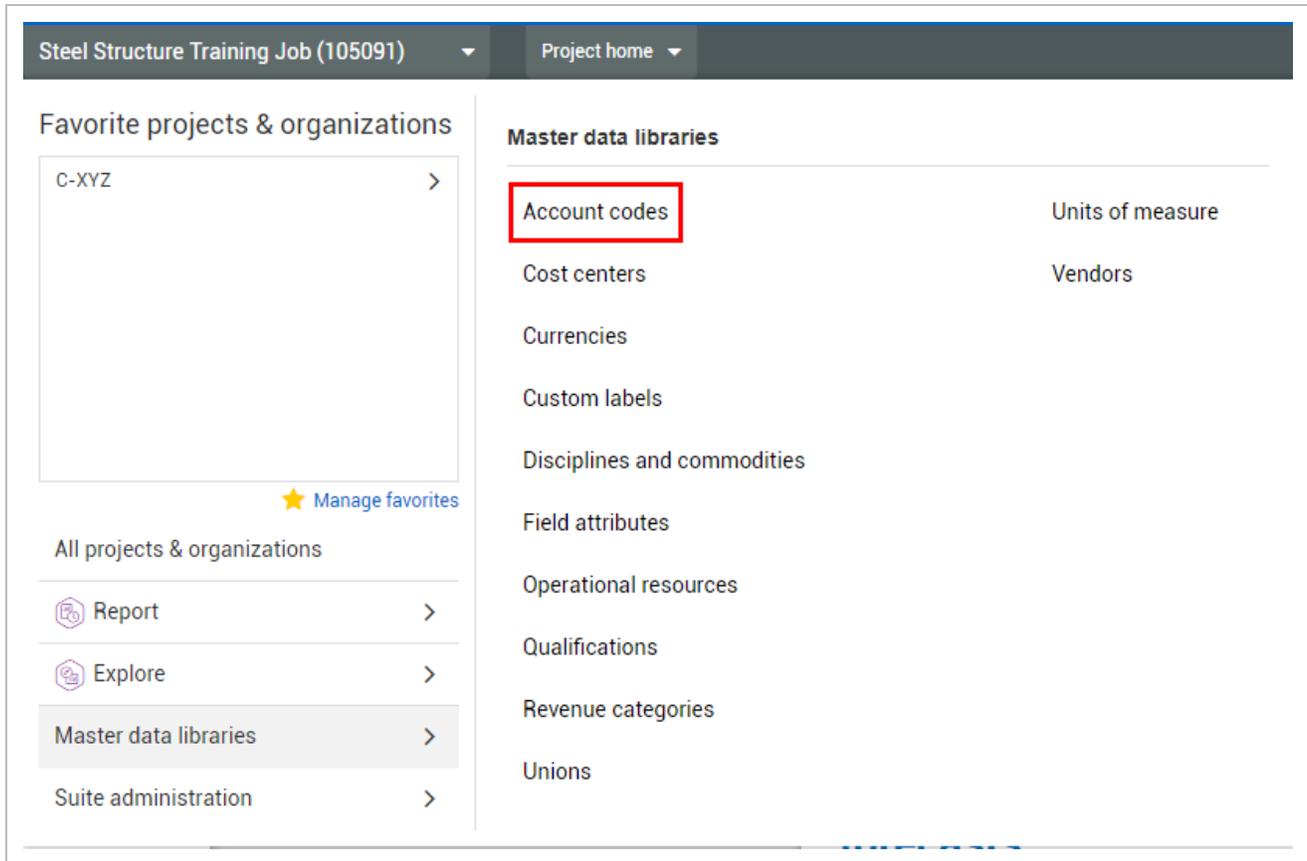
10.2 WHAT IS AN ACCOUNT CODE?

Account Codes serve as a standardized coding system to track like operations across a company, for the purpose of global reporting and benchmarking. Account Codes typically follow a hierarchical structure which allows for summary level reporting rolled up to company standards, but can also be a flat list.

Account Codes are assigned to cost items similar to a tag on a cost item. Once an account code has been assigned to all terminal cost items you can view many project and organization reports organized by the account code structure, rather than individual project cost break down structure which often differs from project to project. Account Codes can also tie back to InEight Estimate where estimators can assign the same standard set of account codes to estimate items, and compare them to active or completed projects for historical benchmarking.

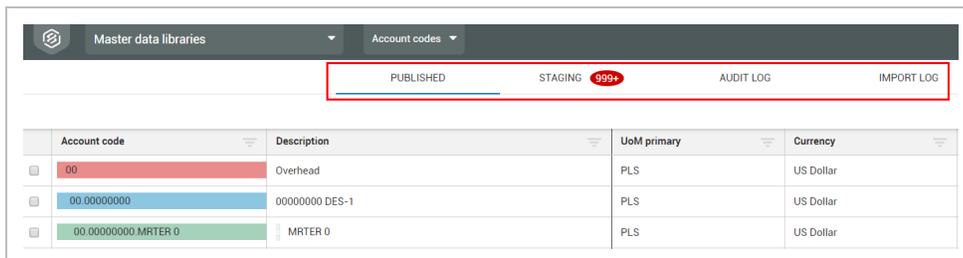
10.3 ACCOUNT CODE SETUP

The master set of account codes is created and stored under Master data libraries > Account Codes.

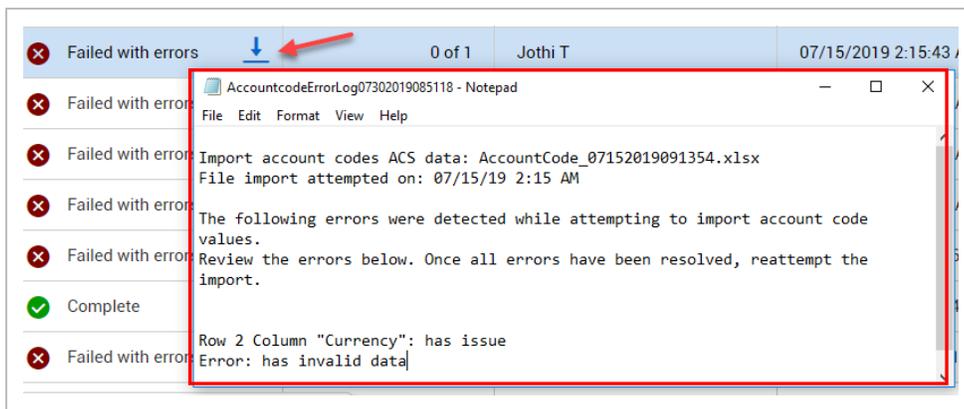


10.3.1 Staging vs. Published Account Codes

The Account Codes master data library contains four tabs: Published, Staging, Audit Log, and Import Log.



- The **Published** tab lists all account codes that have been created and published under the Staging tab.
- Under the **Staging** tab, you create and edit account codes, and then publish them for use. Account codes are not available for use in projects until they are published
- The **Audit Log** tracks changes made to the Account Code Structure, including the value before and after, the changed date, and who made the change
- Under the **Import Log** tab, you can track the status of all the account code import processes.
 - When you hover over the **Failed with errors** imports, a pop-up will provide a brief import status, along with next steps
 - Under the pop-up, there is a down facing blue arrow where you can download a detailed error log



Account codes are typically maintained at an organization administration level to ensure that categories and codes remain consistent with company standards.

The account codes within the Account Code Structure are arranged into a hierarchy of parent-child relationships that can contain varying levels of detail, indicated by color, for each level of the hierarchy. You can assign account codes to cost items anywhere, from the highest level to the lowest level. The lower the level assigned, the higher the level of detail associated to the account code.

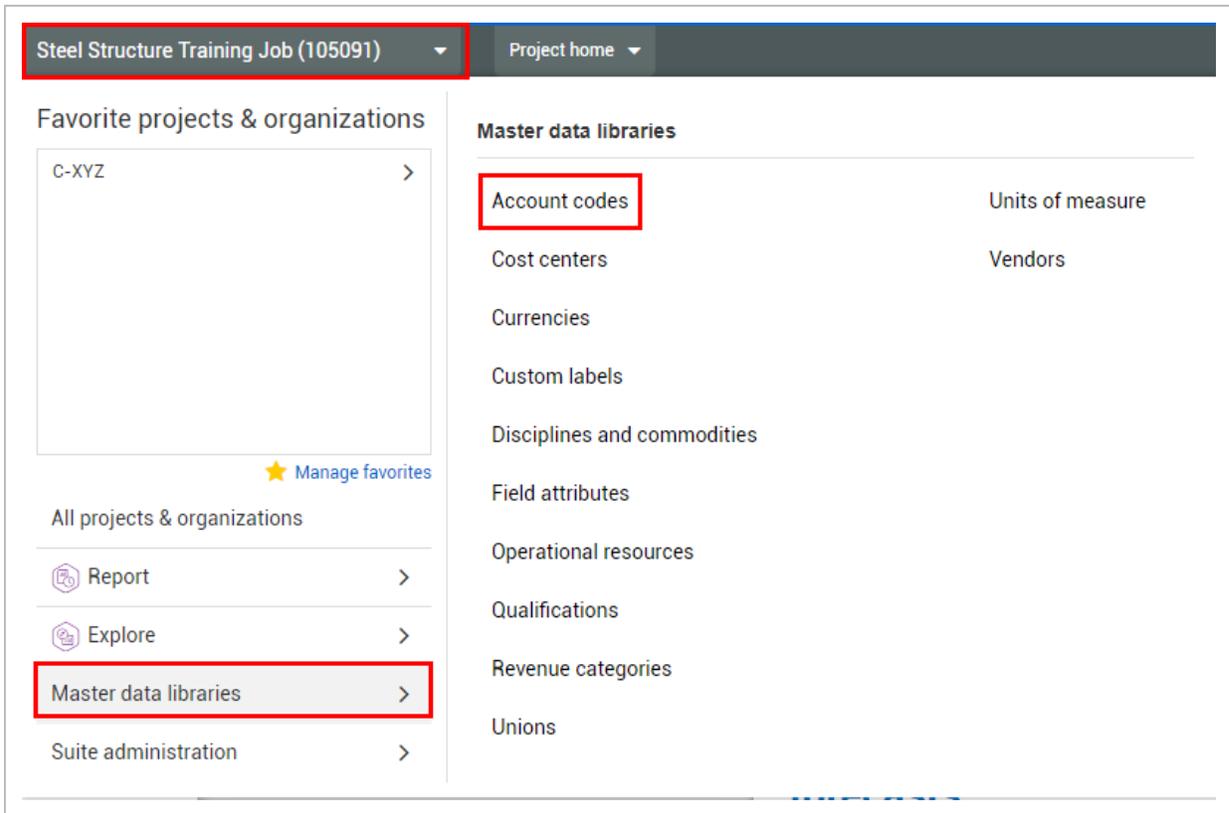
The example below shows a level 3 account code (50.03.04) acting as a parent to two subordinate account codes (50.03.04.002 and 50.03.04.004).

Account code	Description
50.03.02.004.02	Break - Concrete Paving Removal
50.03.02.004.04	Load out - Concrete Paving Removal
50.03.04	Paving Milling and Scarification
50.03.04.002	Paving Milling and Scarification - Asphalt
50.03.04.004	Paving Milling and Scarification - Concrete
50.03.06	Utility Line Removals - Underground
50.03.06.002	Utility Line Removals - Underground (<4' Depth)
50.03.06.002.02	Utility Line Removal (<4' Depth)
50.03.06.002.04	Storm Sewer Removal (<4' Depth)

The following Step by Step walks you through how to create a new account code.

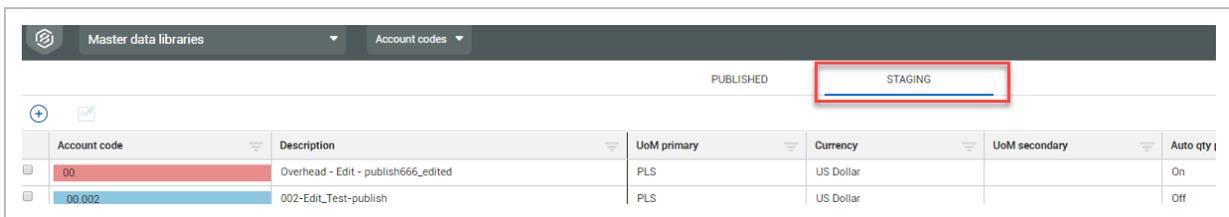
Create an Account Code

1. From the Project home page, select the **1st Level drop-down menu**.
2. Select **Master Data Libraries**.
3. Select **Account Codes**.

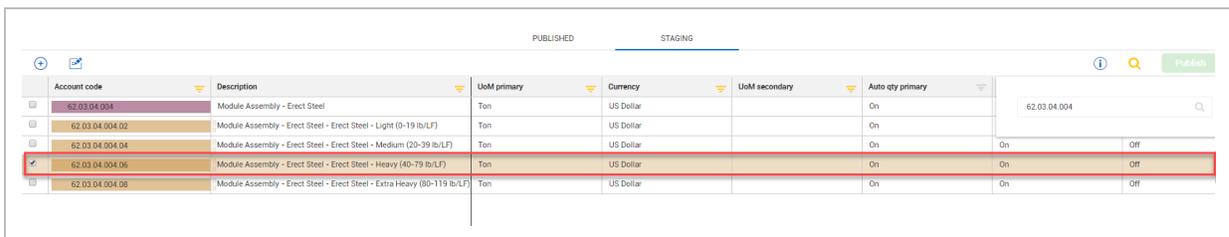


- All the account codes appear on your screen in a hierarchy format

4. Select the **Staging** tab.



5. Click the **check box** next to any of the existing account codes.



6. Click the **Add Account Code** button.

Account code	Description	UoM
<input type="checkbox"/> 62.03.04.004	Module Assembly - Erect Steel	Ton
<input type="checkbox"/> 62.03.04.004.02	Module Assembly - Erect Steel - Erect Steel - Light (0-19 lb/LF)	Ton
<input type="checkbox"/> 62.03.04.004.04	Module Assembly - Erect Steel - Erect Steel - Medium (20-39 lb/LF)	Ton
<input checked="" type="checkbox"/> 62.03.04.004.06	Module Assembly - Erect Steel - Erect Steel - Heavy (40-79 lb/LF)	Ton

- This creates a new account code with the code you selected as the parent
- In the Account code details slide out panel, the following can be assigned:

Item	Function
Parent Account Code	Account Code with lower level “child” account codes below it.
Account Code	The alpha numeric sequence assigned as the code.
Description	Description detailing the account code’s scope.
Currency	The currency assigned to the account code.
UoM Primary	The primary unit of measure for the account code.
UoM Secondary	The secondary unit of measure for the account code.
Auto Quantity Primary/Secondary	Automatically roll up cost item quantities if the cost items and this account code have the same primary/secondary UoMs. It can also be set on a project specific basis.
Parent Roll Up Behavior	Controls whether primary or secondary quantities of account code roll up to the parent account code’s primary or secondary quantity.
Account Code Tag 1-20	Tags that can be associated to account codes to enable them to be categorized.
User Defined Field 1-10	Optional open-text fields you can use to add information related to the account code.

The asterisk (*) at the beginning of a tile indicates it is a required field and it must be populated before the code will be created.

7. Fill in the information below:

- Account code: **Your Initials** (Since a parent was selected when creating this new account code, numbering prior to ‘–Your Initials’ will be the parent’s)
- Description: **Your Initials – Account Code**
- Currency: **US Dollar**
- UoM primary: **Ton**
- Leave all other defaults/blanks

Account code details

Parent account code
62.03.04.004.06 - Module Assembly - Erect Steel - ...

Account code
62... -User #

Description
Your Initials – Account Code

Currency
USD - US Dollar

UoM primary
Ton

UoM secondary

Associated entity roll up behavior

Auto quantity primary Auto quantity secondary

8. When you have filled out all the information, click **Stage** to send the new account code to staging area.

Cancel Stage

- The new account code now exists in the Account Code Structure on the Staging tab
- The new account code will not be available for use within projects until it is published

9. If you have the permissions to publish account codes, check the box for the account code you created..
10. Click the **Publish** button in the top-right corner of the page.

You can also edit existing account codes within the Account Code Structure, as indicted in the steps below.

Edit Account Code Details

1. From the Account Code – **Staging** tab, select the account code you created.
2. Click the **Edit Account Code** button.

The screenshot shows a table with columns: Account code, Description, UoM primary, Currency, and UoM second. The 'STAGING' tab is selected. The row for '62.03.04.004.06-User #' is selected and highlighted in blue. A red box highlights the 'Edit Account Code' button in the top left corner.

	Account code	Description	UoM primary	Currency	UoM second
<input type="checkbox"/>	62.03.04.004	Module Assembly - Erect Steel	Ton	US Dollar	
<input type="checkbox"/>	62.03.04.004.02	Module Assembly - Erect Steel - Erect Steel - Light (0-19 lb/LF)	Ton	US Dollar	
<input type="checkbox"/>	62.03.04.004.04	Module Assembly - Erect Steel - Erect Steel - Medium (20-39 lb/LF)	Ton	US Dollar	
<input type="checkbox"/>	62.03.04.004.06	Module Assembly - Erect Steel - Erect Steel - Heavy (40-79 lb/LF)	Ton	US Dollar	
<input checked="" type="checkbox"/>	62.03.04.004.06-User #	Your Initials – Account Code	Ton	US Dollar	
<input type="checkbox"/>	62.03.04.004.08	Module Assembly - Erect Steel - Erect Steel - Extra Heavy (80-119 lb/LF)	Ton	US Dollar	

- The edit account code page opens where changes can be made

Note that only the description, auto quantity primary, auto quantity secondary, parent roll up behavior, and account code tags can be edited after an account code has been created. All other items are greyed out and read only.

3. Once you are done editing the account code, click **Stage** to update the account code.

Account code details

• Parent account code
62.03.04.004.06-Module Assembly - Erect Steel - ...
Start typing the code or description. i.e. footing

• Description
Your Initials - Account Code

• UoM primary
Ton
Start typing the name. i.e. cubic yard

• Account code
62... -User #

• Currency
USD-US Dollar
Start typing the entity, name or code. i.e. USD

• UoM secondary
Start typing the name. i.e. cubic yard

Associated entity roll up behavior

Auto quantity primary
 Off ⓘ

Auto quantity secondary
 Off ⓘ

Parent roll up behavior

Contribute primary to primary
 Off

Contribute primary to secondary
 Off

Contribute secondary to secondary
 Off

10.3.2 Account code permissions

If you have the required permissions, you can delete, replace, or rename account codes.

The account administrator does not have permissions automatically assigned to approve account codes. Your account administrator must add the permission to approve account codes in the Master data libraries to the administrative account.

10.3.2.1 Deleting account codes

Follow the step-by-step to delete an account code.

If you are deleting a parent account code, all children under the parent are also deleted.

Deleting account codes

1. Go to the Master data libraries and then select **Account codes**.
2. From the Staging tab, select an account code you want to delete.
3. Select the **Edit** icon in the upper-left corner.

Master data libraries		Account codes			
		PUBLISHED	STAGING	AUDIT LOG	IMPORT LOG
⚠ Staged account code changes and requests may differ from current published codes, refer to Published tab for current information.					
Account code	Description	UoM primary	Currency	UoM secondary	
<input checked="" type="checkbox"/> ___001	___001	Acre	US Dollar		
<input type="checkbox"/> 00	DES WD A2k	Hour	CFA Franc BCEAO	Hour	
<input type="checkbox"/> 00.000000000000001	desrption updated_1324	Test1920- Copy	US Dollar	TestSep13	
<input type="checkbox"/> 00.000000000000001 MRTER 0	DES_P	PLS	US Dollar		
<input type="checkbox"/> 00.000000000000001 MRTER 0 Core H...	DES_PDU	TestSep13	US Dollar	TestSep13	
<input type="checkbox"/> 00.000000000000001.nandy kendo	nandy	TestSep13	Unidad de Fomento	TestSep13	
<input type="checkbox"/> 00.000000000000001 Nandy test ACS	Nandy Test Acs	TestSep13	US Dollar	TestSep13	
<input type="checkbox"/> 00.000000000000001 New nandy May2...	New nandy May20th	TestSep13	US Dollar	TestSep13	
<input type="checkbox"/> 00.000000000000001 NR_05082019	00.00000000 NR_05082019_DESC	Acre	US Dollar		
<input type="checkbox"/> 00.000000000000001 NR1_05082019	00.00000000.NR1_05082019_DESC	Acre	US Dollar	098765	
<input type="checkbox"/> 00.000000000000001.NR1_05082019...	NR1_09082019_DESC	Acre	US Dollar		
<input type="checkbox"/> 00.000000000000001 PK -Oct-2019	PK -Oct-2019-description	Test01 30-05-2019	US Dollar	TestSep13	

4. On the Edit account code page, select **Delete account code**, and then click **Next**.

Delete account code

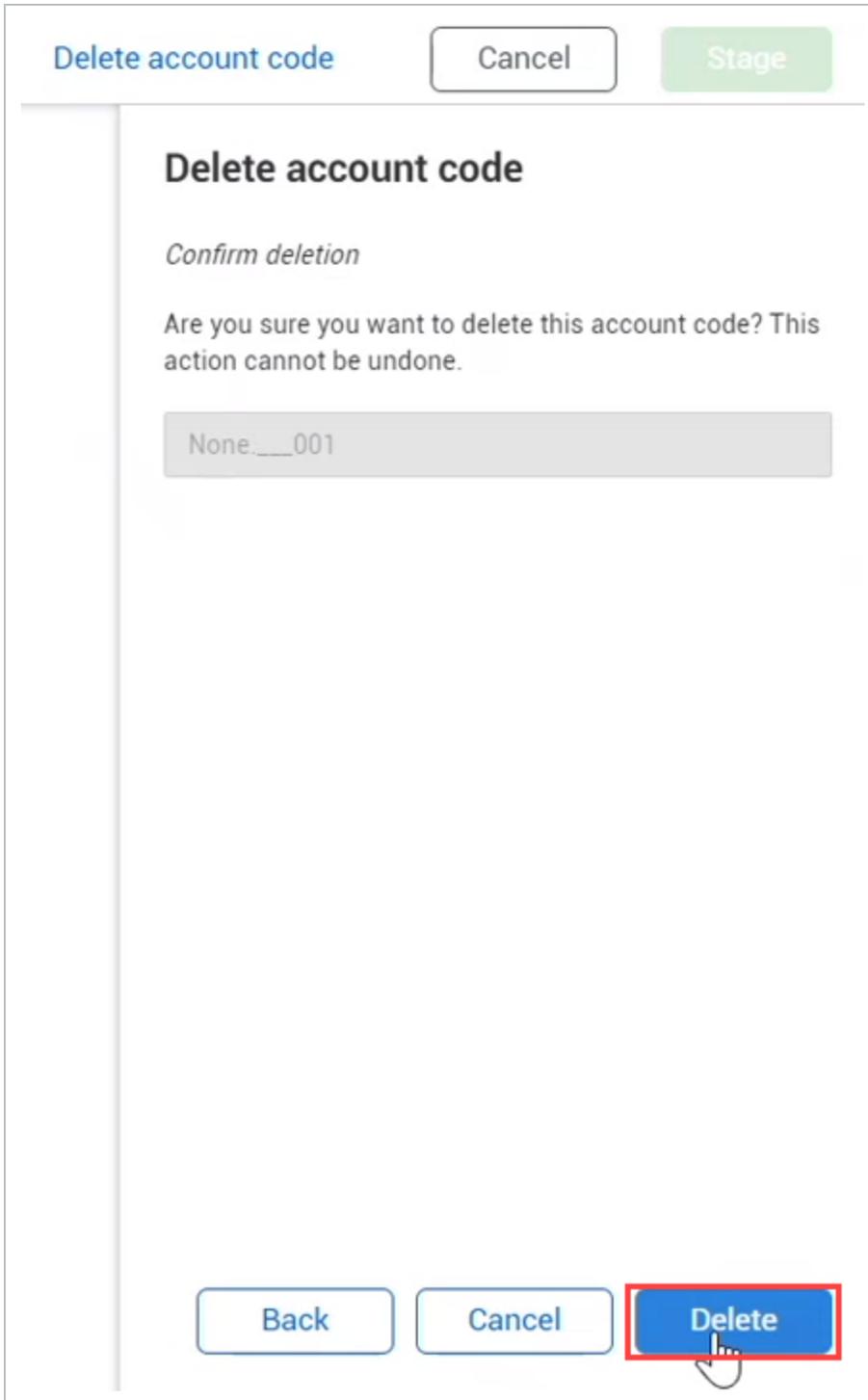
Replacement account code (optional)

Select one

Cancel Next

In the Replacement account code optional text box, you can enter in an existing account code to replace the account code you are deleting.

5. On the Delete account code confirmation page, select **Delete** in the lower-right corner.



6. Click the **Stage** button.
 - This takes you back to the Staging page.

Approve all [Download] [Upload] [Info] [Search] **Publish**

Approve account codes [Close]

Are you sure you want to approve all pending account codes? This action cannot be undone.

Staging notes
Staging notes entered here will be applied to all account codes being approved.

500

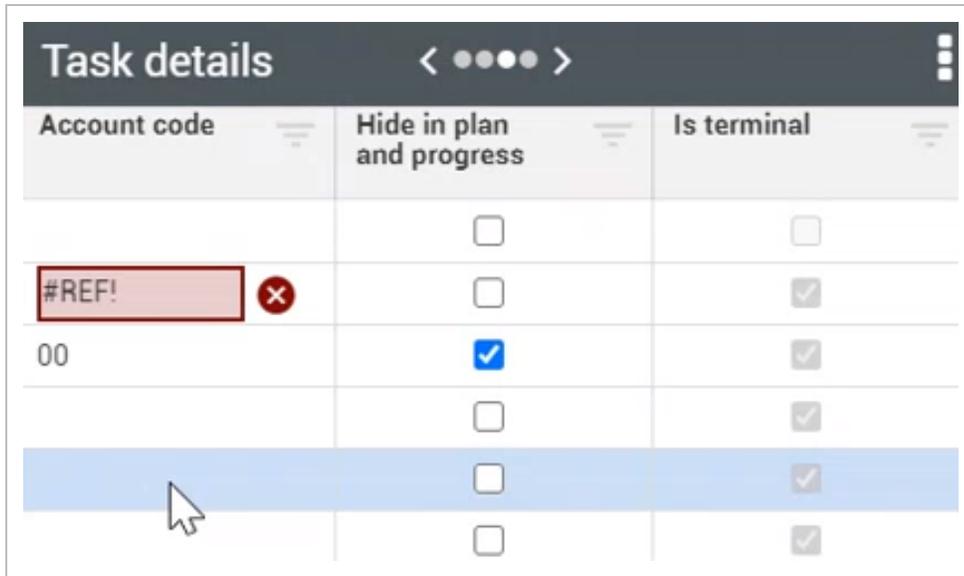
Type message here

Cancel **Approve**

7. From the Staging page, select **Approve all**, and then select **Approve**.

- You can view your current items and deleted items in the Published tab.

The deleted account code shows the following error code in the Cost Item Details and in the CBS tab.



Account code	Hide in plan and progress	Is terminal
#REF!	<input type="checkbox"/>	<input type="checkbox"/>
00	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10.3.2.2 Replacing deleted account codes

To remove the **#REF!** error in the cost item details slide-out panel and grid, select the error to open the Assign Account Code dialog box. Select another account code from the list, and then click **Assign**. The error on both the CBS tab and the Cost Item Details slide-out panel is replaced with the account code you selected.

✕

Assign account code

Search... 🔍

Sel...	Utilized	Account code	Description	UoM
<input checked="" type="radio"/>	<input type="checkbox"/>	00	Overhead	PLS
<input type="radio"/>	<input checked="" type="checkbox"/>	00	DES WD A2k	Hour
<input type="radio"/>	<input type="checkbox"/>	00.00000000.Core Functi...	DES - DUTCH	Test123456Test123456Te...
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001	desrption updated_1324	Test1920- Copy
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001.MRT...	DES_P	PLS
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001.MRT...	DES_PDU	TestSep13
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001.nan...	nandy	TestSep13
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001.Nan...	Nandy Test AcS	TestSep13
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001.New...	New nandy May20th	TestSep13
<input type="radio"/>	<input type="checkbox"/>	00.0000000000000001.NR_...	00.00000000.NR_050820...	Acre

Clear
Cancel
Assign

10.3.2.3 Renaming account codes

If you have the required permissions, you can rename account codes. Follow the step by step to rename an account code.

Renaming account codes

1. Go to the Master data libraries, and then select **Account codes**.
2. From the Staging tab, select an account code you want to rename.
3. Select the **Edit** icon in the upper-left corner.

Master data libraries | Account codes

PUBLISHED | **STAGING** | AUDIT LOG | IMPORT LOG

⊕ 

 Staged account code changes and requests may differ from current published codes, refer to Published tab for current information.

Account code	Description	UoM primary	Currency	UoM secondary
<input checked="" type="checkbox"/> ___001	___001	Acre	US Dollar	
<input type="checkbox"/> 00	DES WD A2k	Hour	CFA Franc BCEAO	Hour
<input type="checkbox"/> 00.0000000000000001	desrption updated_1324	Test1920- Copy	US Dollar	TestSep13
<input type="checkbox"/> 00.0000000000000001.MRTER 0	DES_P	PLS	US Dollar	
<input type="checkbox"/> 00.0000000000000001.MRTER 0 Core H...	DES_PDU	TestSep13	US Dollar	TestSep13
<input type="checkbox"/> 00.0000000000000001.nandy kendo	nandy	TestSep13	Unidad de Fomento	TestSep13
<input type="checkbox"/> 00.0000000000000001 Nandy test ACS	Nandy Test Acs	TestSep13	US Dollar	TestSep13
<input type="checkbox"/> 00.0000000000000001 New nandy May2...	New nandy May20th	TestSep13	US Dollar	TestSep13
<input type="checkbox"/> 00.0000000000000001.NR_05082019	00.00000000.NR_05082019_DESC	Acre	US Dollar	
<input type="checkbox"/> 00.0000000000000001.NR1_05082019	00.00000000.NR1_05082019_DESC	Acre	US Dollar	098765
<input type="checkbox"/> 00.0000000000000001.NR1_05082019	NR1_09082019_DESC	Acre	US Dollar	
<input type="checkbox"/> 00.0000000000000001.PK -Oct-2019	PK -Oct-2019-description	Test01 30-05-2019	US Dollar	TestSep13

- On the Edit account code page, enter a new name for your selected account code in the **Description** text box. Then enter a new name for your selected account code.

Account code details

* Parent account code: None - None 

* Account code: No... ___001 

Start typing the code or description. i.e. footing

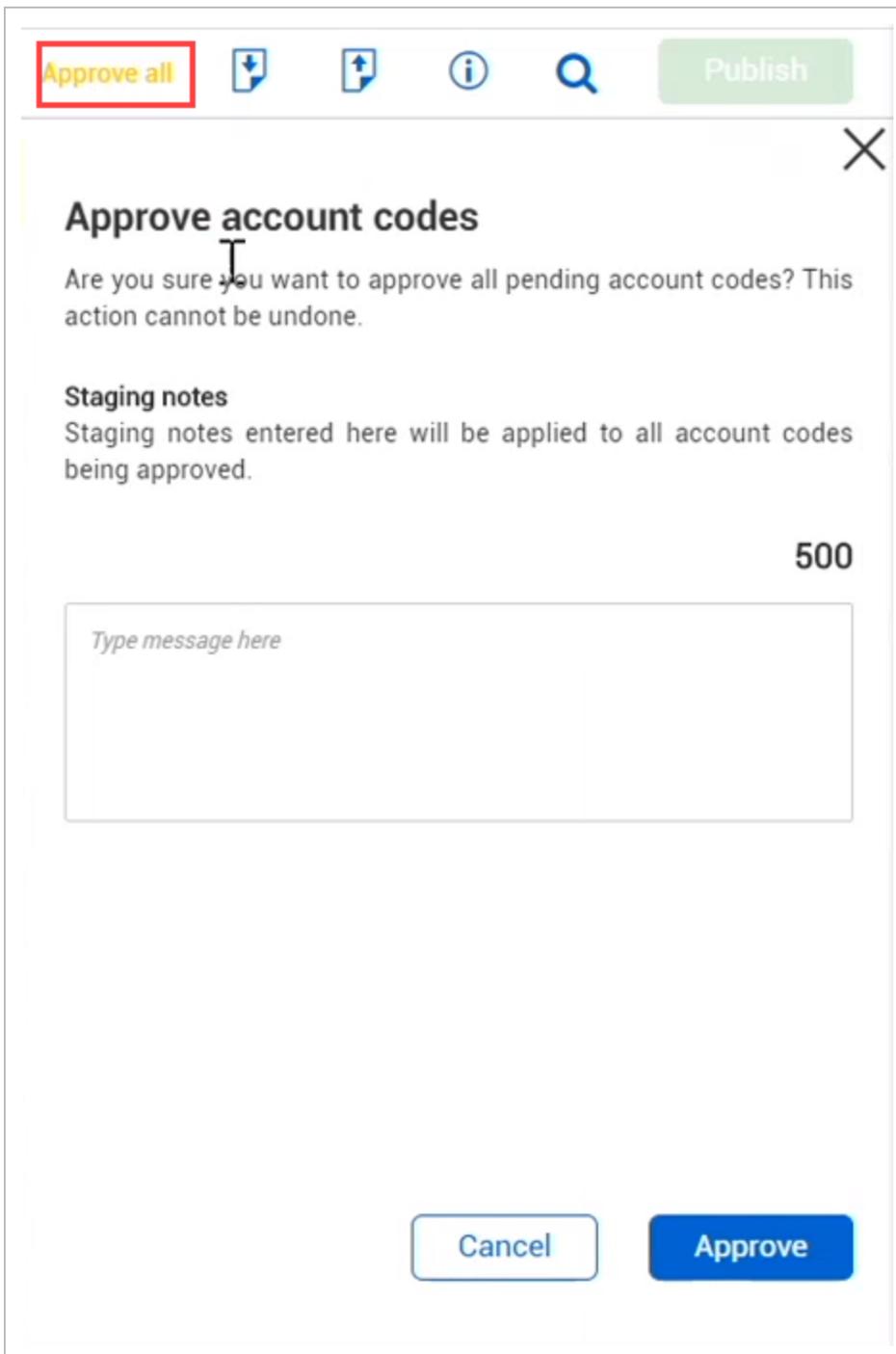
* **Description**: ___001 

* Currency: USD - US Dollar 

* UoM primary: Acre 

UoM secondary: 

- Click the **Stage** button.
 - This takes you back to the Staging page.



- From the Staging page, select **Approve all**, and then select **Approve**.
 - You can view your current items and renamed items in the Published tab.

Your renamed account code is viewable through the Account code column, Cost Item Detail tab, and the ACS tab.

10.4 ACCOUNT CODE ASSIGNMENT

Account codes can only be assigned to terminal items. Parents cannot have an account code.

Assign Account Codes to Cost Items

1. From within the Control Workspaces page of a project, select the **CBS** tab to view your Cost Breakdown Structure.
2. From the View menu, select the **Project Controls** view by first selecting View more, if not already displayed.
3. Within the Task Details data block, click on the right arrow to progress to the Account Code column.
4. For a cost item you wish to have an Account Code assigned, double click in the Account Code cell for that cost item.
5. Use the search box to find the account code to assign, then click **Select**, and then click **Assign**.

10.5 AUDIT LOG

The **Audit Log** tab within the CBS register is used to capture changes that were made within InEight Control and is broken down into five sub-tabs located on a left sidebar menu. Each log is designed to capture the changes that happened within each of the different registers and during synchronization.

All five audit logs can be access by selecting Audit log tab menu bar, then selecting each individual audit log on the far left.

		CBS	ACS	PAY ITEMS	CHANGE REGISTER	AUDIT LOG							
Actions													
CBS	Audit ID	Data type	Item type	Desci	WBS	Attrit	Chan by	Chan date	Value befor	Value after	Actur comp	Forec total co...	Forec total co...
ACS	4871359	CBS	Cost Item	Concrete	1071	Schedule ...	Michael M...	07/23/20...	False	True			
Pay Items	4871358	CBS	Cost Item	Earthwork	1069	Schedule ...	Michael M...	07/23/20...	False	True			
Integration	4871357	CBS	Cost Item	Job Overh...	1002	Schedule ...	Michael M...	07/23/20...	False	True			
Import history	4871356	CBS	Cost Item	Structural...	1073	Scheduled	Michael M...	07/23/20...	False	True			

10.5.1 CBS

You can access the CBS audit log by selecting CBS from the left side menu.

The **CBS audit Log** captures changes in the CBS register and utilizes an attribute field to identify what type of change was made. Other columns include:

- Changed By (who made the change)
- Change Date (the date and time the change was made)
- The attribute value before and after
- Forecast cost before and after
- Forecast man-hours before and after
- Posting date before and after

CBS	Audit ID	Data type	Item type	Desci	WBS	Attrit	Chan by	Chan date	Value befor	Value after
ACS	4871359	CBS	Cost Item	Concrete	1071	Schedule ...	Michael M...	07/23/20...	False	True
Pay items	4871358	CBS	Cost Item	Earthwork	1069	Schedule ...	Michael M...	07/23/20...	False	True
Integration	4871357	CBS	Cost Item	Job Overh...	1002	Schedule ...	Michael M...	07/23/20...	False	True
Import history	4871356	CBS	Cost Item	Structural...	1073	Scheduled	Michael M...	07/23/20...	False	True

10.5.2 ACS

You can access the ACS Audit Log by selecting **ACS** from the left side menu.

The **ACS Audit Log** functions similarly to the CBS Audit Log, but contains the changes that were made within the ACS (Account Code Structure) tab. The fields utilized to capture what changes were made are:

- Change attribute
- Changed By (who made the change)
- Changed Date (the date and time the change was made)
- Attribute value before and after

CBS	Audit ID	Data type	Item type	Description	AC No.	Attribute	Changed by	Changed date	Value before	Value after
ACS	177	ACS	Account Code	Structural Steel Industrial	62.03.02.004.02	Primary Auto Quantity	Paul benison	11/19/2018 12:28 PM	False	True
	176	ACS	Account Code	Structural Steel Industrial	62.03.02.004.02	Primary Auto Quantity	Paul benison	11/19/2018 12:24 PM	True	False
Pay Items	175	ACS	Account Code	Structural Steel Industrial	62.03.02.004.06	Primary Quantity	Paul benison	11/19/2018 12:21 PM	800.00	400.00
Integration	174	ACS	Account Code	Structural Steel Industrial	62.03.02.004.06	Primary Auto Quantity	Paul benison	11/19/2018 12:21 PM	True	False
Import history	170	ACS	Account Code	Structural Steel Industrial	62.03.02.004	Contribute Primary To P/L	Paul benison	11/19/2018 11:39 AM	False	True

10.5.2.1 Pay Items

You can access the Pay Item Audit Log by selecting **Pay Items** from the left side menu.

CBS	Audit ID	Data type	Item type	Description	Pay item No.	Attribute	Changed by	Changed date	Value before	Value after
ACS	4873330	Pay Item	Pay Item	Pay Item 1	001	Billing Method	Renee Japp	07/26/2019 01:...	Cost Plus	Fixed Final Price
Pay Items	4872029	Pay Item	Pay Item		1	Pay item tag 8	Renee Japp	07/24/2019 02:...		PY 8
Integration	4872028	Pay Item	Pay Item		1	Pay item tag 6	Renee Japp	07/24/2019 02:...		PY 6
Import history	4872027	Pay Item	Pay Item		1	Pay item tag 4	Renee Japp	07/24/2019 02:...		PY 4

The **Pay Item Log** again functions similarly but contains changes that were made to the pay items. The fields utilized to capture what changes were made are:

- Attribute
- Changed By (who made the change)
- Changed Date (the date and time the change was made)
- Value before and Value after
- Total price before and after

Audit ID	Description	Attribute	Changed by	Changed date	Value before	Value after	Total price before
1333638	Testing 07/31	Description	paul trippi	07/31/2019 08:...	Test	Testing 07/31	\$1040.00000000...
1333637	Testing 07/31	Sales Order	paul trippi	07/31/2019 08:...		S1	\$40.0000000000...

10.5.3 Integration

You can access the Integration/Sync Audit Log by selecting **Integration** from the left side menu.

	Audit ID	Interface	Status	Processing details	Start	Finish	User name	Log Handle
CBS								
ACS	65639	ActualQty	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	4a2a98f6-eaa6-431b-81f-
Pay Items	65638	LiveForecast	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	ce90c8df-f916-4a50-847-
Integration	65637	Budget	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	43b8dc1c-6825-413a-9c-
Import history	65636	CBS	Succeeded	4 of 4	07/29/2019 03:23 PM	07/29/2019 03:24 PM	pavithra baskaran1	0985605a-745c-4f27-88-

The **Sync Audit Log** is different from the other three. This log is used to capture:

- Whether the synchronization process between InEight Control and the ERP system was completed successfully
- How long the sync process took to complete and who requested the sync

It keeps track of the following functions, as seen under the Actions > Sync menu:

- Push CBS Structure
- Push CBS Structure and Budget
- Push CBS Structure and Live Forecast
- Push CBS Structure and Actual Qty
- Get Plan Quantities
- Get Actual Cost and MH

The syncing relationships and process will be discussed further in *Lesson 12 - Interfaces*.

The status field will automatically update and change from Queued to Succeeded. Queued status items can be cancelled if there is an error or if the sync is no longer necessary by clicking the Cancel a Queued Sync button in the top right-hand corner of the sync log.



To help troubleshoot sync issues, you can click on the Processing details link to get more information on which steps succeeded, are suspended, or failed.

Completed details - - Plan quantities pull: 31570

Step	Status
Step 1: Recieving data	Complete
Step 2: Populating data	Complete

Close

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If a sync error should occur, you can click on the Log Handle link to obtain troubleshooting information.

Log Handle

[4a2a98f6-eea6-431b-81f...](#)

[ce90c8df-f916-4a50-847...](#)

This brings you into the InEight **Suite App Logs** screen, where you can see information relating to the error including Level, Time, Domain, Area, Exception Message, Exception Type and Correlation Id, which can help you determine the cause of the sync error.

10.5.4 Import history

You can access the Import history audit log by selecting **Importhistory** from the left side menu.

The Import history log contains status information for all imports coming into InEight Product Portfolio. *For example:* cost item and actuals import processes can both be viewed in the Import history log for status, then you can eventually make corrections and reprocess.

CBS	File name	Status	Processi Details	Total line items	Errors	Total imported	Added estimate resource	Added pay items	Created by	Created date	Last edited by	Last edited date
ACS	Market_ST_9_8_17_GMP_Baseline.xer (Mark...	Failed	Step_3	1842	0	0	0	0	Renee Japp	07/24/2019 1...	Renee Japp	07/24/2019 1...
Pay items	Market_ST_9_8_17_GMP_Baseline.xer (Mark...	Failed	Step_3	1842	0	0	0	0	Renee Japp	07/23/2019 1...	Renee Japp	07/23/2019 1...
Integration	Book1.xlsx	Pe. →		2	2	0	0	0	Renee Japp	07/12/2019 0...	paul trippi	07/30/2019 0...
Import history	Market_ST_9_8_17_GMP_Baseline.xer (Mark...	Cancelled	Step_5	0	0	0	0	0	Renee Japp	07/10/2019 0...	Renee Japp	07/23/2019 1...

The Import history audit log allows you to take action on import and sync failures, based on error messages. Error messages are contained within the Error File Here for those imports that have failed import.

You can view progress in sync longs, view error messages, and then resolve issues in effort to continue with your import.

Control - Audit Log

Section		Description
1	File name	The name of the actual import file being used to import data.
2	Status	The current status of the import file. There are six import status that can define the current state of an import process.
3	Processing Details	This column describes the processing state in which the file is being processed. This column is not applicable for all statuses.
4	Total line items	This is the total line items that are included within the Excel import file.
5	Errors	This is a count of the number of errors during import.
6	Total import	This is the total amount of records that were successfully imported from the Excel import file.
7	Added estimate resources	This is the total amount of added estimate resources that were added in the CBS.
8	Added pay items	This is the total amount of pay items successfully imported from the Excel import file.
9	Created by	This is user responsible for importing the Excel upload file.
10	Created date	This is the actual date the Excel upload file was imported.
11	Last edited by	This is the last user to edit the Excel upload file.

Control - Audit Log (continued)

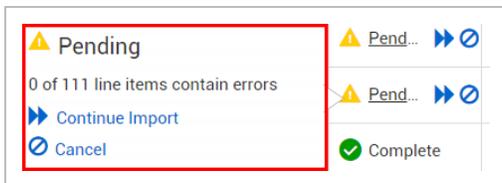
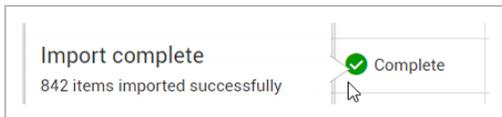
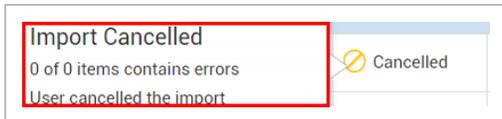
Section	Description
12	Last edited date This is the last date the Excel upload file was edited.

File name	Status	Processing Details	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
NEWPROJ.xer (D...	 Pend...	Step 5	18	0	0	0	0	paul trippi	08/02/2019 12:1...	paul trippi	08/02/2019 12:1...
NEWPROJ.xer (D...	 Cancelled	Step 5	0	0	0	0	0	paul trippi	08/02/2019 12:1...	paul trippi	08/02/2019 12:1...
NEWPROJ.xer (D...	 Cancelled	Step 5	0	0	0	0	0	paul trippi	08/02/2019 12:0...	paul trippi	08/02/2019 12:1...
NEWPROJ.xer (D...	 Cancelled	Step 5	0	0	0	0	0	paul trippi	08/02/2019 12:0...	paul trippi	08/02/2019 12:0...

If you hover over one of these Status symbols below, it provides you with a brief explanation of the selected status.



Here are some examples:



There are six possible import statuses listed below.

Status	Status Icon	Definition
Failed		Import failed due to a duplicate row within the Excel file.
Failed with errors		Import failed with an attachment to download with further information.
Pending		The Excel import file is pending, further action is needed. The double blue arrows will open a new window where you can correct and re-process the Excel import file. The blue circle with the line through it will cancel the import completely.
Cancelled		The Excel import file has been cancelled.
Processing		The Excel import is still processing. Once this is complete, the status will move into one of the other five statuses.
Complete		Processing of the Excel import files is complete.

10.5.5 Pending status

When an import is in a **Pending** status, this means that further action is needed to complete the Excel file import.



There are two options:

Option 1

1. By selecting the double blue errors, you will be taken to another window to continue processing the faulty records.

File name	Status
CBS Import.csv	

As an example, in the below screenshot, there are 3 existing errors. If you hover over one of the errors, it will tell you what needs to be corrected.

In this case, there is an issue with the account code assignment, as the pop-up hover suggests.

Audit log > Import history > CBS Import.csv

Find previous error 3 errors remain Find next error Cancel Import

Status Details (4 WBS phase code)		Import Columns				
Import status	CBS match status	Import method	CBS position	Description	WBS phase code	Account code
Pending	✓ to 1002 [1] [Job Overhead]	Update existing items o...	1	Job Overhead	1002	20
Pending	✓ to 1069 [2] [Earthwork]	Update existing items o...	2	Earthwork	1069	51
Pending	✓ to 1071 [3] [Concrete]	Update existing items o...	3	Concrete	1071	61
Pending	✓ to 1073 [4] [Structural Steel]	Update existing items o...	4	Structural Steel	1073	
Pending	✓ to 1074 [4.1] [Erect Steel - H...]	Update existing items o...	4.1	Erect Steel - Heavy	1074	62.03.02.004.06
Pending	✓ to 1005 [4.2] [Erect Steel - Li...]	Update existing items o...	4.2	Erect Steel - Light	1005	62.03.02.004.02
Pending	✓ to 1006 [4.3] [Bolted Conne...]	Update existing items o...	4.3	Bolted Connections	1006	62.03.02.006
Pending	✓ to 1084 [5] [Materials]	Update existing items o...	5	Materials	1084	1112233
Error	✓ to 1085 [5.1] [Earthwork - M...]	Update existing items o...	5.1	Earthwork - Materials	1085	1112234
Error	✓ to 1086 [5.2] [Concrete - Mat...]	Update existing items o...	5.2	Concrete - Materials	1086	1112235
Error	✓ to 1087 [4.4] [Module 01 - Er...]	Update existing items o...	4.4	Module 01 - Erect Steel ...	1087	1112236

2. When you double click into one of the 3 errors, it will take you directly into an account code assignment screen where you can make the correction.

From here you can select an account code and click on Assign.

Assign account code

Search...

Select	Account code	Description	UoM
<input type="radio"/>	00	Overhead 6233 EDIT	PLS
<input type="radio"/>	00.03	OH - Get Work	MWk
<input type="radio"/>	00.03.02	OH - Estimating	MWk
<input checked="" type="radio"/>	00.03.02.002	OH - Estimating - Engineering (Pr...	MWk
<input type="radio"/>	00.03.02.006	OH - Estimating - Research & Qu...	MWk
<input type="radio"/>	00.03.02.008	OH - Estimating - Prepare Estima...	MWk
<input type="radio"/>	00.03.02.010	OH - Estimating - Review (Pre-Bid)	MWk
<input type="radio"/>	00.03.02.014	OH - Estimating - Post Bid	MWk
<input type="radio"/>	00.03.02.016	OH - Estimating - Management	MWk
<input type="radio"/>	00.03.02.018	OH - Estimating - 2nd Estimates	MWk

Cancel Assign

3. After all corrections have been made to the existing errors, you can select the Import button on the top right on the screen.

Find next error Cancel Import

Description	WBS phase code	Account code
Job Overhead	1002	20
Earthwork	1069	51
Concrete	1071	61
Structural Steel	1073	

4. A warning message appears stating that changes will be made, and this project will be disabled until completion.



Importing cost items will update the CBS for all connected users. Notify all users that changes need to be saved prior to continuing with import. Upon commitment of import, this project will be disabled until completion. Please note this may take several mins.

Active Users :

- Super Nintendo Chalmers
- bridgette quintero

Import now

Save draft

5. Once processing has finished, you will receive an Import complete message.

✓

Import complete

The project has updated and is now enabled.

Close

6. The Import history page now shows that the imported file is now successfully imported and updates the Last edited date.

File name	Status	Total line items	Errors	Total imported	Added estimate resources	Added pay items	Created by	Created date	Last edited by	Last edited date
CBS Import.csv	Complete	11	0	0	0	0	Keith Anderson	06/19/2019 06:30...	paul trippi	07/31/2019 10:32...

Option 2

1. Selecting cancel, the blue circle with the line through it, will cancel the import completely.

File name	Status
CBS Import.csv	⚠ Pending ▶▶ <div style="border: 2px solid red; padding: 2px;"> ⊘ </div>

10.5.6 Failed with errors status

When an import is in a **Failed with errors** status, the system will generate a Word error report. The document displays detected errors while attempting to import the Excel file values. Errors will need to be reviewed within the Word document



An example of the Failed with errors Word **error file** provides direction on how to proceed with correcting the Excel import errors, and a course of action to run the import again

```

Import actuals CBS data: CBS import.xls
File Import attempted on: 7/31/2019 3:45:03 PM

The following errors were detected while attempting to import actual
values into control.
Review the errors below, once all the errors have been resolved,
reattempt the import to Control.

Error 1: Posting date in external system must be valid (this error
affects 10 WBS/CBS items out of 10 total attempted imported WBS/CBS items
and 10 rows out of 10 total attempted imported rows)

WBS: 2904
CBS: 10
Row: 7

WBS: 2905
CBS: 11
Row: 8

WBS: 2906
CBS: 12
Row: 9

WBS: 2907
CBS: 13
Row: 10
    
```

The only option with a Failed with errors status is to review the errors, resolve them within the initial Excel file import, and then re-import the file.

10.6 QUANTITY CONTRIBUTION

At the project level, you can manage account codes under the ACS tab from the Control Workspaces page. On the ACS tab, you can see the account codes assigned to your cost items, along with the related parent account codes, with account code details and quantity contributors.

Other budget information is automatically pulled into the ACS Details data block including, Total Cost, Unit Cost, Unit Rates, Primary and Secondary Quantity Ratios, Quantities Complete, and Account Code Tags. To access this information, click the right arrow to view the second, third and fourth panels of the data block.

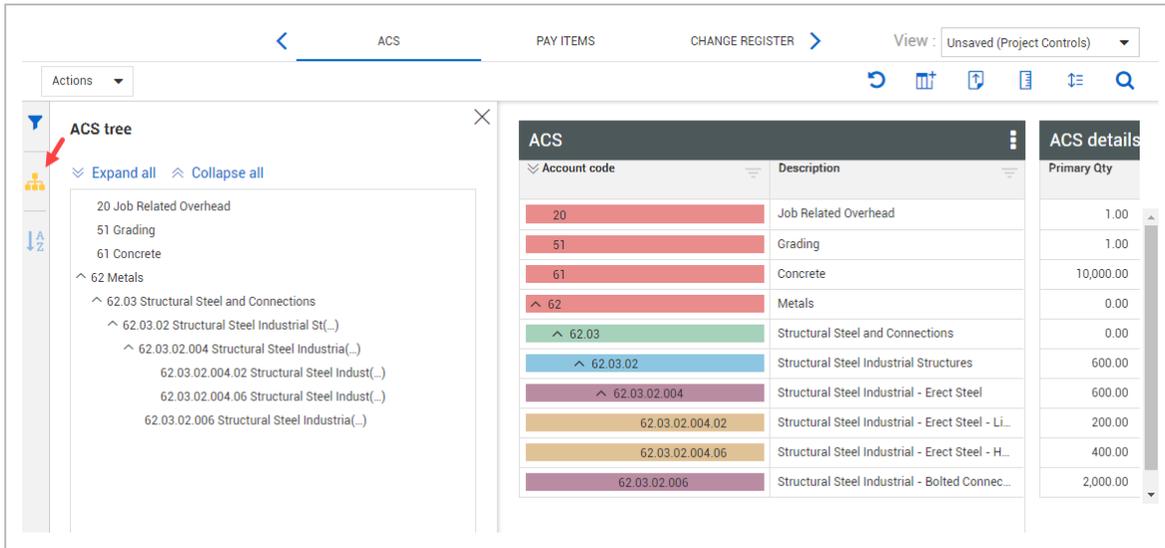
The screenshot shows the 'ACS' tab selected in a software interface. The interface has a top navigation bar with tabs for 'CBS', 'ACS', 'PAY ITEMS', 'CHANGE REGISTER', and 'AUDIT LOG'. Below this is a toolbar with various icons. The main content area is divided into three panels:

- ACS:** A table with columns for 'Account code', 'Descri...', and a list of account codes (99, 99.09, 99.09.02, 99.09.02.002, 99.09.04, 99.09.04.002, 99.09.06, 99.09.06.002) with descriptions like 'Change Order...' and 'Back charges...'.
- ACS details:** A table with columns: 'Primary Qty', 'Primary UoM', 'Auto-quantity (Primary)', 'Notes', 'Forecast total cost', and 'Forecast total MfHrs'. It contains data for each account code, such as '1.00000000000' for Primary Qty and '\$187,829,311.97999998927' for Forecast total cost.
- ACS qty contributors:** A table with columns: 'Contribute Primary to Primary' and 'Contribute Primary to Secondary', both containing checkboxes.

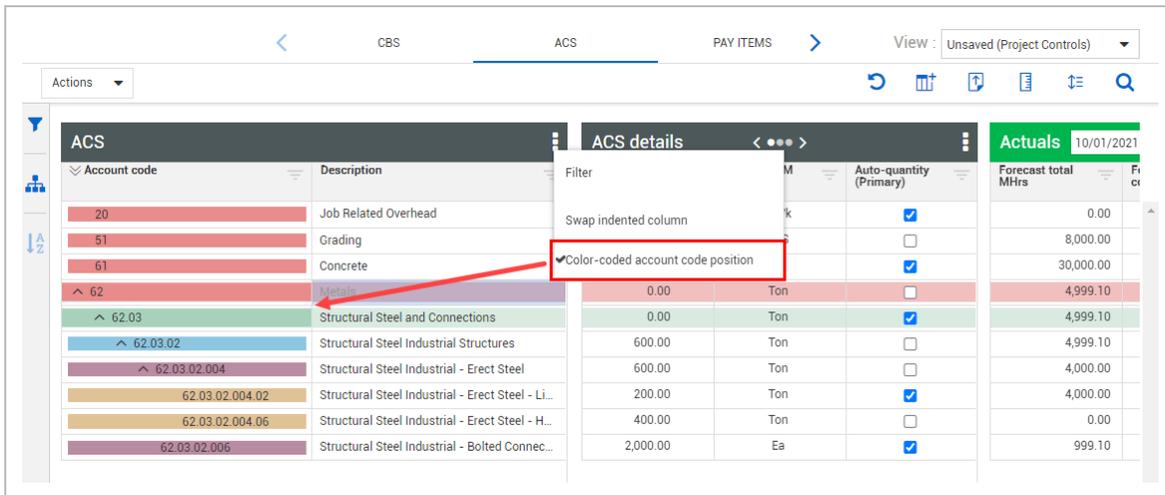
A red box highlights the 'ACS' tab in the top navigation bar, and a red arrow points from it to the 'ACS details' panel header.

10.6.1 ACS Navigation

The ACS tree lets you easily navigate up and down your ACS structure and also provides a way to filter down to a subset in the structure. Open the ACS tree slide-out panel by clicking on the ACS tree icon on the side toolbar.



Similar to the CBS color coded hierarchy, the ACS gives you the option to differentiate your account codes by color. Click on the ACS data block ellipsis to select this option to help you identify which level of the hierarchy a specific account code is located.



10.6.2 Account Code Quantity

There are two methods for defining primary and secondary quantities for your account codes:

- Manual entry in the Primary Qty and Secondary Qty fields
- Using the auto-quantity feature to have them automatically inherit the quantities of any cost items that have the same unit of measure as the assigned account code

Define Account Code Quantity

1. From the Workspaces page of the Steel Structure Job, select the **CE + CB** viewset from the View drop-down list.
2. In the Current Estimate data block, double click in the **Secondary UoM** field for a cost item you assigned an account code to.
3. Select a Secondary UoM from the drop-down list different than the cost item's primary UoM.
4. Click the **side arrow** to navigate to the Secondary Qty column.
5. Double click in the **Secondary Qty** field for your cost item and enter a value.
6. Select the **ACS** tab.
7. In the Primary Qty field for the account code assigned to the cost item you just changed and type in a quantity value.
8. For your account code, check the **Auto-quantity (Primary)** check box.
9. To view what cost items are assigned to the account code, right click on your account code and select **ACS item details**.

If you have the account code slideout open and want to open a different account code's item details, you can select a different account code. The details slideout updates to the current account code's details. You no longer have to exit out of one ACS item only to right click and select ACS details slide out to open another.

10.6.3 Quantity Contributors

Within your project, you can specify how primary and secondary quantities contribute to your account codes. Specifically, you can indicate how:

- Cost item primary and secondary quantities contribute to assigned account code primary and secondary quantities
- Child account code primary and secondary quantities contribute to parent account code primary and secondary quantities

For both cost item and account code contributions you can have quantities roll up:

- Primary quantity to primary quantity
- Primary quantity to secondary quantity
- Secondary quantity to secondary quantity

Account codes will only automatically inherit quantities from cost items/account codes using the same unit of measure.

10.6.3.1 Contribution Options - Cost Item to Account Code

From the ACS item details slide out panel, you can specify how cost item quantities roll up to the account code that is assigned to it, by selecting the appropriate checkbox. The total of the contributing cost item(s)'s quantities will roll up to become the account code quantity.

ACS item details							- Structural Steel Industrial - Erect Steel - Light (0-19 lb/LF)		
CBS position code	Description	WBS phase code	UoM	Forecast (T/O...	CE final MHrs	CE total cost	Primary to Prim...	Primary to Seco...	Secondary to Seco...
4.2	Erect Steel - Light	1005	Ton	200.00	4000	200,000.00	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.6.3.2 Contribution Options - Child Account Code to Parent Account Code

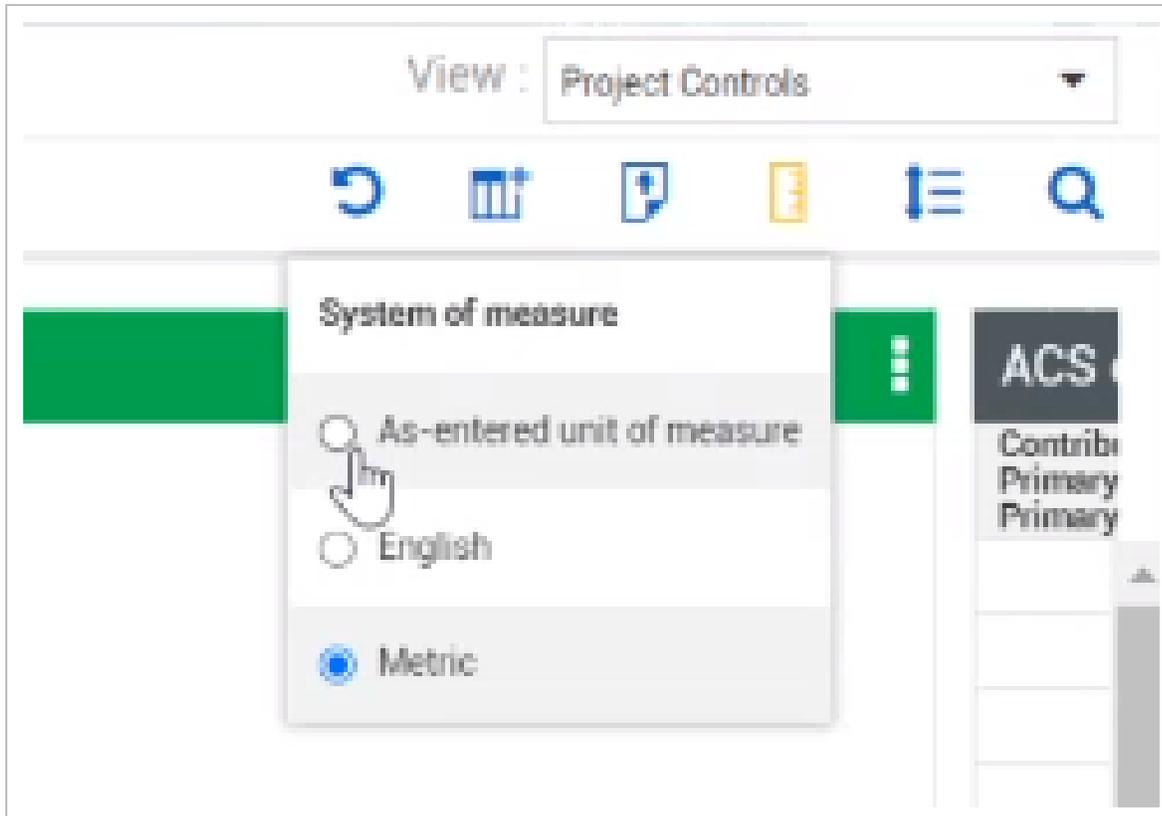
On the ACS page, in the ACS qty contributors data block, you can specify how child account code quantities will roll up to their parent account codes by selecting the appropriate checkbox.

ACS		ACS details < ● ● ● >			ACS qty contributors		
Account code	Description	Primary Qty	Primary UoM	Auto-quantity (Primary)	Contribute Primary to Primary Qty	Contribute Primary to Secondary ...	Contribute Secondary to secondary Qty
20	Job Related Overhead	0.000000000...	MWk	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51	Grading	1.000000000...	PLS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
61	Concrete	10000.00000...	CY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^ 62	Metals	0.000000000...	Ton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^ 62.03	Structural Steel and Connecto...	0.000000000...	Ton	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^ 62.03.02	Structural Steel Industrial Stru...	0.000000000...	Ton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
^ 62.03.02.004	Structural Steel Industrial - Ere...	1000.0000000...	Ton	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
62.03.02...	Structural Steel Industrial - Ere...	200.000000000...	Ton	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
62.03.02...	Structural Steel Industrial - Ere...	800.000000000...	Ton	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

10.6.4 ACS Unit of Measure Toggle

In the ACS register, you can toggle different Unit of Measures. The Unit of Measure toggle has three different options:

- As entered Unit of Measure
- English (Imperial Unit of Measure)
- Metric



If you want to display and edit in liters instead of gallons for example, you would select the ruler icon in the top right corner of the ACS register, and then select Metric. The quantity amount converts in the browser and displays in the alternate unit of measure.

10.6.5 Account Code Quantity Conversions

Cost items that are tracked in one unit of measure can be tracked in another UoM. For example, cost items that are tracked in a metric UoM can contribute to account codes tracked in imperial UoM. This saves time in maintaining account code quantities, as project team members do not have to perform

quantity conversions manually. Data accuracy is also ensured since any manual errors are eliminated from the conversion process.

In this example, CBS item Asphalt Paving and Break Removal contains a Forecast quantity of 3,000 with a UoM of Square Meter.

Tasks			Task details		
CBS position	Description		Resource	Forecast (T/O) quantity	UoM
1.1.1.2	Removals and De...			1.00	PLS
1.1.1.2.1	Excavate Native t...		3	42,000.00	m3
1.1.1.2.2	Asphalt Paving Br...		3	3,000.00	Square Meter
1.1.1.2.3	Concrete Removal			1.00	PLS

In the ACS, you can display the Primary UoM Alternate System column to see what UoM is needed to track cost items in, so they contribute to your account codes. The Auto-quantity column is set up so that quantities are summing up the CBS. The Primary Qty of 3,587.97 is automatically populated. There is no further action to allow this value to roll up to the account code.

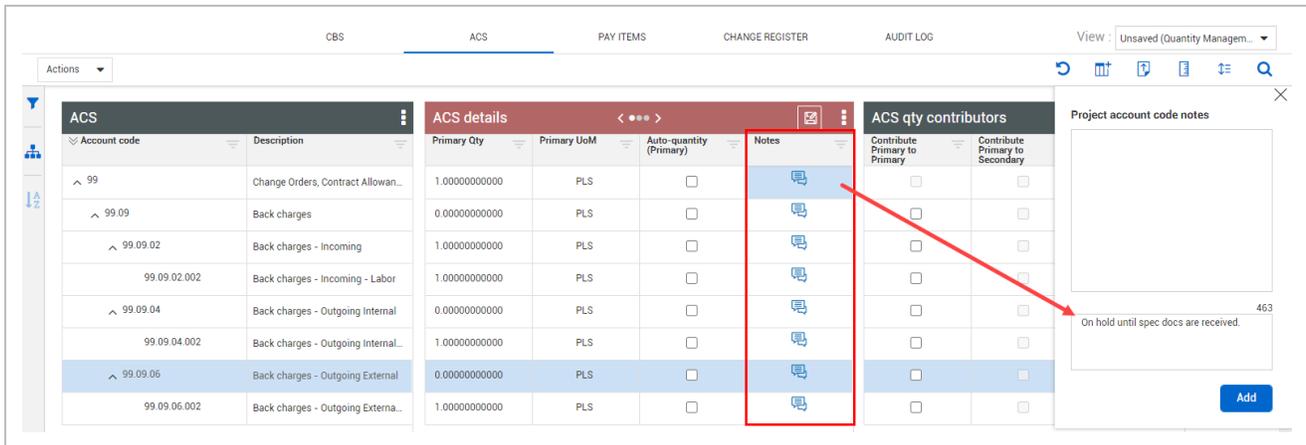
ACS		ACS details			
Account code	Description	Primary Qty	Primary UoM	Auto-quantity (Primary)	Primary UoM alternate system of...
50.03.02.002	Paving Removal - ...	3,587.97	Square Yard	<input checked="" type="checkbox"/>	Square Meter
50.03.02.002.02	Break - Asphalt P...	3,224.10	Square Meter	<input checked="" type="checkbox"/>	Square Meter
50.03.02.004	Paving Removal - ...	0.00	Square Meter	<input checked="" type="checkbox"/>	Square Meter
50.03.12	Concrete Removal	0.00	Cubic Meter	<input checked="" type="checkbox"/>	Cubic Meter
50.03.12.002	Concrete Removal...	0.00	Cubic Meter	<input checked="" type="checkbox"/>	Cubic Meter
50.03.12.002.05	Concrete Removal...	290.82	Cubic Meter	<input checked="" type="checkbox"/>	Cubic Meter

The system will automatically take the Forecast Qty in the CBS, and convert that number to the value shown in the Primary Qty field displayed in the ACS. In the above example, the CBS Forecast Qty of 3,000 in square meters is being converted to the 3,587.97 square yards, as shown in the ACS.



10.6.6 Notes Column

A Notes column is available for you to add to a new or existing data block. The Notes column lets you add commentary to any of the ACS records.



After notes are added to a record, the Notes column populates with the number of comments that are currently added to each record.

The screenshot shows the ACS interface with a table of ACS details and contributors. The table has columns for Primary Qty, Primary UoM, Auto-quantity (Primary), Notes, Contribute Primary to Primary, and Contribute Primary to Secondary. A red arrow points from a comment icon in the Notes column to the Project account code notes panel on the right. The notes panel contains three messages: 'On hold until spec docs are received.', 'Primary UOM needs to be verified.', and 'Change tax rate to 7%'. There is an 'Add' button at the bottom of the notes panel.

10.7 MEASUREMENT TYPES

In master data libraries units of measure, there are two sections. The sections are Units of measure, and Measurement types. Using any two Units of measure that share the same Measurement type (such as area), you are able to do a measurement type conversion in the ACS.

If you have a cost item with a different unit of measure assigned to an account code, but with the same measurement type, that cost item can contribute to the same account code.

The screenshot shows the Master data libraries interface with a table of Measurement types. The table has columns for Name, Description, and Measurement type. The table contains five rows of data:

Name	Description	Measurement type
#NAME?- Copy AE ae	BACKLOGS	Area
#NAME?- Copy B	DESC	Area
#NAME?d	DESC	Area
-0098765- Copy- Copy1- Copy		Area
-0098765- Copy- Copy1- Copy...	-0098765- Copy- Copy1- Copy...	Area

You can have a cost item with a measurement type of acre contribute its values to its assigned account code if the account code has a measurement type of square foot. This is Because acre and square foot are both a measurement type of Area.

The column Primary to Primary lets you choose the cost item that contributes quantities of the account code.

Primary Qty		Primary UoM		DETAILS				COST CATEGORIES				
2,460.1999...		SF		CBS posi... code	Desc...	WBS phase code	Forec... (T/O) quan...	UoM	CE final Mhrs	CE total cost	Prim... to Prim...	Prim... to Seco...
ACS item details												
1.1.1.1	Permits	1004_	450.00000	Acre	2,323.00000	99.9999950...	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
1.9.2.1	SOE for fou...	1252	320.00000	SF	64.00000	0.00000000...	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
1.9.2.2	Excavate fo...	1253	95.00000	CY	57.00000	0.00000000...	<input type="checkbox"/>	<input type="checkbox"/>				
1.9.2.3	U&H Steel	1254	2.64600	Ton	5.29200	0.00000000...	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
1.9.2.4	Set Steel Fr...	1255	35.00000	Each	140.00000	0.00000000...	<input type="checkbox"/>	<input type="checkbox"/>				
1.9.2.5	Bolt Up	1256	172.00000	Each	22.36000	0.00000000...	<input type="checkbox"/>	<input type="checkbox"/>				
1.9.2.6	Metal Grati...	1257	180.00000	SF	28.00000	4,032.9767...	<input checked="" type="checkbox"/>	<input type="checkbox"/>				

The items without a check mark, such as Cubic Yards, have a measurement type that is not considered an area, so you cannot select Primary to Primary for Cubic Yards, Ton, and Each.

10.8 COST CATEGORY LABEL CUSTOMIZATIONS

In Master data libraries > Cost categories, there is a **Enable custom labels** toggle. If this toggle is turned on, all of your cost category field names come from the custom columns depending on your language preference in Control. Language preference is located in user settings.



You can overwrite the custom labels if you have the applicable permissions. Depending on where you have cost categories shown in the product, the overwritten labels show with the new custom labels.

These labels can be viewed at the organization level. Every project within that organization can see these labels.

If the organization prefers a different field name, it can be renamed using the cost category custom labels.

Dimmed custom labels cannot be overwritten. For example, the Field name Total.

Field name	Is terminal	Custom label - EN
Total	<input type="checkbox"/>	Total
Labor ⓘ	<input type="checkbox"/>	TEST-12345-94
Labor Base	<input checked="" type="checkbox"/>	L-Base

If the custom label for the field name is blank, then the custom label column will use the default name for the field name column.

One way of finding these custom labels in the project is by going to the CBS register. From there, open the Cost Categories slide-out panel. Under the Cost category column, find your custom label. For example, the Labor Base field name can be customized and renamed L-Base.

PAY ITEMS
CHANGE REGISTER
AUDIT LOG

1004_
Permits

DETAILS
ATTRIBUTES
COST CATEGORIES

% Complete ★ Live forecast method Latest actuals in forecast values

75.55556 % Manual (EAC) 🕒 12/11/2020

	Total	Per unit
Cost category	Current budget	Total cost (to date)
^ Total	\$ 109,999,995,000...	\$ 30,559,600,000...
^ Labor	\$ 0.000000000000	\$ 44,111,000,000...
L-Base	L-Base	00000... \$ 0.000000000000 \$ 183,093,332,000...

These changes can take a few minutes to fully generate because custom categories span the entire project.

If the Enable custom labels toggle has been shut off, then the category names come from the Field names in the Master data libraries only.

Review

1. Account codes are created inside which of the following:
 - a. ACS register page
 - b. Library
 - c. Project settings

2. Which of the following are account codes used to track?
 - a. Quantity
 - b. Budget
 - c. Account Code Tags
 - d. Unit Costs
 - e. a, b, and d
 - f. All of the above

3. Which of the following is not tracked in the CBS Audit Log?
 - a. Change Attribute
 - b. Changed By
 - c. Change Date
 - d. Pay Item Value
 - e. Forecast Cost Before and After

Summary

As a result of this lesson, you can:

- Define what an account code is
- Set up account codes within the library
- Assign account codes to cost items
- Define the quantity contribution for each account code
- Review and analyze the audit log

CHAPTER 11 – INTERFACES

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11.1 INTERFACES

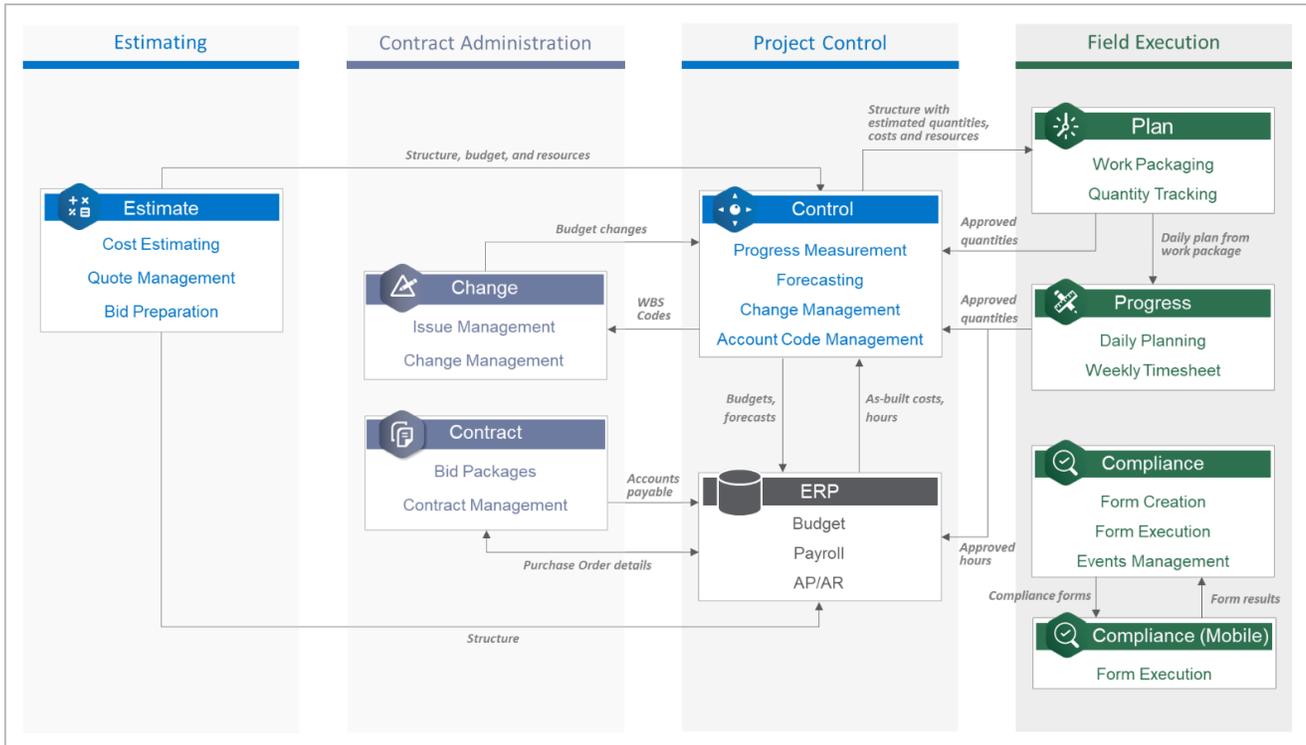
The InEight cloud platform has multiple options for synchronizing information from one platform to another. This gives you many options to utilize data efficiently between various programs, saving you time and resources.

After the initial import from Estimate, you can use the Push and Get actions to integrate directly with Control. You can use Push actions to send the CBS structure, budget, live forecast, actual quantity, pay item, billed revenue, or forecast revenue from your job. You can use the Get actions to bring in quantities, actual cost, man-hours, and billed revenue from other Platform and external applications.

The table below shows you the high-level functions of platforms to help you better understand how the actions interrelate.

Title	Description
Estimate	Create CBS/ACS/WBS structures Create cost estimates Analyze contractor/supplier quotes Prepare bid proposals Benchmark estimate values
Contract	Create and manage bid packages Set up and manage contracts Create and manage issues and change orders
Control	Edit CBS/ACS/WBS structures Manage budgets and contracts Manage forecasts Record actuals (manual entry, or import from Plan and ERP) Calculate job costs/variances, earned values, contract earnings
Plan	Associate planning components with CBS/ACS/WBS structures Create work plans and packages
Progress	Create work plans and daily plans Record progress and timesheets (as-builts) Approve executed daily plans
ERP	Budget, Payroll, Forecasts, AP/AR, Final Costs

The workflow diagram below shows how programs connect and how data flows between the InEight products.

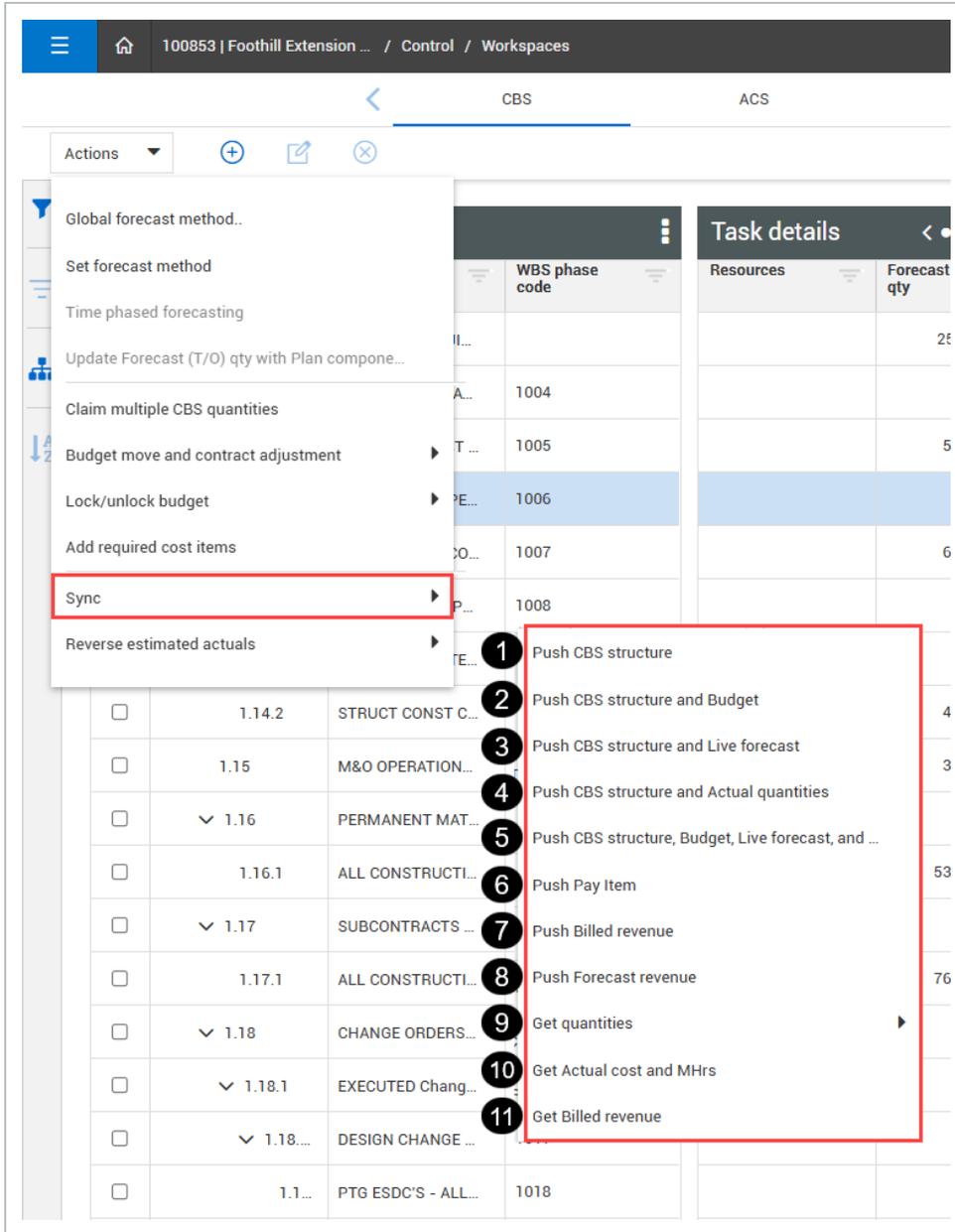


11.2 PUSH AND GET ACTIONS

Control integrations typically have one direction that specific information travels. As data is generated or modified in one product, it does not automatically change in other connected products downstream; you must perform a manual sync action, referred to as a *Push* or *Get* action.

- A *Push* sync occurs when you send information to another InEight cloud Platform application or an external application.
- A *Get* sync occurs when you retrieve information from a different InEight cloud Platform application or an external application.

You can view the various integration options by clicking on the Actions menu from the Control main page and hovering over the Sync option. The image and table below give a description of the sync type functions:

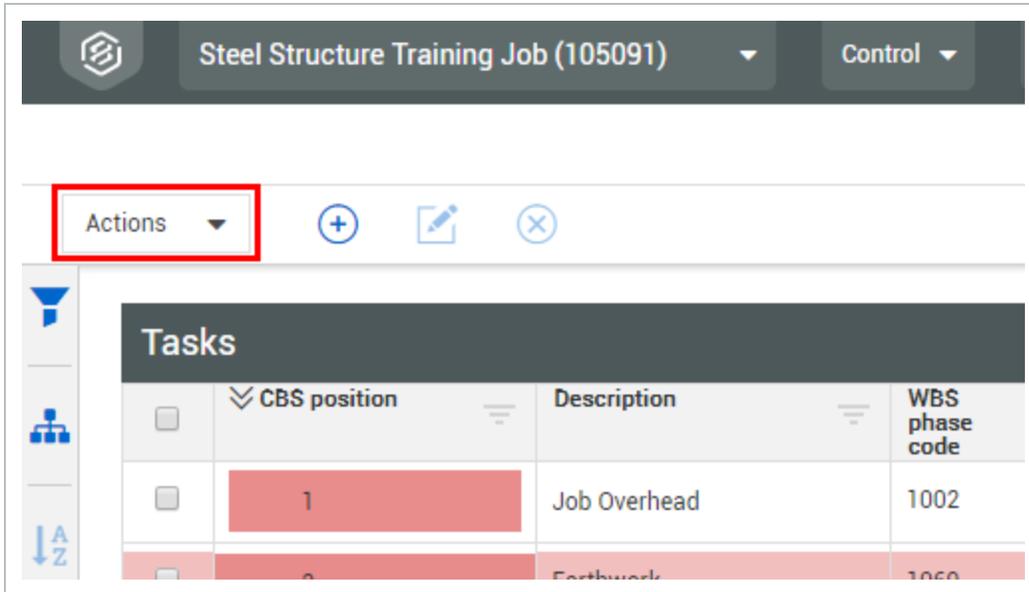


Sync Type		Function
1	Push CBS Structure	Syncs the Control CBS Structure to the ERP system.
2	Push CBS Structure and Budget	Syncs the Control CBS Structure, budgeted quantities, man-hours, and costs to the ERP system.
3	Push CBS Structure and Live Forecast	Syncs the Control CBS Structure and Live Forecasted quantities, man-hours, and costs to the ERP system.

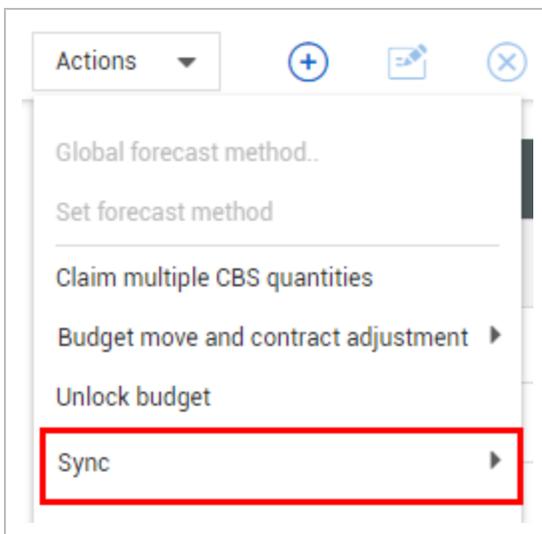
	Sync Type	Function
4	Push CBS Structure and Actual Quantities	Syncs the Control CBS Structure and job-to-date actual quantities to the ERP system.
5	Push CBS Structure, Budget, Live Forecast, and Actual QTY	Simultaneously performs all the syncing functions listed above (1-4).
6	Push Pay Item	Syncs the Pay item list and data to the ERP system.
7	Push Billed Revenue	Syncs job to date billed amounts to the ERP system.
8	Push Forecast Revenue	Sync pay item revenue values (billed revenue, earned revenue, forecast revenue).
9	Get Quantities (Through Previous Pay Period or Job To Date)	Retrieves the claimed quantities from InEight Plan and incorporates the information to Actual QTY within Control.
10	Get Actual Cost and MH	Retrieves actual project costs and man-hours from the ERP system and incorporates the information to Actual Costs and Actual Man-hours within Control.
11	Get Billed Revenue	Retrieves billed amounts from the ERP system and incorporates the information to Billed revenue within Control

Sync Options

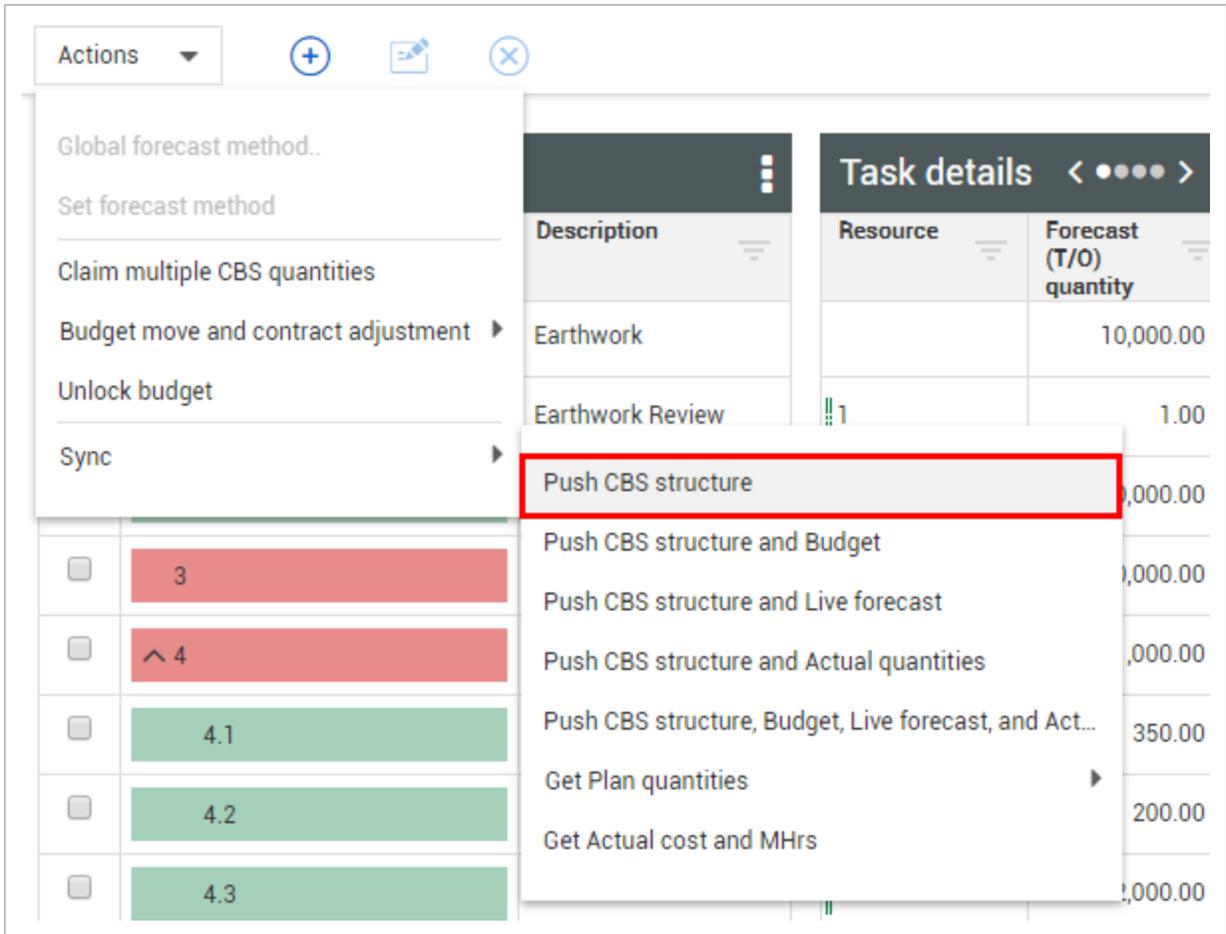
1. From the Control main page, click the **Actions** menu.



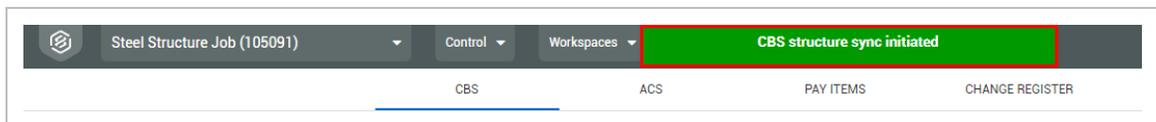
2. Select **Sync** from the Actions drop-down.



3. Select **Push CBS Structure** from the Sync drop-down.



- A message shows at the top of the page that shows the process initiated.



- You can follow the same steps for selecting the other sync options
- For the Get Plan Quantities option, you must select the **Through Previous Pay Period**

option

<input type="checkbox"/>	5.2	Insta	Push Forecast revenue	0.00	\$ 0.00	6
<input type="checkbox"/>	6	36 In	Get quantities	Through previous pay period		
<input type="checkbox"/>	6.1	Furni	Get Actual cost and Mhrs	Job to date		2
<input type="checkbox"/>	6.2	Exca	Get Billed revenue	Job to date		3
<input type="checkbox"/>	6.3	Insta		0.00	\$ 0.00	7
<input type="checkbox"/>		Backfill P&P Disc	10007	0.00	\$ 0.00	4

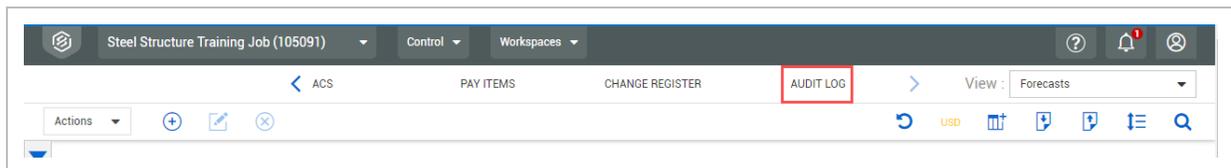
When you want certain types of data to sync automatically, you can schedule syncs. For more information, see [Scheduled Syncs](#).

11.3 AUDIT LOG - INTEGRATION

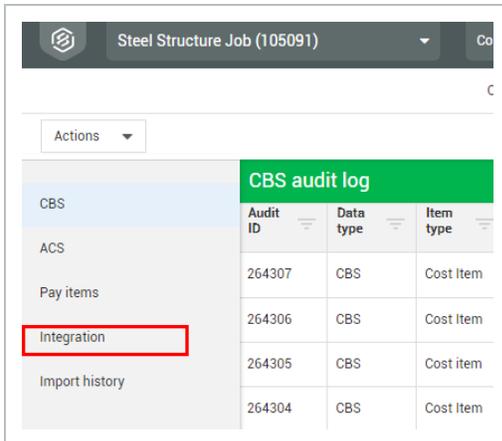
As you utilize the sync option, you have the option to go back and audit the status of the actions taken. The Audit Log Integration section shows all sync processes that have been initiated and their status. The Integration section captures whether the sync process between InEight Control and the ERP system was completed successfully. You can also view how long the sync process took to complete and who requested the sync.

Sync Audit Log

1. From the Control Workspaces page, click the **Audit Log** tab.



2. On the left side bar menu, click **Integration**.



CBS audit log		
Audit ID	Data type	Item type
264307	CBS	Cost Item
264306	CBS	Cost Item
264305	CBS	Cost item
264304	CBS	Cost Item

The log displays the current sync status

11.4 SCHEDULED SYNCS

Scheduled syncs allow you to set up automatic syncs, so you don't have to manually perform the syncs. You can set a time and date for the type of information you want updated from push or get data sync options. You can do a one-time sync or set up recurring syncs to get up-to-date costs or man-hours.

To use the sync features in Control, you must first select **Control with confirmation** in Global Options. For more information, see [Cost item integration behavior](#).

To schedule syncs, you must first configure them for your organization in Application integrations. You can open Application integrations in Main menu > Suite administration > **Application integrations**.

The available sync types are:

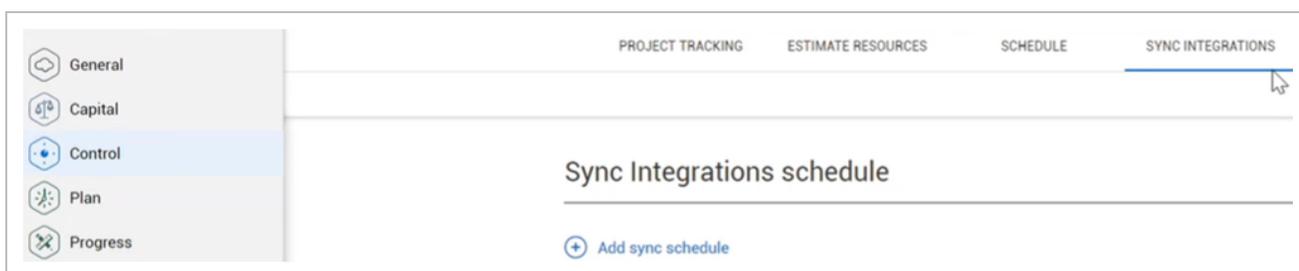
- Push CBS structure
- Push CBS structure and Budget
- Push CBS structure and Live forecast
- Push CBS structure and Actual quantities
- Push CBS structure, Budget, Live forecast and Actual quantities
- Push Pay item
- Push Billed revenue
- Push Forecast revenue
- Get Quantities

- Get Actual cost and MHrs
- Get Billed revenue

For more information about push and get functions, see [Push and Get Actions](#).

11.4.1 Sync integrations

To start scheduling syncs, go to the Sync integrations tab in the Control Project settings. You can add syncs by selecting the **Add sync schedule** button. You can schedule all your syncs for the project at one time.



There are five required fields you must fill out in order to schedule a sync.

- Sync type
- Time zone
- Start date
- Time to run sync
- Repeat

Sync types lists all available push and get syncs.

The screenshot shows a configuration interface for a scheduled sync. It includes a dropdown for 'Sync type' with a list of options, a 'Time zone' field set to '(UTC-06:00) Central Time (US & Canada)', and a 'Time to run sync' field set to '12:00 AM'. A sub-menu for 'Get Plan quantities' is open, showing 'Through previous pay period' and 'Job to date'. A 'Cancel' button is located on the right side of the form.

The Time zone is where you select which region's time zone you are in.

Start date functions similarly to selecting a start date for a project. You cannot select to start a sync from a day in the past. The scheduled sync starts at the current day by default unless you select otherwise.

+ Add sync schedule

* Sync type: Select one

* Time zone: (UTC-06:00) Central Time (US & Canada)

* Start Date: 02/02/2021

* Time to run sync: 12:00 AM

* Repeat: Never Daily Weekly Monthly

Cancel Add

You can only select start times in 30 minute increments.

The Repeat section is where you select how often a scheduled sync repeats. You can choose to have the sync repeat daily, weekly, monthly, or never depending on your preference. You can end the schedule syncs on a certain date or end after a number of occurrences.

For daily syncs, select how often you want to repeat the sync or when you want the reoccurring syncs to end.

* Repeat: Never Daily Weekly Monthly

* End: After 1 Occurrence(s) On 02/03/2021

Cancel Add

For weekly syncs, select which days the sync repeats on as well as when you want the sync to end.

The screenshot shows the configuration interface for a sync. Under the heading '* Repeat', there are four buttons: 'Never', 'Daily', 'Weekly', and 'Monthly'. The 'Weekly' button is highlighted in blue, and a mouse cursor is pointing at it. To the right, under '* End', there are two radio button options: 'After' and 'On'. The 'After' option is selected, with a dropdown menu showing '1' and the text 'Occurrence(s)'. The 'On' option is unselected, with a date field showing '02/03/2021' and a calendar icon. Below these options, under '* Repeat on', there are checkboxes for days of the week: S, M, T, W, T, F, S.

For monthly syncs, select what day in the month the sync repeats and when you want the sync to end.

This screenshot shows the 'Repeat on' configuration section. The 'Repeat' buttons are 'Never', 'Daily', 'Weekly', and 'Monthly', with 'Monthly' selected. Under '* Repeat on', there are two radio button options: 'Day' and 'First'. The 'First' option is selected, and a dropdown menu is open showing options: 'First', 'Second', 'Third', 'Fourth', and 'Last'. A 'Sunday' dropdown is also visible. The 'End' section shows 'After 1 Occurrence(s)' selected. 'Cancel' and 'Add' buttons are at the bottom right.

After you click **Add**, the sync appears in the synch integrations tab.

Sync Integrations schedule

[+ Add sync schedule](#)

Scheduled syncs

Push Billed revenue Sync type: Push Billed revenue Time to run sync: 12:00 PM CST Repeat: Weekly	Start date: 02/01/2021 Repeat on: Fri End: 12/31/2021	✎ ✕
Get Plan quantities Sync type: Get Plan quantities - Job to date Time to run sync: 1:00 PM CST Repeat: Monthly	Start date: 02/08/2021 Repeat on: Last - Saturday End: 12/31/2021	✎ ✕

You can edit syncs or delete them using the Edit and Delete buttons on the right of the sync data box. When you want to perform manual syncs for certain type of data, you can use the *Push* or *Get* action. For more information, see [Push and Get Actions](#).

Review

1. How can you know a sync process initiated?
 - a. Viewing the CBS Audit log
 - b. Appearance of a toast message
 - c. There is no way to tell

2. Where can you view the status of a sync process?
 - a. In the Change Register
 - b. On the CBS tab, in the Forecast data block
 - c. On the Pay Items tab, under the sync status column
 - d. In the Sync Audit Log

Summary

As a result of this lesson, you can:

- Explain the InEight cloud platform Functional Flow diagram
- Explain the different InEight Control Push interfaces and use cases
- Explain the different InEight Control Get interfaces and use cases
- Identify where to go to audit sync transactions

CHAPTER 12 – CONTROL SETTINGS

As an administrator, you can configure settings at the organization and project level in Control. The correct setting details must be added to manage projects successfully.

- **Organizational settings** — Settings configured at the organizational level are inherited when creating associated child organizations and new projects within the organization. You can configure organizational settings in Main menu > <organization> > Settings > **Control**.
- **Project settings** — At the project level, you can refine the default inherited organizational settings to customize how they are applied in each project. You can configure project settings in <project> > Settings > **Control**.

Organizational settings are applied as default settings for new projects. As an administrator, you can configure the default project settings to how they will apply to your individual project.

12.0.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform, or an assignment to the root organization based on permission configuration.

Every new project launch has its own particularities, and the setup and initialization of these projects depends on multiple factors, such as:

- Project organizational structure
- Staff and resources assigned
- Location of the project
- Units of measurement
- Currencies
- Financial reporting period

This lesson covers how to set up these project options.

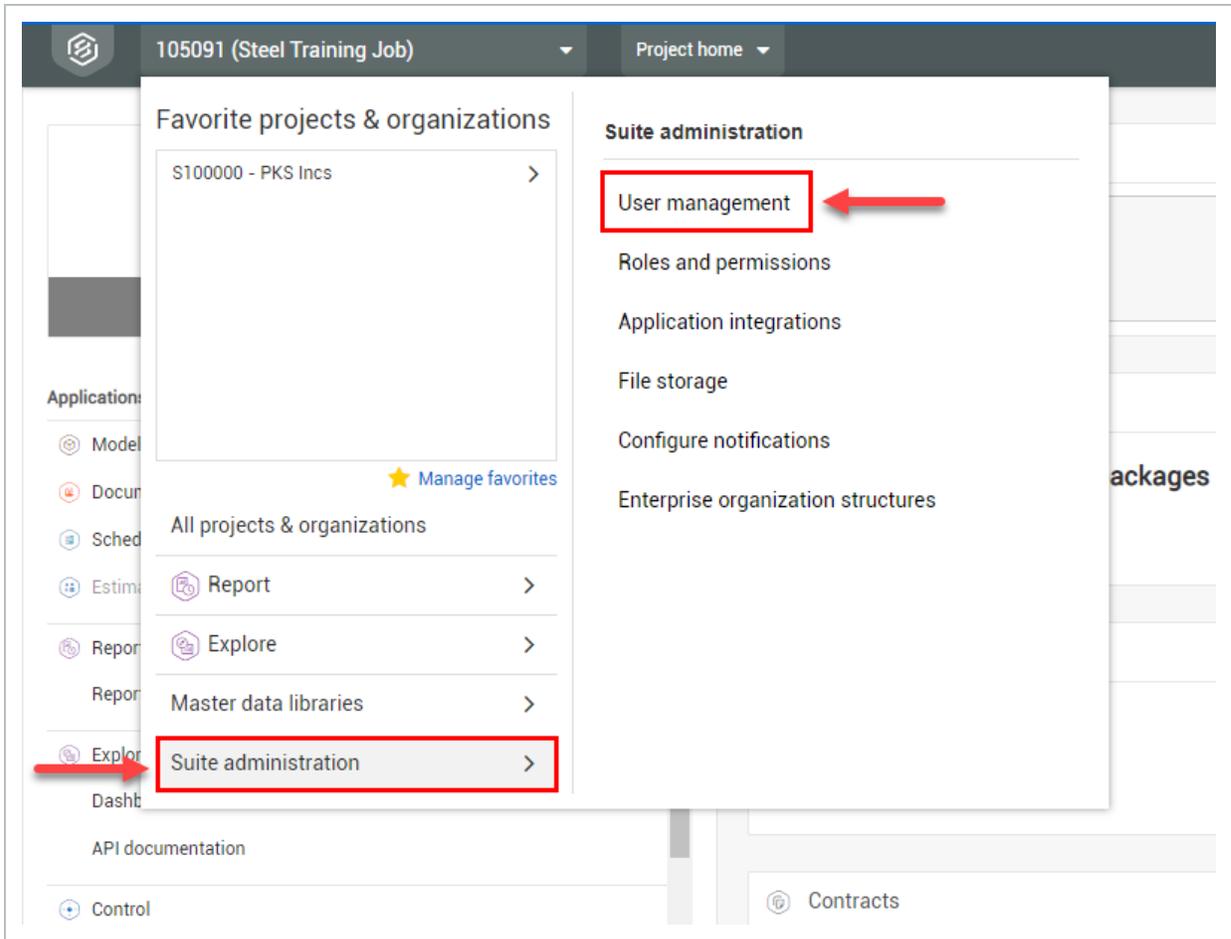
Establishing roles and permissions is an administrative function. As such, access to these settings may not be available to you, as the setup of these settings may not be within the scope of your daily tasks.

12.0.2 User Management

The User Management page provides a list of users inside your organization. You can view any user's project access, roles, and permissions within your organization. Users with required administrative permissions can edit and grant permissions to other users, up to the equivalent level of access they have been granted.

View the Role and Permissions of a User

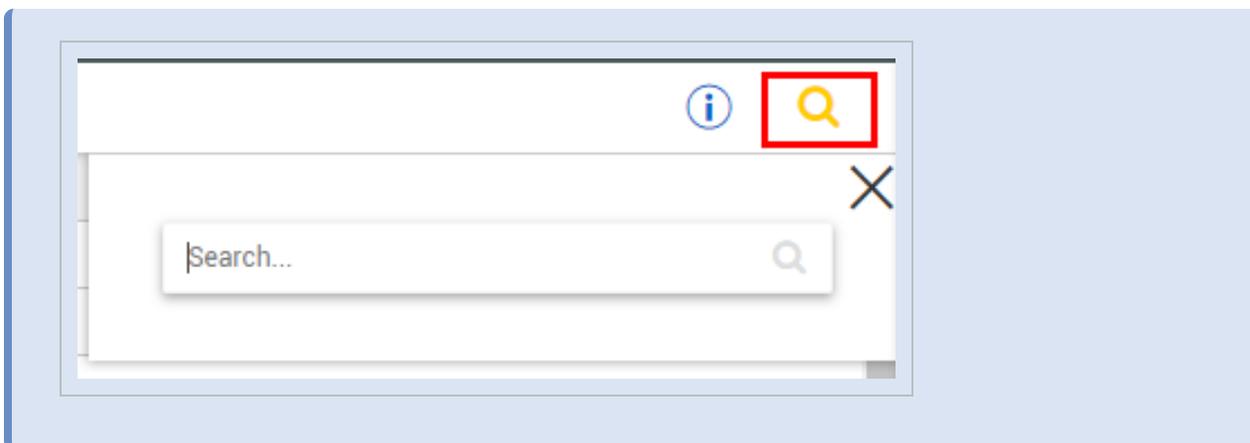
1. From any InEight application, click on the **First Level Menu** in the upper left corner of your screen, and from the drop-down menu, select **Suite Administration**, then **User Management**.



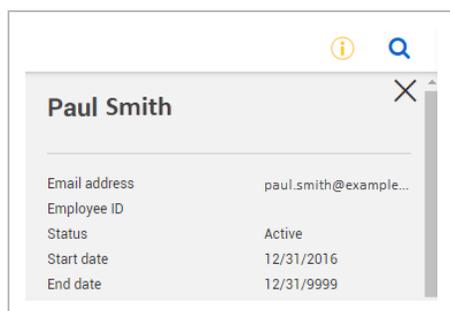
2. Scroll down the list or use the Search field to find and select **a user**.
3. To view the record, **right click** on the name, and select **Show Info**.
 - You can also click on the Show Info button located on the upper-right register menu bar



You can use the Search located in the upper right corner of the page to search for a keyword in any column in the User Management database.



- Once you click on the **Show Info** option, a slide out panel appears on the right. From this panel, you can view the contact information, as well as the role and project access of that specific user.



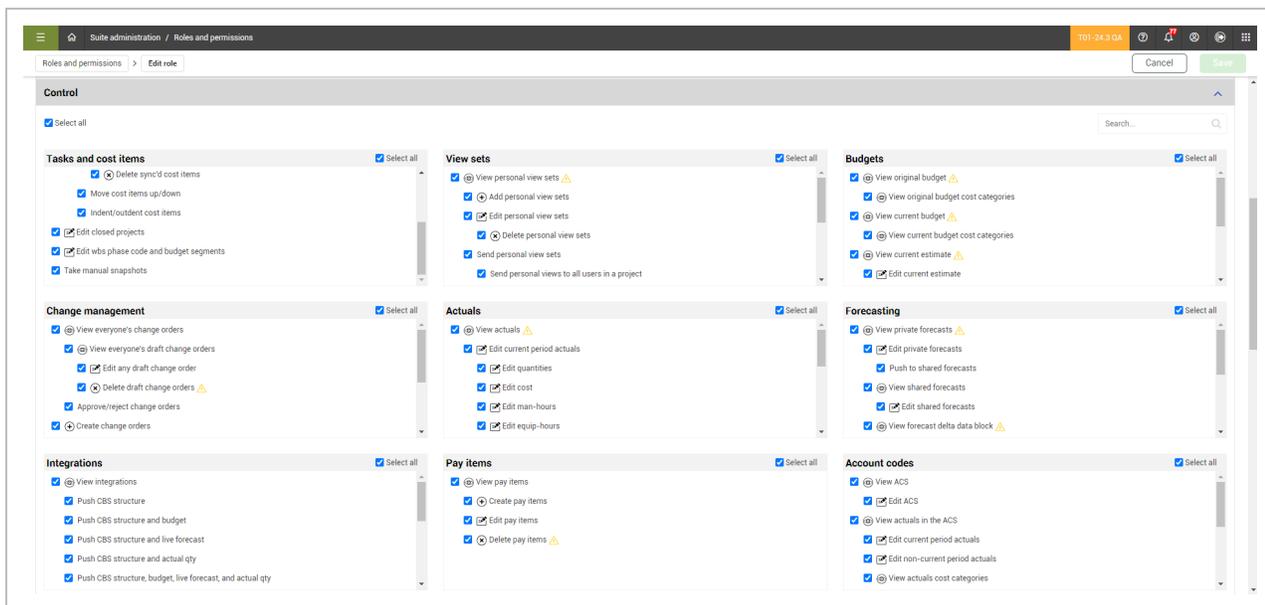
Note that once your organization implements the InEight cloud platform, you will be able to link your contacts' address book to your user information.

12.0.3 Organizational Breakdown Structure

The Organizational Breakdown Structure represents the way your company is structured and divided, such as departments, districts, sectors, etc. Roles and permissions can be added at different levels in your OBS, so users with a district level access would have access to all the projects under that district's umbrella.

12.0.4 Roles and Permissions

A role is defined as the function that a user occupies inside an organization or project. A role in Platform contains a set of predetermined authorizations and permissions. When a role is assigned to a user, they acquire all the permissions of that role in the project or organization that you can assign to users or project staff. With sufficient rights and permissions, you can add or remove a role and all access it provides from the user. The Roles and Permissions section is where you can view what permissions each different role has. Refer to Platform topic for information about adding, deleting, modifying, and assigning roles.



The administrator levels range from 0-3 and give you a predetermined set of permissions, with the lowest level giving read only access, and higher levels having more abilities to adjust settings and edit fields within the InEight portfolio of products.

InEight Control has many permissions that control important functions within the program.

12.1 PROJECT SETTINGS

To manage a project successfully in Control, the correct project details must be added before project initiation. To view project details, go back to the **All projects & organizations** page of the InEight cloud platform.

12.1.1 Organizations Page

The Organizational Breakdown Structure (OBS) represents the hierarchical company structure. It can have regions, such as Eastern and Western, and within those regions, the company can have also divisions, such as Electrical, Paving, and Masonry. The organization can continue to be more refined to the level such as states, cities, districts. Projects are the lowest level of the structure but they do not show in the OBS.

The OBS controls your access. Where you are assigned in the organization determines what access you inherit and the visibility you have to other areas of the OBS. The higher the level a user is placed on the OBS, the more actions they can perform, and the more organizations and projects they can view. A user assigned at only the project level has no visibility to any other projects or administrative pages.

To access the OBS, go to All projects & organizations > **Organization**.

The screenshot displays the 'All projects & organizations' interface. The 'ORGANIZATIONS' tab is active, showing a table with the following data:

Organization	Description	Created by	Created on	Last modified on
S100000 - PKS Inc	PKS Inc	InEight Service Account	01/26/2017 9:48:11 AM	01/26/2017 9:48:11 AM
S100000 - PKS Inc_AA	AAUIO	Vijaya LakshmiDa-PTR@ineight	12/07/2022 2:15:54 AM	12/07/2022 2:15:54 AM
S100000 - PKS Inc_Concentrix	Concentrix Desc	Kullai Reddy	09/15/2022 11:51:58 PM	09/15/2022 11:51:58 PM
S100000 - PKS Inc_Core_Test_Org_102	Core_Test_Org_102	Core qa1	07/08/2022 12:35:26 PM	07/08/2022 12:35:26 PM
S100000 - PKS Inc_Core_Test_Org_1118	Core_Test_Org_1118	Core qa1	07/27/2022 5:14:32 AM	07/27/2022 5:14:32 AM
S100000 - PKS Inc_Core_Test_Org_1169	Core_Test_Org_1169	Core qa1	08/02/2022 4:13:08 AM	08/02/2022 4:13:08 AM
S100000 - PKS Inc_Core_Test_Org_2014	Core_Test_Org_2014	Core qa1	08/04/2022 12:38:29 PM	08/04/2022 12:38:29 PM
S100000 - PKS Inc_Core_Test_Org_2150	Core_Test_Org_2150	Core qa1	07/25/2022 10:10:38 PM	07/25/2022 10:10:38 PM
S100000 - PKS Inc_Core_Test_Org_2244	Core_Test_Org_2244			
S100000 - PKS Inc_Core_Test_Org_2335	Core_Test_Org_2335			
S100000 - PKS Inc_Core_Test_Org_2362	Core_Test_Org_2362			
S100000 - PKS Inc_Core_Test_Org_242	Core_Test_Org_242			
S100000 - PKS Inc_Core_Test_Org_2436	Core_Test_Org_2436			
S100000 - PKS Inc_Core_Test_Org_2458	Core_Test_Org_2458			
S100000 - PKS Inc_Core_Test_Org_2482	Core_Test_Org_2482			

The 'Edit organization' modal is open, showing the following configuration options:

- Parent organization:** Root organization
- Name:** S100000 - PKS Inc
- Description:** PKS Inc
- External organization ID:** RootOrg1
- Configurations:**
 - Default base currency:** USD - US Dollar
 - Account code delimiter:** Period (.)
- Budget code:** Using unique budget code?
- Unique budget code:** Segment 1: Project

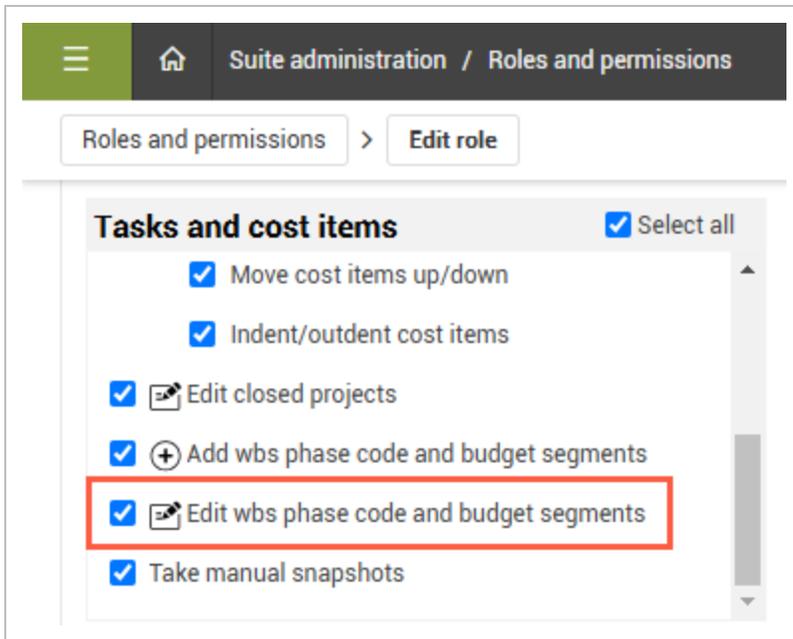
12.1.1.1 Unique budget code segments

You can populate budget segments in Workspaces to show a unique code label. Unique budget code segments contain additional options to identify a cost item using four independent fields that are separated by periods. Budget codes can be configured at the organization level and are primarily used with Time Center.

The screenshot displays the 'Budget code' configuration page. At the top, a tooltip explains that segments are combined to create a single unique budget code. A toggle switch for 'Using unique budget code?' is turned on. The configuration area is divided into four segments: Segment 1 (Project), Segment 2 (Cost center), Segment 3 (Other (String)), and Segment 4 (Phase code). A red box highlights the 'Project' dropdown menu, which is open to show options: 'Project', 'Cost center', 'Phase code', and 'Other (String)'. Below the configuration, there is a 'Tasks' table with columns for CBS position, Description, and four Budget Segment columns (1-4). The table shows a hierarchical structure of tasks with their corresponding budget codes.

CBS position	Description	Budget Segment 1	Budget Segment 2	Budget Segment 3	Budget Segment 4	Forecast method
1	Financial Results ...	103961		1000		Average performan...
2	Misc: Rev Internal	103961		1103		Rollup
2.1	Misc: Rev Internal	103961		1104		Manual (EAC)
2.2	Escalation/Contin...	103961		1101		Rollup
2.2.1	General Project Ri...	103961		1102		Current estimate
2.3	Directs	103961		1001		Rollup
Subtotals 163						

When the edit WBS phase codes and budget segments permission is assigned to a role in Suite administration > Roles and permissions > **Control**, users are allowed to populate the WBS phase codes and budget segments in the CBS workspace. This permission only applies based on configurations set for the WBS phase code and the budget segments. The edit WBS phase codes and budget segments permission must be selected to allow users to edit WBS phase codes and budget segments.



When only the Add wbs phase code and budget segments permission is assigned, users are only allowed to import WBS phase code and budget segments, and not to edit them.

When importing, users who have only been assigned the Add wbs phase code and budget segments permission must use the **New items** option in the Import CBS data dialog box.

Import CBS data

Import from Excel (.xlsx, .xls) or Comma separated value (.csv)

Drag and drop the file here
or browse

[Browse](#)

Options

* Import type

Cost items and cost item attributes ▼

- Update existing and new items
- Update existing items
- New items

[↓ Cost categories list](#)

i The import file is read and field mapping can be specified. Mapping uses row 1 headers from the source document

For new cost items, if the CBS position field is mapped then the position specified is where the cost item will be placed in the hierarchy. If the CBS position field is not mapped then the new cost item will be inserted at the bottom of the CBS hierarchy.

[Cancel](#)

[Next](#)

Open Project Details

1. From the All projects & organizations page, right-click on **your job**.
2. Select **Edit Project**, or click the **Edit** icon.

12.1.2 Project Page

The Edit Project page is where general project setup information is edited and stored, including the following settings:

- Project Details
- Location
- Project Dates
- Prime Contact
- Currency and Markets

All projects & organizations > Edit project
DETAILS INFORMATION ATTRIBUTES
Project settings Cancel Save

Project details



Add project image
Minimum of 540px x 360px

* Project ID 0020029472	* External project ID 0020029472	Notes
* Name James River WWTP and AWT Facility	* Status Active	
* Organization S100000 - PKS Inc ; SA1000 - Kiewit Corporation ; SB3000 - Infrastructure ; SC3002 - Infrastructure Central ; SD3003 - Infrastructure Central (SVP Level) ; SE6...		

Location

Country / Region	Address 1	Address 2	City
State	Postal / Zip code	Latitude	Longitude
			* Time zone (UTC-06:00) Central Time (US & Canada)

Project dates

Project start date 02/01/2020	Project end date 02/14/2020	Forecast start date	Duration	Forecast completion date
<small>Hint: Notice to proceed date or date contract time b...</small>		<small>Hint: forecast time duration in calendar days</small>		
Forecast extensions/reductions	Forecast revised duration	Forecast revised completion date		

Prime contract

Company legal name <small>Hint: Business name</small>	Original contract amount	Contract number <small>Hint: Client or Designer project number</small>	Contract date <small>Hint: Date original contract signed</small>
Contract start date <small>Hint: Notice to proceed date or date contract time b...</small>	Duration <small>Hint: Contract time duration in calendar days</small>	Contract completion date	Certificate of substantial completion(expected)
Contract extensions/reductions	Contract revised duration	Contract revised completion date	Certificate of substantial completion(awarded)
			Certificate of final completion(expected)
			Certificate of final completion(awarded)

Currency

* Base currency
USD - US Dollar
Hint: type the entity name or code. i.e. USD

[Add another currency](#)

Project contacts

Owner	Designer
Contact 1	Contact 2
Contact 3	Contact 4

Markets

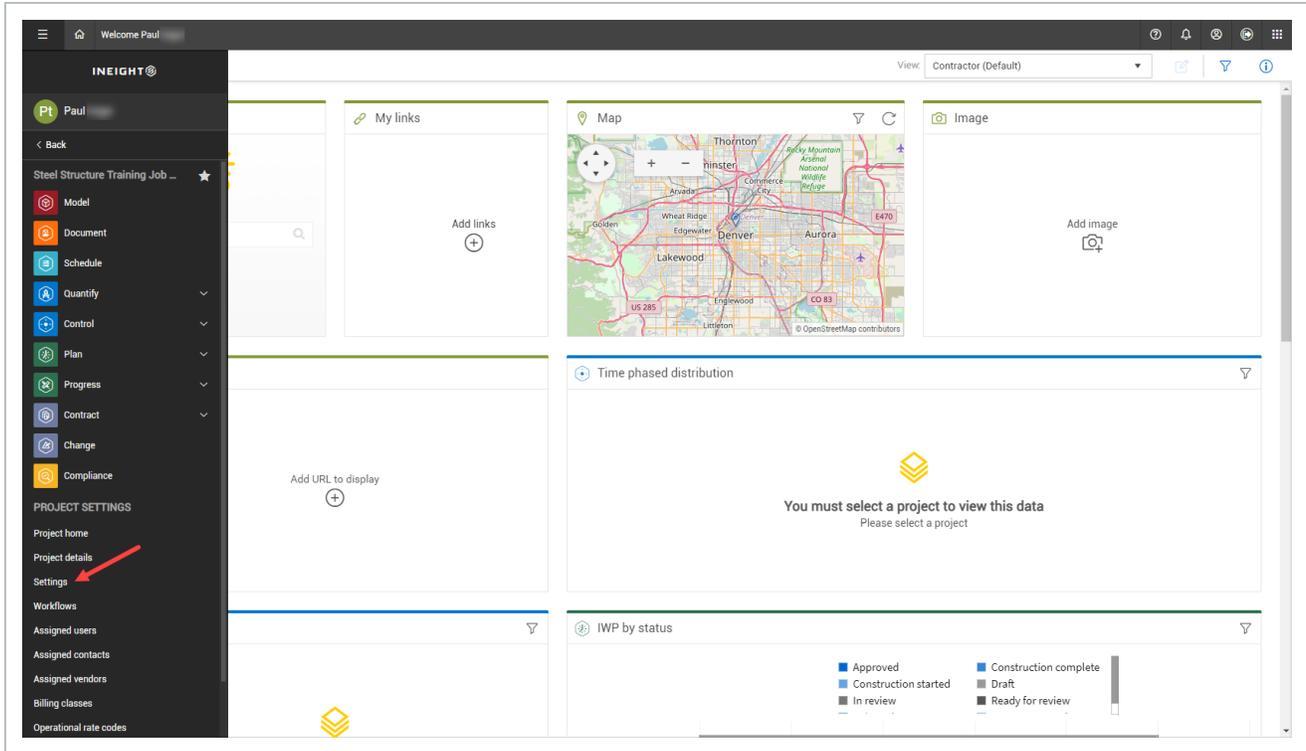
Market
Hint: type the market name or description

[Add another market](#)

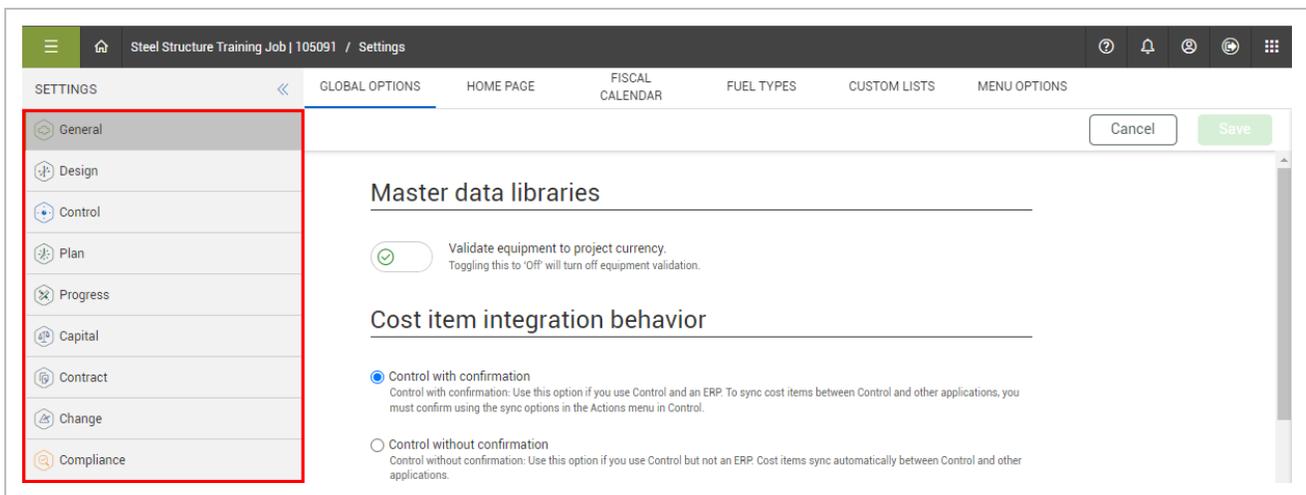
12.1.3 Project Settings

You access Project settings from the Project home landing page. From the Project home page, you can either:

- Select **Settings** from the side menu
- Select **Manage settings** on the Settings tile



The Project settings page contains setup information for all the InEight products, including Control. A list of tabs on the left allow you to navigate to the appropriate settings for each application.

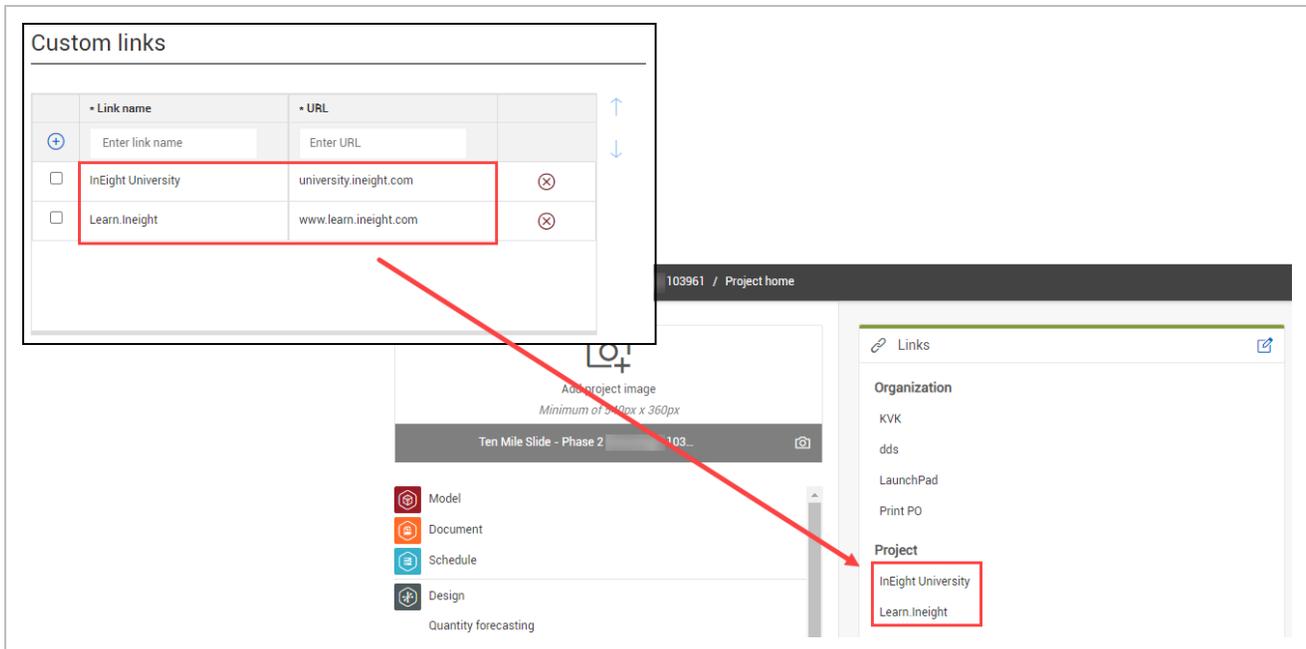


The settings that pertain to Control are located under two of the tabs, as listed below:

- General
 - Home Page
 - Global Options
 - Fiscal Calendar
 - Document Types
 - Custom Lists
 - Attribute Definitions
 - Menu Options
- Control
 - Project Tracking (*Organization, Project*)
 - Forecast (*Organization, Project*)
 - Estimate Resources (*Organization, Project*)
 - Schedule (*Organization, Project*)
 - Revenue (*Project*)
 - Sync Integrations (*Project*)
 - Others (*Organization, Project*)

12.1.4 Home Page

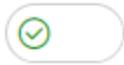
The Home Page tab lets you create URL links to be placed directly on the Project home page at both the Organization and Project levels.



12.1.5 Global Options

The Global Options tab controls the master data libraries, cost item integration behavior, advanced work and scheduling features, and the template library. The three cost item integration behaviors provide flexibility in how to configure Control with and without a direct tie to an ERP system. There is also an option to pass cost items directly from other sources to applications.

Master data libraries



Validate equipment to project currency.
Toggling this to 'Off' will turn off equipment validation.

Cost item integration behavior

- Control with confirmation**
Control with confirmation: Use this option if you use Control and an ERP. To sync cost items between Control and other applications, you must confirm using the sync options in the Actions menu in Control.
- Control without confirmation**
Control without confirmation: Use this option if you use Control but not an ERP. Cost items sync automatically between Control and other applications.
- Without control without confirmation**
Without control without confirmation: Use this option if you do not use Control. Cost items pass directly from other sources to applications.

Advanced work and scheduling features



Enables data sharing between Model, Schedule, and Plan applications for use with advanced work and scheduling features

Template library



Enables project to be listed as an available template library project

12.1.6 Fiscal calendar

The settings in the Fiscal Calendar can be set at the organization and project levels. These settings specify the start and end dates for fiscal years and financial periods, such as month-end dates. It is important to know the different cut-off dates, especially when you pull the current period actual quantities to compare them to prior periods, or when you synchronize your quantities with the other applications.

Changes to a project level fiscal calendar only impact the project, while changes to the organization level fiscal calendar impact all projects that do not have fiscal calendar modifications. If there are no changes at the project level, and the project matches the organization fiscal calendar settings, the project inherits the organization-level settings.

Any changes to the project fiscal calendar impact read-only snapshots, which are captured at the closure of month-end plus days, for the period month being closed. Changes also influence the monthly time buckets in time phase forecasting and budgeting and to the time periods in which claims can or cannot be posted.

Cancel
Save

* Week ending day

Saturday
▼

* Financial year start month

April
▼

Period end

* Month end day

Last day of the month
▼

Last weekday

▼

* Financial period closing day

Same as Month End Plus Days
▼

* Month end plus days

17

* Financial period closing time

09:30
🕒

* Closing time zone

(UTC-05:00) Eastern Time (US and Canada)
▼

12.1.7 Document Types

You can assign a document type to InEight applications. This lets you filter the payload of Document Types for visibility and use in the assigned application.

English				Español	
Name	Description	Product(s)	System managed	Name	Description
<input checked="" type="checkbox"/> Diagram	Diagram	Model, Document, Estimate, Control, Pla..	Yes	Diagrama	Diagrama
<input type="checkbox"/> Photo	Photo	Model, Document, Estimate, Control, Pla..	Yes	Imagen	Imagen
<input type="checkbox"/> Design	Design	Model, Document, Estimate, Control, Pla..	Yes	Design	Design
<input type="checkbox"/> Executed contract	Executed contract	Model, Document, Estimate, Control, Pla..	Yes	Contrato ejecutado	Contrato ejecutado
<input type="checkbox"/> Executed change order	Executed change order	Model, Document, Estimate, Control, Pla..	Yes	Orden de cambio ejecutada	Orden de cambio ejecutada
<input type="checkbox"/> Permit	Permit	Model, Document, Estimate, Control, Pla..	Yes	Permiso	Permiso
<input type="checkbox"/> Transmittal	Transmittal	Model, Document, Estimate, Control, Pla..	Yes	Transmisión	Transmisión
<input type="checkbox"/> Request for information	Request for information	Model, Document, Estimate, Control, Pla..	Yes	Solicitud de información	Solicitud de información
<input type="checkbox"/> Submittal	Submittal	Model, Document, Estimate, Control, Pla..	Yes	Envío	Envío
<input type="checkbox"/> Other	Other	Model, Document, Estimate, Control, Pla..	Yes	Otros	Otros
<input type="checkbox"/> Checklist	Checklist	Model, Document, Estimate, Control, Pla..	Yes	Lista de verificación	Lista de verificación
<input type="checkbox"/> Correspondence	Correspondence	Model, Document, Estimate, Control, Pla..	Yes	Correspondencia	Correspondencia

12.1.8 Custom Lists

Like the tag feature in InEight Estimate, you can enter your tags and their values to use later for categorizing your cost items as you manage your project in Control.

Many of the tag fields are validated fields, meaning you can choose from options in a drop-down list. You define both the names of the tags and their drop-down values here.

The field names associated with Cost breakdown structure and Account codes, are tags defined and editable at the organizational level; you cannot edit them at the project level, as indicated by the statement “Inherited from parent organization”.

List name	Label name	Associated entity	Field values	Inherited from parent org
<input type="checkbox"/> ACS tag 1	ACS tag 1	Account code	Multiple	Yes
<input type="checkbox"/> ACS tag 2	ACS tag 2	Account code	Multiple	Yes
<input checked="" type="checkbox"/> ACS tag 3	ACS tag 3	Account code	Multiple	Yes
<input type="checkbox"/> ACS tag 4	ACS tag 4	Account code	None	Yes
<input type="checkbox"/> ACS tag 5	ACS tag 5	Account code	None	Yes
<input type="checkbox"/> ACS tag 6	ACS tag 6	Account code	None	Yes
<input type="checkbox"/> ACS tag 7	ACS tag 7	Account code	None	Yes
<input type="checkbox"/> Change management ...	Change management ...	Change management	None	No
<input type="checkbox"/> Change management ...	Change management ...	Change management	None	No
<input type="checkbox"/> Change management ...	Change management ...	Change management	None	No
<input type="checkbox"/> CBS tag 1	CBS tag 1	Cost breakdown structure	None	No
<input type="checkbox"/> CBS tag 11	CBS tag 11	Cost breakdown structure	None	Yes

ACS tag 3 field values

Description

- Account Code Revision Sept 2015
- Account Code Revision July 2017
- Account Code Revision Mar 10 2015

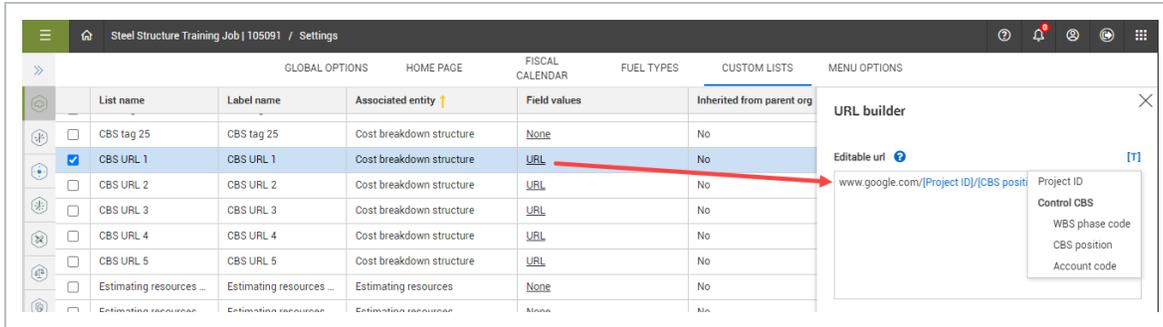
Inherited from parent organization

Close

12.1.8.2 CBS URL columns

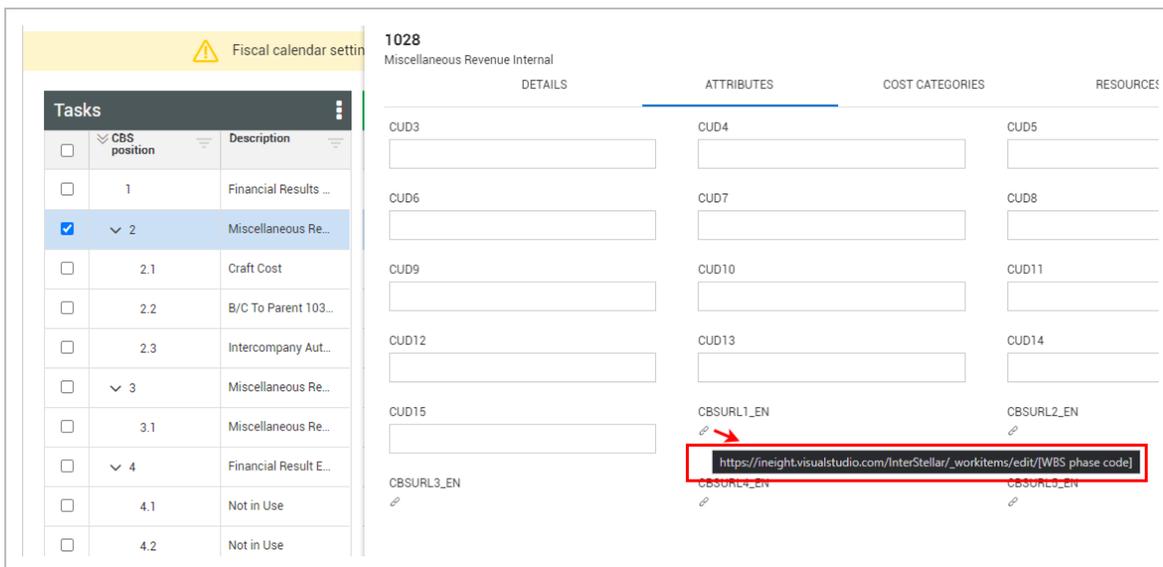
You can create direct links to URL addresses outside of Project Suite under Custom Lists. In the URL Field values you can define a URL with associated criteria to be used as an attribute for a cost item in the CBS.

In the URL Builder enter a URL that you want associated with your list name, along with any other dynamic attributes such as Project ID and CBS position code. Paste your URL and highlight the section you want to reference with another field. First highlight an attribute in the URL string, and then click the [T] reference icon to select which field to connect with.



These quick links are accessible in the CBS and can contain detailed information pertaining to the cost item and project, which can also link to external reports.

In the CBS cost item details attributes slide-out panel, the URL is concatenated to include the attributes defined. A link is included on a cost item that opens a new tab.



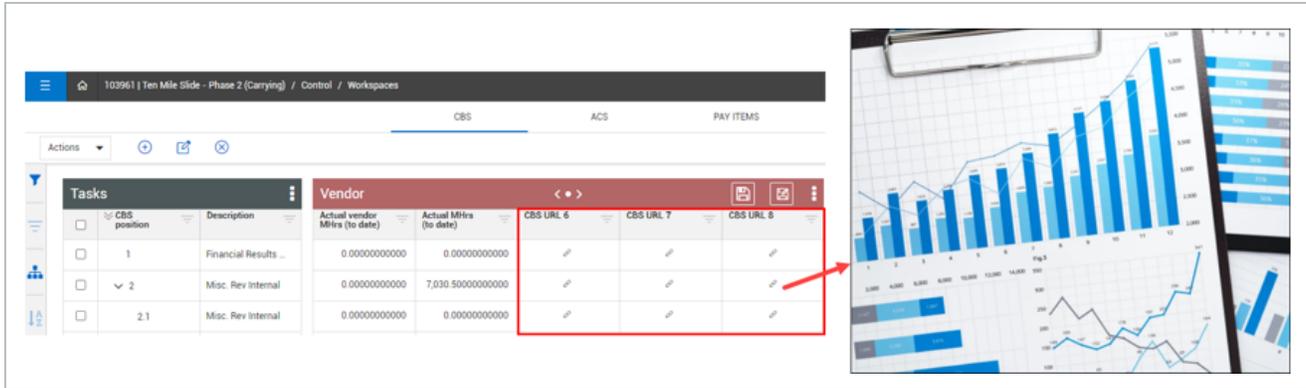
The links can also be accessed in the CBS register. Up to five CBS URL columns can be viewed in a data block in the CBS, per project.

Tasks				CBS URL 1					Forecast
CBS position	Description	WBS phase code						Forecast total cost	
<input type="checkbox"/>	1	Job Overhead	1002					\$ 250,000.00	
<input checked="" type="checkbox"/>	2	Earthwork	1069					\$ 400,000.00	
<input type="checkbox"/>	3	Concrete	1071					\$ 1,500,000.00	
<input type="checkbox"/>	4	Structural Steel	1073					\$ 1,516,282.48	
<input type="checkbox"/>	4.1	Erect Steel - Heavy	1074					\$ 25,666.00	
<input type="checkbox"/>	4.2	Erect Steel - Light	1005					\$ 200,000.00	
<input type="checkbox"/>	4.3	Bolted Connections	1006					\$ 49,955.00	
<input type="checkbox"/>	5	Materials	1084					\$ 1,750,000.00	
<input type="checkbox"/>	5.1	Earthwork - Mater...	1085					\$ 250,000.00	
<input type="checkbox"/>	5.2	Concrete - Materi...	1086					\$ 1,000,000.00	
<input type="checkbox"/>	5.3	Structure Steel - ...	1087					\$ 500,000.00	
<input type="checkbox"/>	6		1088					\$ 0.00	
Subtotals 12 (1 rows selected)								\$ 4,175,621.00	

At the organization level, CBS URL columns 6, 7, and 8 have been added to the CBS register. When you define a CBS URL, it is then applied to each of the organization’s projects.

	List name	Label name	Associated entity ↑	Field values	Inherited from parent org
<input type="checkbox"/>	CBS tag 24	CBS tag 24	Cost breakdown structure	None	No
<input type="checkbox"/>	CBS tag 25	CBS tag 25	Cost breakdown structure	None	No
<input type="checkbox"/>	CBS URL 1	CBS URL 1	Cost breakdown structure	URL	No
<input type="checkbox"/>	CBS URL 2	CBS URL 2	Cost breakdown structure	URL	No
<input type="checkbox"/>	CBS URL 3	CBS URL 3	Cost breakdown structure	URL	No
<input type="checkbox"/>	CBS URL 4	CBS URL 4	Cost breakdown structure	URL	No
<input type="checkbox"/>	CBS URL 5	CBS URL 5	Cost breakdown structure	URL	No
<input checked="" type="checkbox"/>	CBS URL 6	CBS URL 6	Cost breakdown structure	URL	Yes ↑
<input checked="" type="checkbox"/>	CBS URL 7	CBS URL 7	Cost breakdown structure	URL	Yes ↑
<input checked="" type="checkbox"/>	CBS URL 8	CBS URL 8	Cost breakdown structure	URL	Yes ↑

Creating organization-level CBS URL links lets you associate shared documentation, such as external standard reports that are used across the organization. Instead of setting up links for every project, you can create a CBS URL link in Settings > Custom Lists.



12.1.9 Attribute Definitions

Attribute Definitions are used to define project attributes which can be of the types text/date/number or can have source values from Organization, Project, and Market master data. These definitions are inherited to all projects in the organization.

*Fuel type	*Cost per UoM	*Currency	*UoM	Account code
<input type="text" value="Enter fuel type name"/>	<input type="text"/>	USD - US Dollar	Select one	Start typing account code
Gasoline	\$1.00000	USD - US Dollar	Gallon	71.06.32.016.02 - Turbine Enclosure - Install En... <input type="button" value="X"/>

12.1.10 Menu Options

The below URL addresses specific to InEight products are updated when licenses are purchased or activated. The URLs are customer specific. The ability to maintain the URLs are intended for users with account admin only (root Org Setting) permissions. If no other products are purchased or activated, the URL opens an InEight related page to learn more about the products.

Menu links

Configure the URL addresses for your InEight Products

Product	* URL	* Target	
Model	https://ineight.com/solutions/virtual-design-constr...	New tab	▲
Document	https://ineight.com/solutions/collaborative-docum...	New tab	
Basis	http://my.basisplanning.com	New tab	▼

12.1.11 Project Tracking (organization & project level)

Under the Control tab, Project Tracking settings configure how your project tracks progress and percent complete in Control.

These settings include the following options:

- What level to lock down your CBS structure to
- What value to base percent complete off
- If percent complete are capped at or allowed to exceed 100%

12.1.11.3 Tasks

The first option in the Tasks Section lets you maintain your CBS structure at a specific level. Selecting yes, lets you determine your own CBS structure level.

Tasks

Maintain CBS Structure at a specific level? Level to Maintain CBS Structure at

No

Generate WBS phase code automatically?

Yes

WBS Phase code generation method WBS Phase codes start value

Enable manual snapshots

Allow syncs to replace manual snapshots

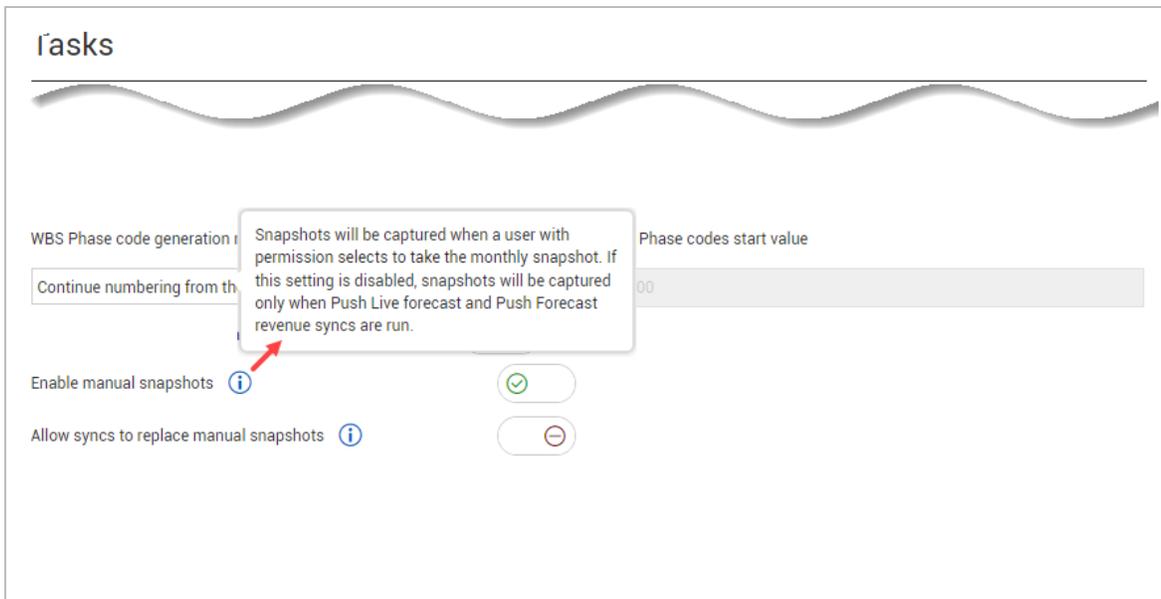
The second option is WBS Phase Code. Select Yes or No under the Generate WBS phase code automatically?

- Yes indicates phase codes for newly created cost items to be automatically generated
- The WBS Phase code generation method regenerates all values beginning from the specified start value
- The value entered in the WBS Phase code start value is the phase code for the first cost item created. When automatic phase code generation is activated, the proceeding new cost items is automatically created based on the phase code generation method selected.
- No indicates phase codes for newly created cost items must be manually entered

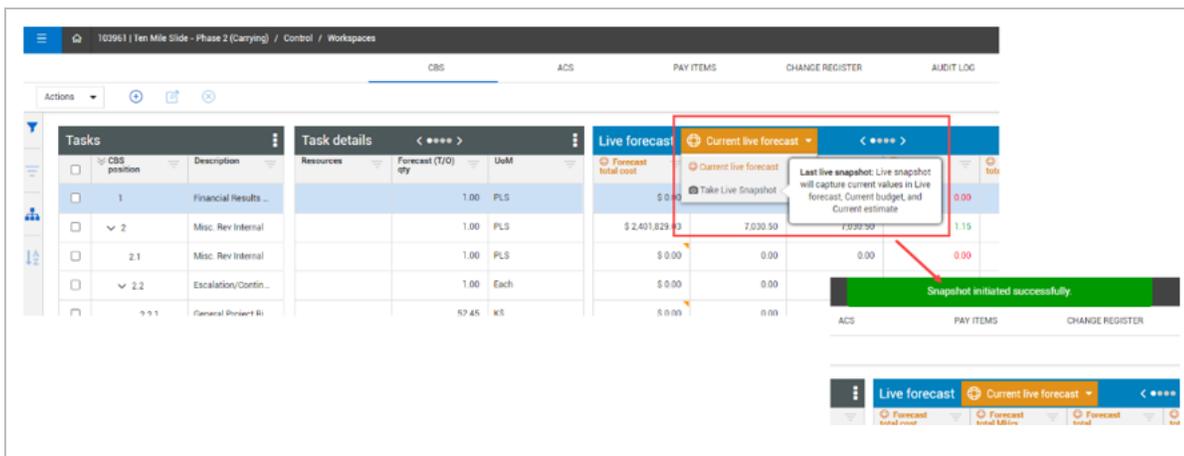
Enable Manual Snapshots

You can create a manual snapshot of Control project data in the CBS and Pay Items registers.

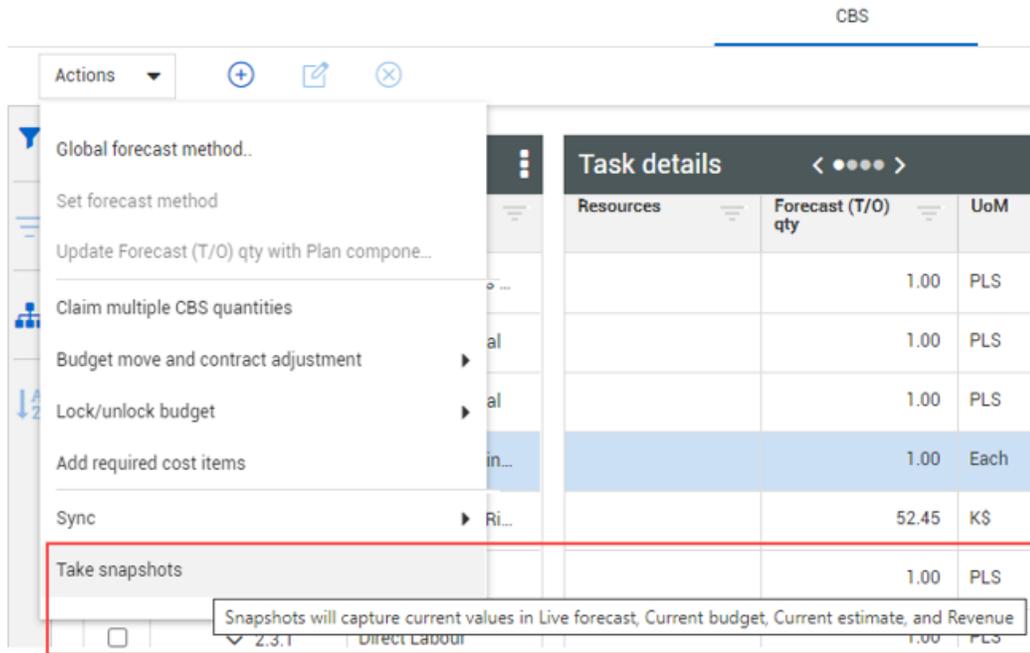
If you have the *Enable manual snapshots* setting enabled, you can create a snapshot at any point in time, separately from any of the above-mentioned syncs.



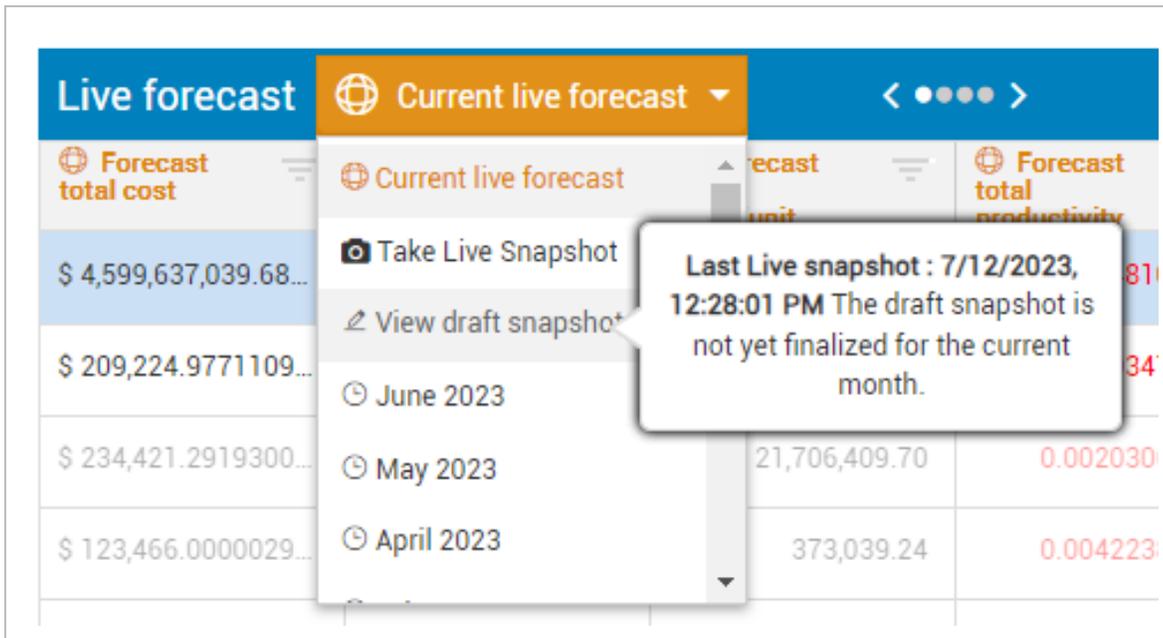
When the Enable Snapshots settings is enabled, you can select the **Take Live Snapshot** option from the Current Live Forecast drop-down menu in the CBS to capture current values in the Live Forecast, Current Budget and Current Estimate.



Snapshots can also be taken from the Actions menu.



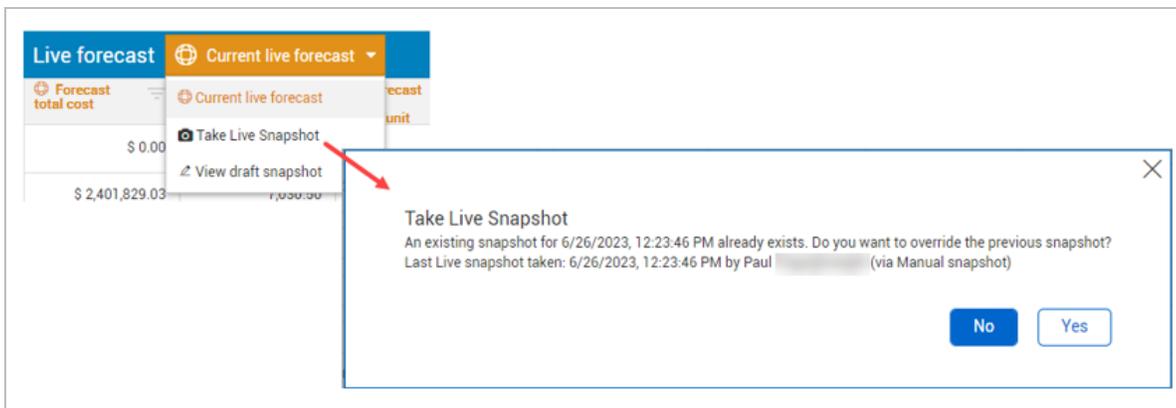
You can view the draft snapshot by selecting the View draft snapshot from the Current live forecast drop-down menu. This lets you know that the draft snapshot is not yet finalized for the current month.



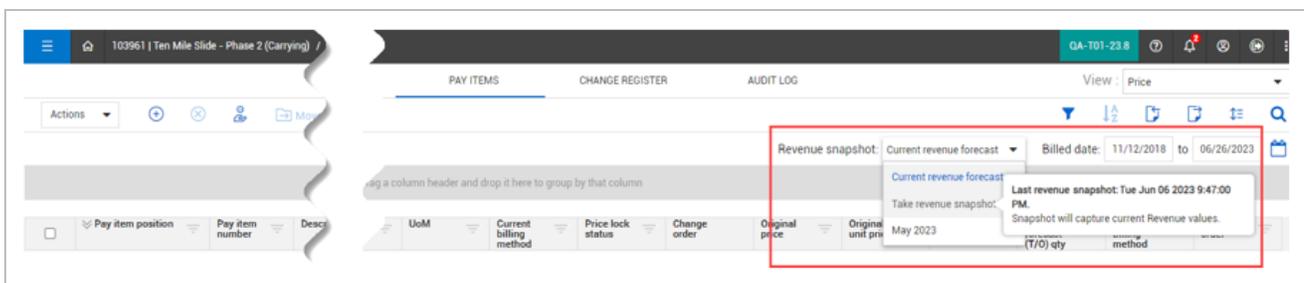
When you select **View draft snapshot**, the snapshot values load into the CBS in a read-only status.

Forecast total cost	Forecast total MHrs	Forecast total MHrs/unit	Forecast total productivity	Forecast total unit cost	Forecast method
\$ 0.00	0.00	0.00	0.00	\$ 0.00	Current estimate
\$ 2,401,829.03	7,030.50	7,030.50	1.15	\$ 2,401,829.03	Rollup
\$ 0.00	0.00	0.00	0.00	\$ 0.00	Manual (EAC)
\$ 0.00	0.00	0.00	0.00	\$ 0.00	Rollup
\$ 0.00	0.00	0.00	0.00	\$ 0.00	Manual (EAC)
\$ 705,957.35	3,821.00	3,821.00	1.38	\$ 705,957.35	Rollup
\$ 203,410.93	3,067.00	3,067.00	1.37	\$ 203,410.93	Rollup
\$ 15,337.63	268.00	268.00	1.45	\$ 15,337.63	Rollup
\$ 2,478.22	46.00	0.02	1.30	\$ 0.99	Average performan...
\$ 2,946.01	49.00	4.45	3.18	\$ 267.82	Manual (EAC)

When you select the **Take Live Snapshot** menu-option, consecutively, a message lets you know that an existing snapshot already exists and a choice to override the previous snapshot.

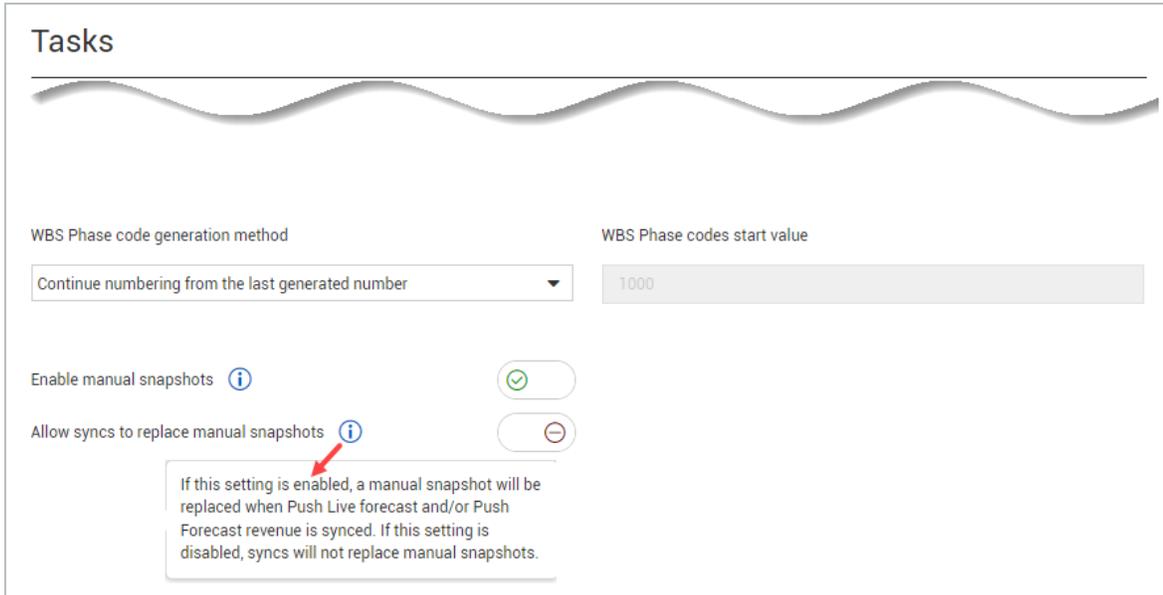


The same snapshot functionality now exists in Pay Items, with the exact same option.



Allow syncs to replace snapshots

When the *Enable manual snapshots* and the *Allow syncs to replace manual snapshots* toggle is turned *On*, the manual snapshot is replaced when the Push Live Forecast and/or Push Forecast revenue is synced. If this setting is disabled, syncs are replaced with manual snapshots.



12.1.11.4 Actuals

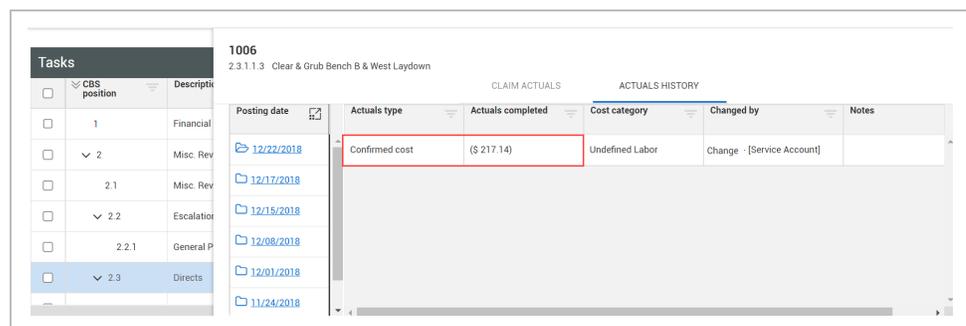
The image and table below give a brief explanation of Project Tracking: Actuals settings.

Overview - Project Tracking: Actuals

Title		Function
1	Calculate % complete	Calculate percent complete for individual cost items as a percentage of: <ul style="list-style-type: none"> • Forecast (T/O) Quantity • Current Budget Quantity
2	% complete cap	Cap any cost item percent complete at 100%
3	Calculating roll-up method	Calculate percent complete for roll-ups, such as superior cost items and account codes by Cost or Manhours

Overview - Project Tracking: Actuals (continued)

Title	Function
4 Roll-up % complete	Roll-up percent complete weighted by <ul style="list-style-type: none"> • Current Budget • Current Estimate
5 Calculate man hours earned at the parent level by...	Calculate man-hours earned for roll-up items by summing the man-hours earned of the contributing items (regardless of roll-up items percent complete). Option 1: The summation of man hours earned from direct child items Option 2: The total man hours multiplied by percent complete
6 Get actual cost from Contract	When turned on, the subcontract actual cost is received from Contracts. Actual costs from Contract can consist of a goods receipt, an accrual, or an invoice receipt/payment form. If a goods receipt and an invoice receipt come in at the same time for a record, the higher cost is recognized and not duplicated.
7 Drive committed cost values from Contract	When turned on, the committed costs is driven from Contracts. When turned off, committed costs are derived from the ERP.
8a Update % complete from Contract	Quantities that are claimed in Contract for SOV items updates the percent complete in Control when the Update % complete from Contract switch is enabled. Updating the percent complete provides you with another way to claim quantities against schedule of value items in Contract. When quantities are claimed against a schedule of values item in Contract and the Get quantities sync is executed in Control, the cost items actuals quantity completed gets updated with a percentage claimed toward the contract's schedule value total cost.



Overview - Project Tracking: Actuals (continued)

	Title	Function
8b	Calculate percent complete for individual cost items as a percentage of	Calculate the percent complete for individual cost items as a percentage of <ul style="list-style-type: none"> • Current estimate total cost • Committed total cost • Forecast total cost • Current estimate total cost

Actuals

Calculate percent complete for individual cost items as a percentage of

1
Forecast (T/O) qty

Cap percent complete at 100%

2
 Yes

Calculate percent complete for roll-up items such as superior cost items and account code by:

3
Cost

Roll-up percent complete weighted by

4
Current Budget

Calculate man hours earned at the parent level by 5

The summation of man hours earned from direct child items

The total man hours multiplied by percent complete

Get actual cost from Contract 6

Drive committed cost values from Contract 7

Update % complete from Contract 8 A

Calculate percent complete for individual cost items as a percentage of 8 B

8 B
Current estimate total cost

Current budget total cost

Committed total cost

Forecast total cost

Current estimate total cost

12.1.11.5 Estimated Actuals

This feature allows estimated actuals to be accrued to a cost item, then used to contribute to the forecast. This results in the forecast being more accurate. The estimated actuals are calculated based on the cost category values associated to the cost items.

When **Turn on estimate actuals** is enabled, you can choose to turn on or off estimated actuals based on the cost category. You can enable estimated actuals in both Control and InEight Progress.

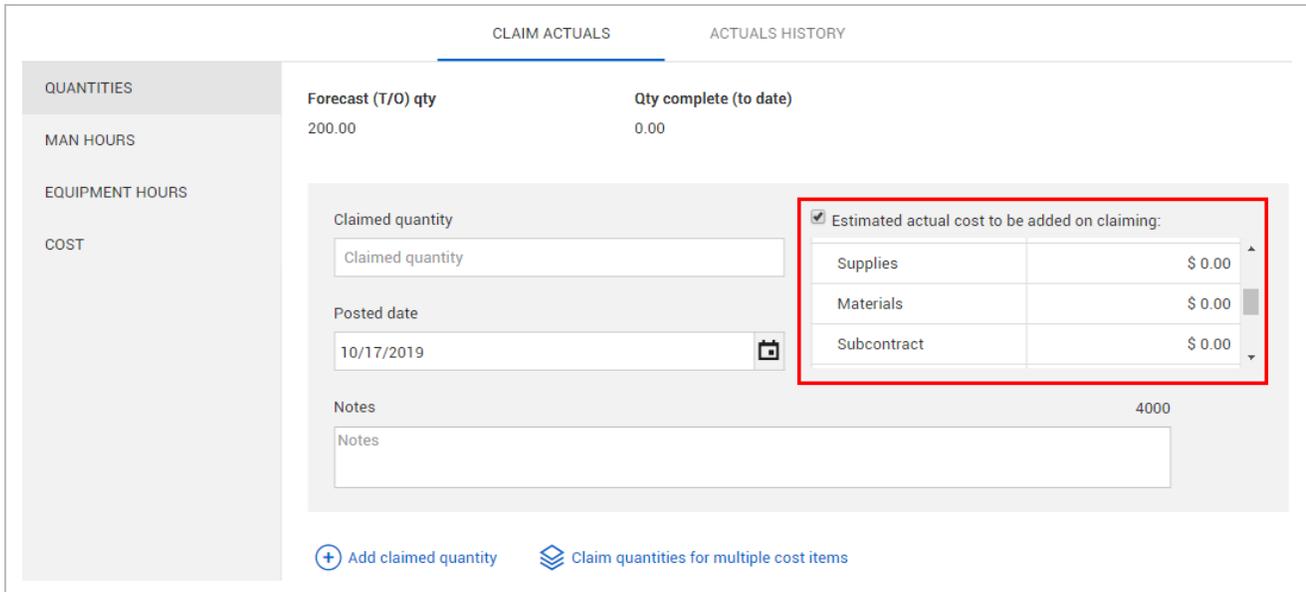
When any one of the following cost categories are enabled, the Claim Actuals tab shows the option when claiming quantity to accrue estimated cost based on the amount claimed.

Estimated actuals

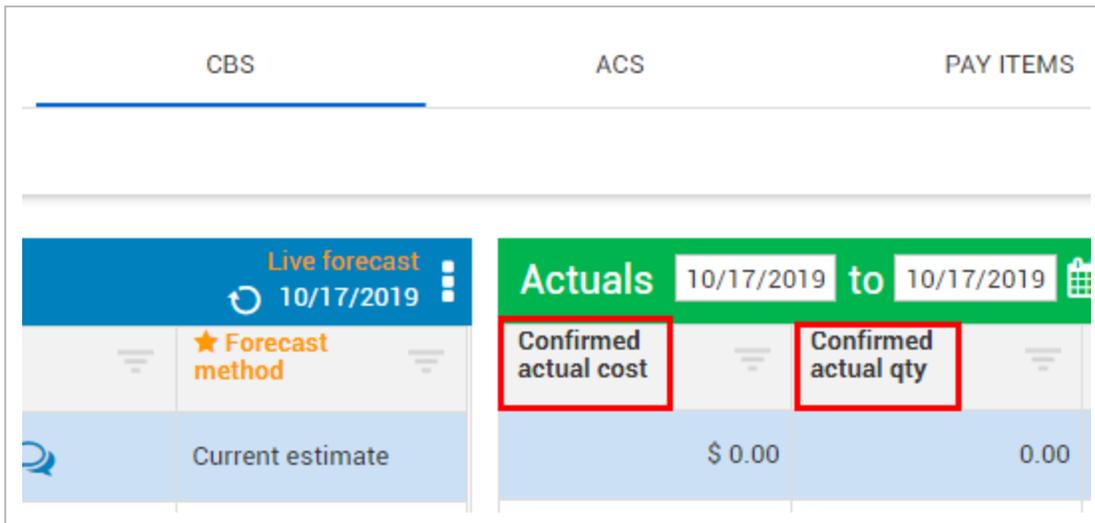
Turn on estimated actuals:

Actual type	Enable estimated actuals for.	
	Control	Progress
Labor cost	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Labor man hours	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Construction Equipment cost	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Construction equipment hours	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
FOM Rented Equipment cost	<input checked="" type="checkbox"/>	
Supplies cost	<input checked="" type="checkbox"/>	
Materials cost	<input checked="" type="checkbox"/>	
Subcontract cost	<input checked="" type="checkbox"/>	
Fees cost	<input checked="" type="checkbox"/>	
Allowance cost	<input checked="" type="checkbox"/>	
G & A cost	<input checked="" type="checkbox"/>	
Undefined cost	<input checked="" type="checkbox"/>	

You access the Claim actuals tab from the Control > Workspaces page by right-clicking the cost item on the CBS tab and selecting Actuals details. The Actuals details slide-out panel is then shown where you can select the estimated actuals option.



On the CBS tab, the estimated actuals are shown as columns. These values can be added to the Confirmed actuals (actuals that were imported into Control or manually entered in Control) to get all the actuals for the project that are available. This helps you more accurately forecast your project.



12.1.11.6 Enabling actuals for Progress

Using an example for Progress, if you have labor cost and man hours enabled for Progress and there is an approved daily plan in Progress, those man-hours go over to Control automatically as estimated man-hours. Then, those man-hours generate an estimated cost based on the operational rates for that resource. In this case, it would be using the Straight time rate, the Double time rate, and the Over time rate.

The same process can happen for construction equipment and equipment hours. For example, if you claim equipment hours in Progress and they are in an approved daily plan, then those hours go over to Control as estimated equipment hours. The operational and equipment resources also have a unit cost. Those hours times for that unit cost can then be used to generate an estimated construction equipment cost.

12.1.11.7 Enabling actuals for Control

If man-hours and equipment hours are enabled, then you claim a quantity, it can generate estimated man-hours and equipment hours if there are CE amounts on those hours. For example, CE man hours per unit and CE equipment hours per unit can be estimated. If those are nonzero and you claim quantity, then the estimated man hours and equipment hours are generated.

Tasks											
	CBS position	Description	WBS phase code	#Hrs (to date)	Equipment hours (to date)	Estimated actual cost	Estimated actual man hours	Estimated actual equipment	CE Mhrs/Unit	CE equipment-Hrs/Unit	Last estimated actual man hours reversal
<input type="checkbox"/>	41	Cost item 1	01	0.00	0.00	\$ 0.00	0.00	0.00	0.00	0.00	
<input type="checkbox"/>	42	Cost item 2	02	0.00	0.00	\$ 0.00	0.00	0.00	0.00	0.00	
<input type="checkbox"/>	43	Cost item 3	03	100.00		\$ 0.00	0.00	0.00	0.00	10.00	03/29/2021 3:07:2
<input type="checkbox"/>	44	Cost item 4	04	0.00	0.00	\$ 0.00	0.00	0.00	0.00	0.00	

If you do not have estimated actuals enabled in the project settings, you do not see any of the Estimated actuals columns, and you also cannot add them to your view. Some of these columns are a direct correlation with Progress.

Some of these columns are also from Control. The columns from Progress generate actual man-hours and equipment hours from claimed quantity in Control. These columns come over directly from Control and they affect your forecasts. Any estimated man-hours are included in your man-hours to date and then the estimated actual cost is included in your total cost to date.

Your forecast equations look for total cost to date, man-hours to date, and equipment hours to date to generate forecasts.

12.1.11.8 Estimated actuals process overview

When you have synced everything from Progress, it is now in your ERP system. You can then bring in the man-hours and equipment hours through the sync.

	Estimated actual cost	Estimated actual man hours	Estimated actual equipment	CE Mhrs/Unit	CE equipment-Hrs/Unit	Last estimated actual man hours reversal	Last estimated actual equip hours reversal	Issue
0	\$ 0.00	0.00	0.00	0.00	0.00			
0	\$ 0.00	0.00	0.00	0.00	0.00			
0	\$ 1,250.00	110.00	20.00	10.00	1.00	03/29/2021 3:07:2...	03/29/2021 3:08:7 ...	
0	\$ 0.00	0.00	0.00	0.00	0.00			

After the sync is completed, you can reverse the estimated actuals as they have been accounted for as confirmed actuals by bringing the actuals through the sync.

The Estimated columns are only general estimates. They are not confirmed hours until synced with an ERP or an external payroll system. With an ERP you can make changes to where you can have taxes added on which would raise the price for the estimated actuals. Estimated actuals that go into Control from Progress are not guaranteed to be 100% correct. Your ERP is what confirms the final cost.

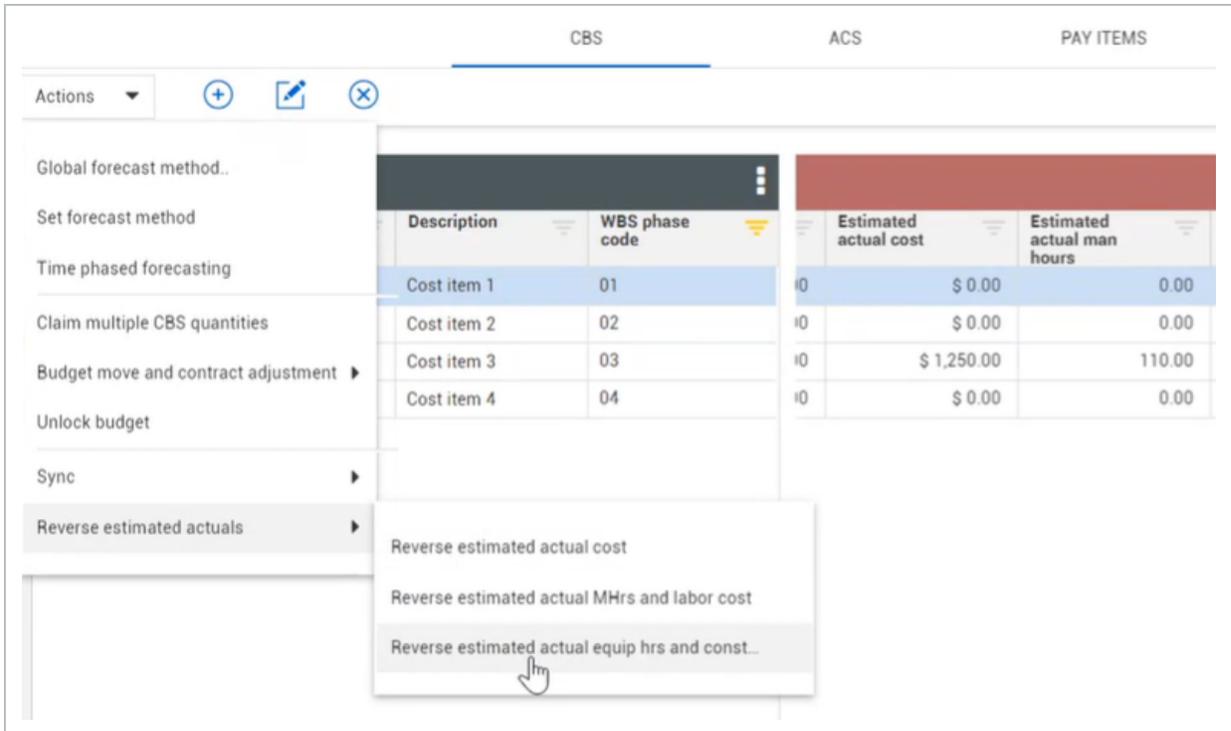
12.1.11.9 Reversing estimates

When you bring in values from your ERP system, you can reverse your estimates with the actual values as the replacement.

If you keep the estimated values without reversing after syncing with ERP system, those values are detected as double values.

Reversing Estimated Actuals

1. From the CBS, select the cost items you want to revert actuals.
2. Select the Actions drop-down menu.
3. Hover over Reverse estimated actuals. Then, select **Reverse estimated actual equip hrs and const....**



4. Click **Yes** to confirm reversal.

You can also select Reverse estimated actual cost or Reverse estimated actual MHRs and labor cost.

5. In the CBS, look for the Last estimated actual man hours reversal or Last estimated actual equipment hours reversal columns.

	Estimated actual cost	Estimated actual man hours	Estimated actual equipment	CE Mhrs/Unit	CE equipment-Hrs/Unit	Last estimated actual man hours reversal	Last estimated actual equip hours reversal	Issue
0	\$ 0.00	0.00	0.00	0.00	0.00			
0	\$ 0.00	0.00	0.00	0.00	0.00			
0	\$ 1,250.00	110.00		20.00	10.00	03/29/2021 3:07:2...	03/29/2021 3:08:7...	
0	\$ 0.00	0.00	0.00	0.00	0.00			

Those columns show the date of the last time you reversed the amount.

In the actual history, the reversal shows as negative entries when you have successfully reversed the estimated actuals.

12.1.11.10 Time Phasing budget

Time phasing your forecast lets you take your forecast and break it down into more consumable, estimate related time blocks/periods. This gives you more visibility into what activities and costs are going to occur in smaller time periods. Time Phasing is explained further within the Forecasting lesson, under Time Phased Forecasting.

Time phasing the budget lets you plan out where to spend money in the months of the active fiscal calendar for your project. Time Phased Budget is explained further within the Revenue lesson, under Time Phased Budget.

Time phasing

Enable time phasing for the following:

Budget 



Edit past Time phased budget values



12.1.12 Forecast (organization & project level)

12.1.12.11 Time Phasing

Time phasing your forecast lets you take your forecast and break it down into more consumable, estimate related time blocks/periods. This gives you more visibility into what activities and costs are going to occur in smaller time periods. Time Phasing is explained further within the Forecasting lesson, under Time Phased Forecasting.

Time phasing

Enable time phasing for the following:

Forecasting  

Push Time phased forecast to Live forecast 

Commitments  

12.1.12.12 Forecast

The image and table below give a brief explanation of Project Tracking: Forecast.

Overview - Project Tracking: Forecast

Title	Function
<p>1 % complete for delta from straight-line</p>	<p>% complete threshold for delta from straight-line calculation:</p> <p>By configuring the value of % Complete threshold, you can determine the equation used for the Delta from Straight-Line column depending on if those cost items have their % complete greater than or less than the value set in configurations.</p> <p>Changing the threshold and impacting the formula is necessary because when a cost item has not been sufficiently completed, the actuals data is not yet reliable enough to predict the final anticipated cost (forecast cost) of that scope of work, so a different equation should be used until that cost item has been sufficiently completed.</p> <p>For example, if the threshold is 3% complete, and a cost item is less than 3%, then delta from straight line = Forecast total cost - CB total cost. Once the cost item has reached 3% complete, then the calc switches to Forecast total cost - Average performance total cost</p>

You can set manual forecast notes to be mandatory when switching to a manual forecast type. When the Mandatory notes for manual Forecasts switch is set to *On*, entering forecast notes is mandatory for Manual (EAC) and Manual (ETC) forecasts.

Forecast

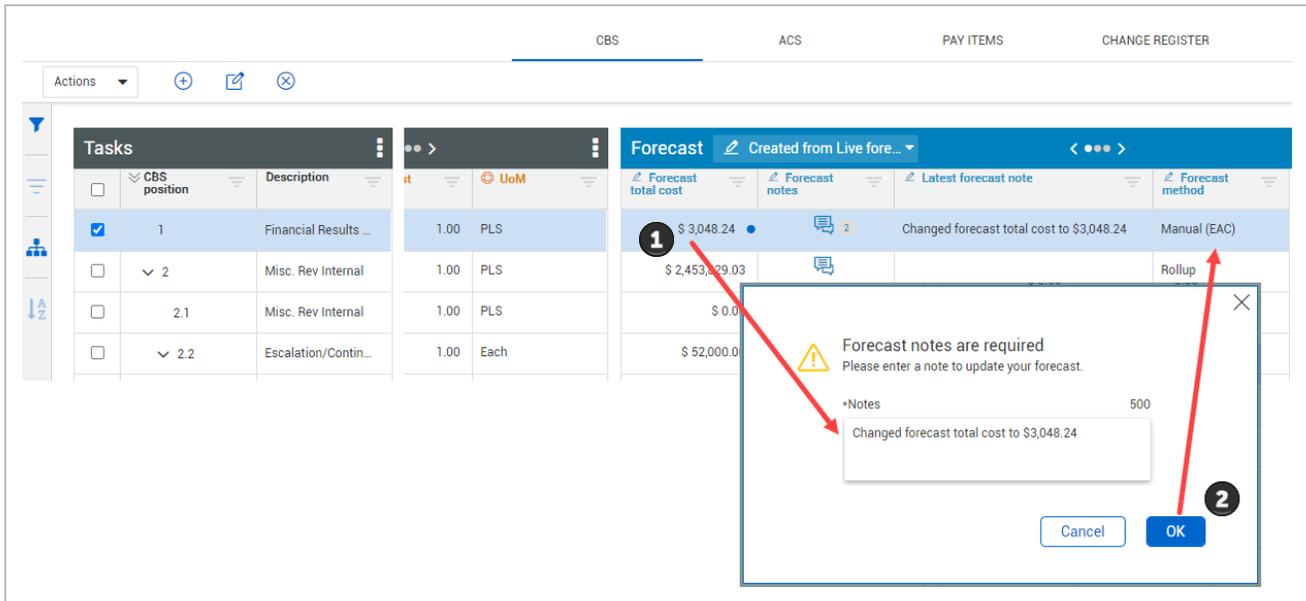
% complete value at which delta from straight line calculation utilizes average performance

Mandatory notes for Manual forecasts i

⊖

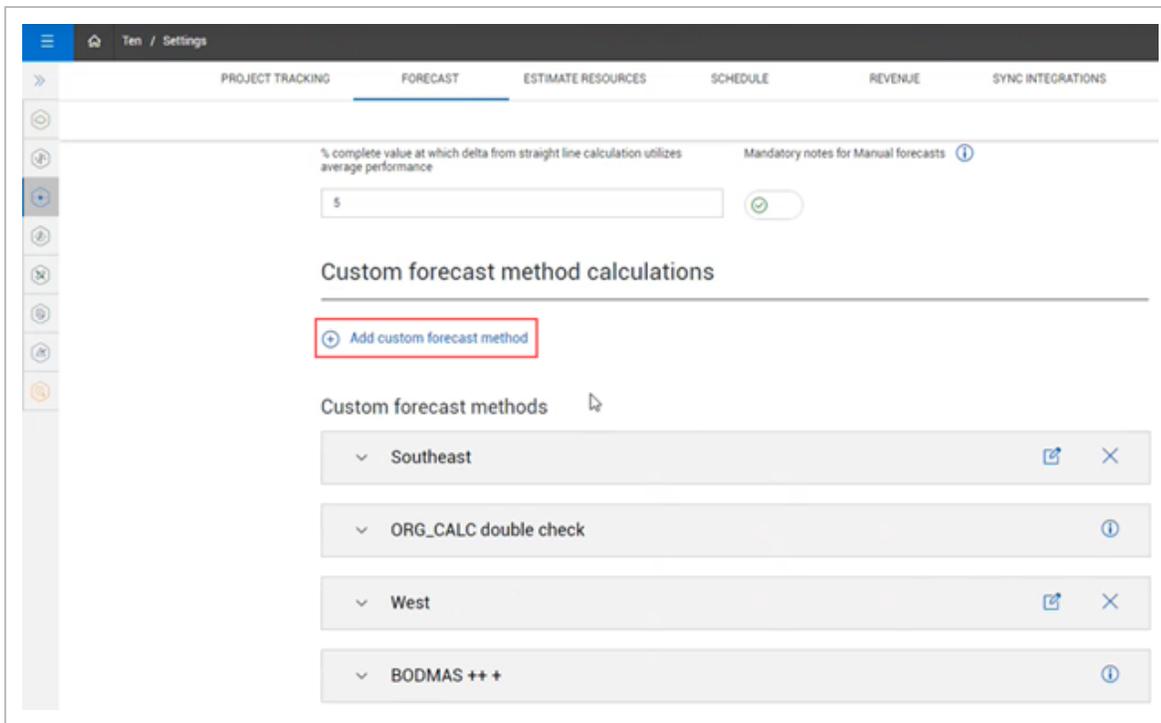
When manually forecasting, notes are required to be entered in the Forecast Notes dialog box. Once confirmed, the notes are captured, and the forecast method automatically changes to *Manual*.

This feature helps to keep track of manually entered forecasts. You can use the notes to explain the forecast. For example, you can enter a rationale for why a manual forecast is being used.



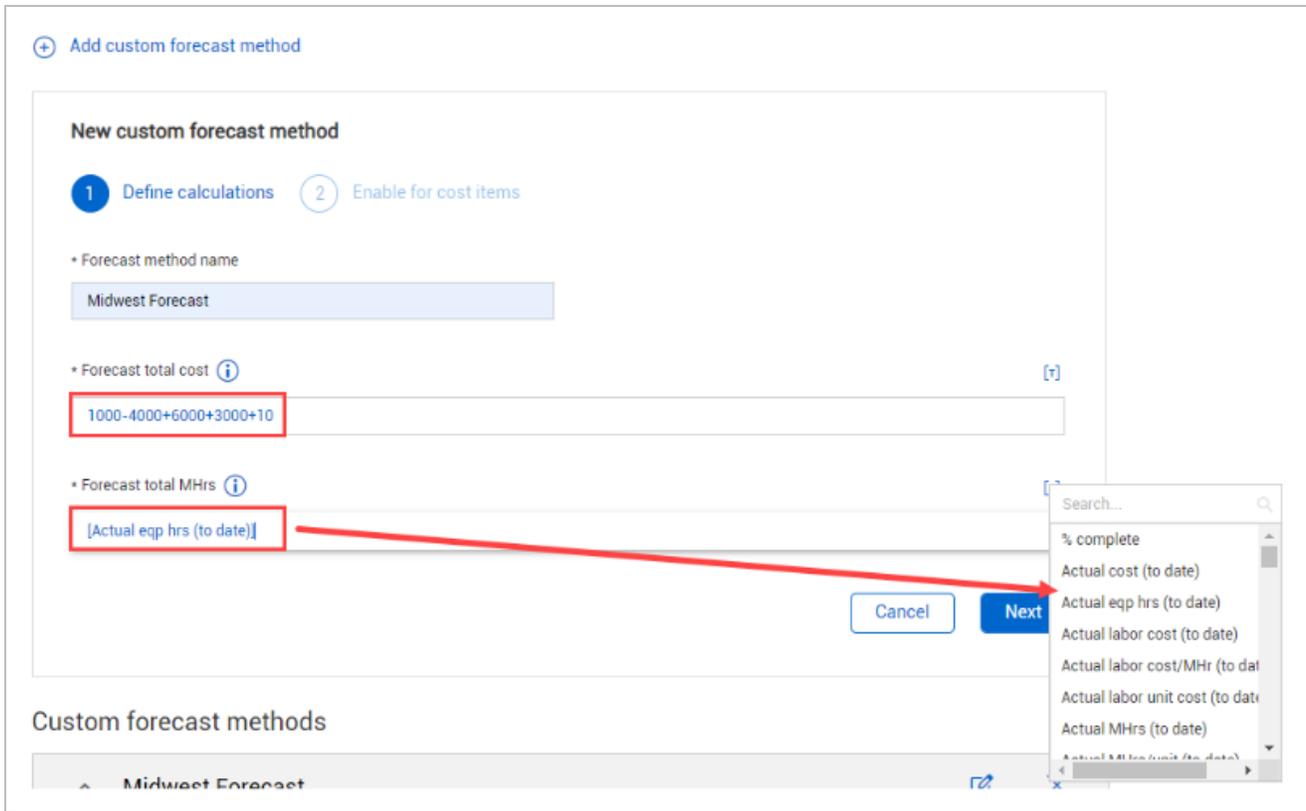
12.1.12.13 Custom Forecast method calculations

You can create custom forecast methods at both the project and organization levels by configuring your own calculations.



To create a custom Forecast Method, click Add custom forecast method, and then enter the Forecast Method Name, Forecast Total Cost and Forecast Total Mhrs calculations. You can create a maximum of 10 custom organization and project level forecast methods each at one time.

Select the **Formula** icon to choose fields to include in your forecast formula.



In the CBS you can set the Custom Forecast Method for a cost item at the organization or project level, which updates the Forecast Total Cost and Forecast Total Mhrs based on the calculations created in Settings.

The screenshot shows the InEight Control interface for a project named 'Steel Structure Training Job | 105091'. The interface is divided into sections for 'CBS', 'ACS', and 'PAY ITEMS'. The 'Tasks' table on the left lists various construction tasks with their CBS positions, descriptions, and WBS phase codes. The 'Forecast' table on the right shows forecast data for these tasks, including 'CB forecast total MHR G/L', 'Delta from straight line', 'Forecast notes', and 'Forecast method'. A dropdown menu for 'Forecast method' is open, showing options like 'Committed cost', 'Midwest Forecast', 'Northeast Forecast', '878.JHR Forecast', and 'Canada West Region', with 'Canada West Region' currently selected.

Tasks	Forecast	InEight Control	Forecast notes	Forecast method		
CBS position	Description	WBS phase code	CB forecast total MHR G/L	Delta from straight line	Forecast notes	Forecast method
1	Job Overhead	1002	0.00	250,000.00		Current estimate
2	Earthwork	1069	-8,000.00	400,000.00		Current estimate
3	Concrete	1071	-30,000.00	1,500,000.00		Current estimate
4	Structural Steel	1073	-4,999.10	1,516,282.48		Rollup
4.1	Erect Steel - Heavy	1074	0.00	1,266,327.48		Canada West Region
4.2	Erect Steel - Light	1005	-4,000.00	200,000.00		
4.3	Bolted Connections	1006	-999.10	49,955.00		
5	Materials	1084	0.00	0.00		
5.1	Earthwork - Mater...	1085	0.00	0.00		
5.2	Concrete - Materi...	1086	0.00	0.00		
5.3	Structure Steel - ...	1087	0.00	0.00		
6		1088	0.00	0.00		

12.1.12.14 Enable Forecast methods based on Allow as-built selections

Select which forecast methods can be used based on the allow as- built settings, for both terminal and non terminal cost items.

There are multiple forecast allow as-built options to choose from to help you configure your forecasted cost items, in addition to the existing available Control forecasting methods. When an option is disabled, that method is not available to select for cost items with the allow as-built selected.

Enable Forecast methods based on Allow as-built selections

Non-terminal cost items

When Allow as-built is set to *All or Cost*
Enable the following Forecast methods for non-terminal cost items when Allow as-built is set to *All or Cost*

Current estimate Manual (ETC)

Current budget Manual (EAC)

Average performance None

Committed cost Contract

Default Forecast method for non-terminal cost items when Allow as-built is set to *All or Cost*

Only enabled selections above are eligible. 'Manual (ETC)' and 'Manual (EAC)' cannot be default options.

When Allow as-built is set to *Quantity*
Enable the following Forecast methods for non-terminal cost items when Allow as-built is set to *Quantity*

Current estimate Manual (ETC)

Current budget Manual (EAC)

Average performance None

Default Forecast method for non-terminal cost items when Allow as-built is set to *Quantity*

Only enabled selections above are eligible. 'Manual (ETC)' and 'Manual (EAC)' cannot be default options.

When Allow as-built is set to *None*
Enable the following Forecast methods for non-terminal cost items when Allow as-built is set to *None*

Rollup None

Manual (ETC) Manual (EAC)

Default Forecast method for non-terminal cost items when Allow as-built is set to *None*

Only 'Rollup' may be the default option.

Terminal cost items

When Allow as-built is set to *All or Cost*
Enable the following Forecast methods for terminal cost items when Allow as-built is set to *All or Cost*

Current estimate Manual (ETC)

Current budget Manual (EAC)

Average performance None

Committed cost Contract

Detailed ETC

Default Forecast method for terminal cost items when Allow as-built is set to *All or Cost*

Only enabled selections above are eligible. 'Manual (ETC)' and 'Manual (EAC)' cannot be default options.

When Allow as-built is set to *Quantity*
Enable the following Forecast methods for terminal cost items when Allow as-built is set to *Quantity*

Current estimate Manual (ETC)

Current budget Manual (EAC)

Average performance None

Default Forecast method for terminal cost items when Allow as-built is set to *Quantity*

Only enabled selections above are eligible. 'Manual (ETC)' and 'Manual (EAC)' cannot be default options.

When Allow as-built is set to *None*
Enable the following Forecast methods for terminal cost items when Allow as-built is set to *None*

None

Default Forecast method for terminal cost items when Allow as-built is set to *None*

12.1.13 Estimate Resources (organization & project level)

The Wage rate composition determines what percentage of each labor hour will be calculated at the scale 1, scale 2, or scale 3 rate.

Wage rate composition

<p>Scale 1</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="80"/>	<p>Scale 2</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="10"/>
<p>Scale 3</p> <input style="width: 100%; border: 1px solid #ccc;" type="text" value="10"/>	

12.1.14 Schedule (organization & project level)

Under the Schedule sub-tab, you can define the data source for your project's schedule using manual entry or import using and XER type file. You can also create custom cost curves to apply to your progressed work, based on actual costs and schedule. Plug day calculations and Schedule ID's are also maintained in the Schedule tab.

Define project schedule

Schedule data source:

Duplicate field values for Baseline and Current schedule columns:

- Schedule ID and Baseline schedule ID
- Scheduled and Baseline Scheduled
- Schedule WBS and Baseline schedule WBS
- Roll up schedule and Baseline roll up schedule

Cost curves

Customize cost curve tables

Description	Data points
<input type="checkbox"/> Back Loaded	2
<input type="checkbox"/> Linear	
<input type="checkbox"/> Employed t	
<input type="checkbox"/> Front Load	Plug days default rollup calculation
<input type="checkbox"/> Bell Shape	<input type="text" value="Longest child"/>

Plug Day Calculation

Schedule ID

Schedule ID settings will only affect newly created cost items

Schedule ID prefix:
Example schedule ID: PS.0000001

Schedule ID start value:
Example schedule ID: PS.0000001

Define the delineator:

Example schedule ID: PS.0000001

12.1.15 Revenue (project level)

12.1.15.15 Revenue and Cost Timing

Revenue and Cost Timing

Category	Retention	Tax	Payment timing	Next ... months
Labor cost	0.00 %	0.00 %	Same month	
Construction Equipment cost	0.00 %	0.00 %	Same month	
FOM Rented Equipment cost	0.00 %	0.00 %	Same month	
Supplies cost	0.00 %	0.00 %	Same month	
Materials cost	0.00 %	0.00 %	Same month	
Subcontract cost	0.00 %	0.00 %	Same month	

	Payment timing	Next ... months
Subcontract Retention released	Same month	
Client Retention released	Same month	

Average calendar days elapsed from billing to collection: End of project date:

Enforce change order price values to match between Control and Change:

Billing method default earnings rules

Default cost item earnings amounts ⓘ

Fixed final price
Earnings amounts based on:
 Forecast (T/O) qty
 CE total cost

Unit price
Earnings amounts based on:
 Forecast (T/O) qty
 CE total cost

Pay item to Cost item Forecast (T/O) qty relationship

Enable pay item Forecast (T/O) qty rollups ⓘ Enable pay item Forecast (T/O) qty roll down ⓘ

Markup

Default markup percent:

Cost categories	Markup percent	Current estimate resources	Markup percent
Labor	0.00 %	Labor	0.00 %
Construction Equipment	0.00 %	Construction equipment	0.00 %
FOM Rented Equipment	0.00 %	Rented construction equipment	0.00 %
Supplies	0.00 %	Installed material	0.00 %
Materials	0.00 %	Installed equipment	0.00 %
Subcontract	0.00 %	Supplies	0.00 %
Fees	0.00 %		
Allowance	0.00 %		

Unique resources will apply markup percent by cost category

You can change the Retention percentage, Tax rate, and Payment Timing at the cost category level.

Revenue and Cost Timing

Category	Retention	Tax	Payment timing	Next __ months
Labor cost	5.00 %	0.00 %	Same month	
Construction Equipment cost	2.00 %	0.00 %	Same month	
FOM Rented Equipment cost	0.00 %	0.00 %	Same month	

You can set the average calendar days elapsed from the billing collection, in addition to setting the end of project date to any of the options available in the drop-down menu.

You can also enter a default retainage percent that is held back from each bill on the pay items. Pay item retainage creates an incentive for contractors to complete contracted work on a project. Typically, contractors do not get paid the total amount of money until all work or a set milestone is completed. With pay item retention, an agreed upon retainage percentage is held back by the owner for each bill by the client until the owner agrees to release the retention.

When changing the Default retainage percent setting you can choose to either update all existing items on a project, update matching existing pay items, or only apply to pay items created in the future.

<p>Average calendar days elapsed from billing to collection</p> <input type="text" value="34"/>	<p>End of project date</p> <div style="border: 1px solid #ccc; padding: 2px;"> <p>Project end date ▼</p> <ul style="list-style-type: none"> <li style="background-color: #f0f0f0; padding: 2px;">Project end date <li style="padding: 2px;">Forecast completion date <li style="padding: 2px;">Contract completion date <li style="padding: 2px;">Certificate of substantial completion (expected) <li style="padding: 2px;">Certificate of final completion (expected) </div>
<p>Default retainage percent</p> <input type="text" value="5.00 %"/>	

When it is time to bill for a pay item, the retainage percentage is used to automatically withhold the percentage of the bill specified in the Billed Revenue details slide-out panel. You can also see your adjusted net bill which excludes the retention withheld amount.

BILLED
RETENTION
BILLED HISTORY

Pending billable qty
144.00

Pending billable revenue
\$ 13,300.00

Retainage %
10.00 %

Billed revenue: \$ 100.00

Cost category: Undefined

Retention withheld: \$ 10.00
Net bill: \$ 90.00

On the Pay Items page, the Net billed revenue shows \$90.00, while \$10.00 is being withheld.

<input type="checkbox"/>	Pay item position	Pay item number	Description	Billed revenue	Retention released	Retention withheld	Net billed revenue	Retainage %	Billed qty	Reven... earned
<input type="checkbox"/>	1	001	Earthwork - Labor & Material	\$ 5,000.00	\$ 0.00	\$ 0.00	\$ 5,000.00	0.00 %	100.00	\$ 0.00
<input checked="" type="checkbox"/>	2	002	Concrete - Labor & Material	\$ 100.00	\$ 0.00	\$ 10.00	\$ 90.00	10.00 %	0.00	\$ 0.00
<input type="checkbox"/>	3	003	Steel - Labor & Material	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	0.00 %	0.00	\$ 32.28

You can also release and track your full or partial retention amounts in both Billed Revenue Details and Bill Multiple Pay Items, set a retention release date, then view the results in the Pay Item register.

BILLED
RETENTION
BILLED HISTORY

Retention withheld
\$ 0.00

Retention released (to date)
\$ 0.00

Retention released: \$ 10.00

* Retention released date: 02/28/2022

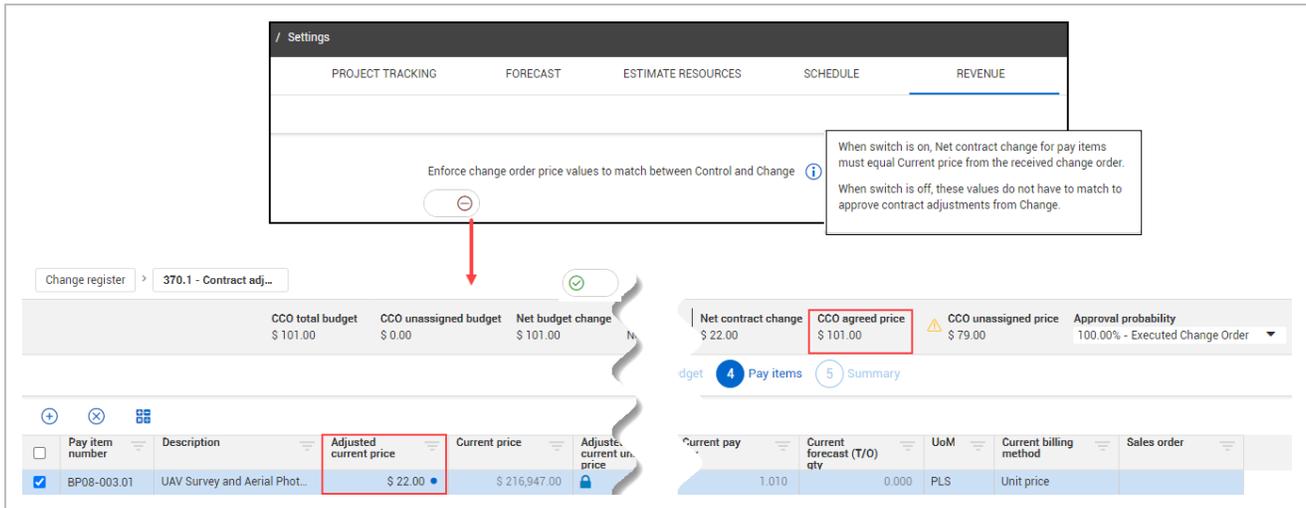
Notes: 250

Billed revenue	Retention released	Retention withheld	Net billed revenue	Retainage %
\$ 5,000.00	\$ 0.00	\$ 0.00	\$ 5,000.00	0.00 %
\$ 100.00	\$ 10.00	\$ 0.00	\$ 90.00	10.00 %
\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	0.00 %

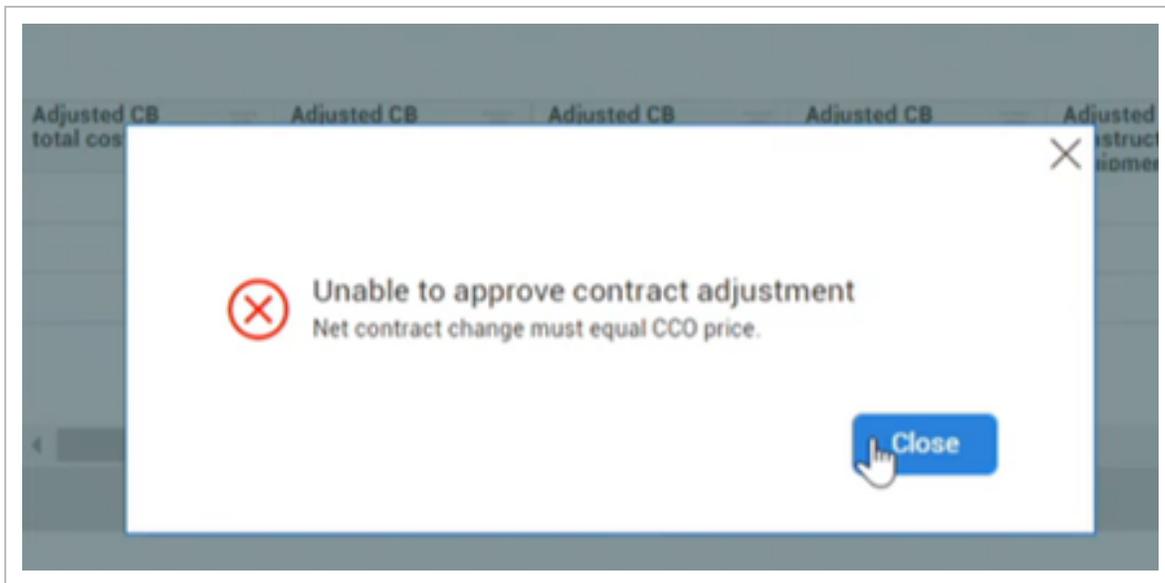
When approving contract adjustments from Change to Control, pay item amounts are not required to equal the amount received from Change if the Enforce change order price values to match between

Control and Change is turned off. In Settings > Control > **Revenue**, disabling the switch to the *Off* position is ideal when pay items are not being used in a contract adjustment.

The example below shows a CCO agreed price of \$101.00 and an Adjusted current price of \$22.00. When advancing to the Summary page, you can now approve the contract adjustment without the CCO agreed price and Adjusted current price matching.



When the Enforce change switch is enabled, the error message below stating that the contract adjustment cannot be approved shows when the Adjusted current price does not equal the CCO price.



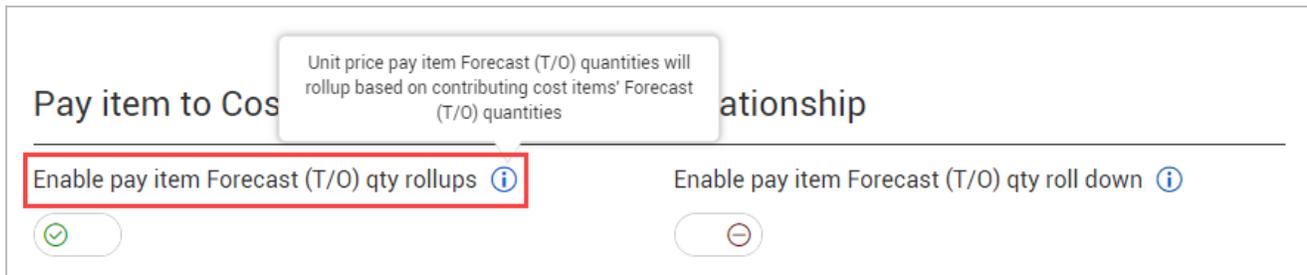
12.1.15.16 Billing method default earnings rules

You can also manage the settings for billing method default earning rules, pay item forecast quantity rollups, and the markups. You can select the default earnings amounts based on forecast takeoff quantity. The default earnings are calculated using the forecast takeoff quantity of the cost item and comparing it to the total forecast takeoff quantities of all of the cost items assigned to that pay item to generate the percentage.

The Fixed final price and Unit price settings let you select a default way to calculate those earnings amounts based on takeoff forecast quantity or CE final cost. After the settings are saved, all of your fixed final price pay items that normally calculate based on CE final cost and unit price then calculate forecast takeoff quantity or any of the other options you select. You can still modify this selection at the pay item level.

12.1.15.17 Pay item forecast takeoff quantity rollups

In the Revenue tab, you can manage settings for Pay Item Forecast takeoff quantity rollups. This setting is used for pay item unit price only.

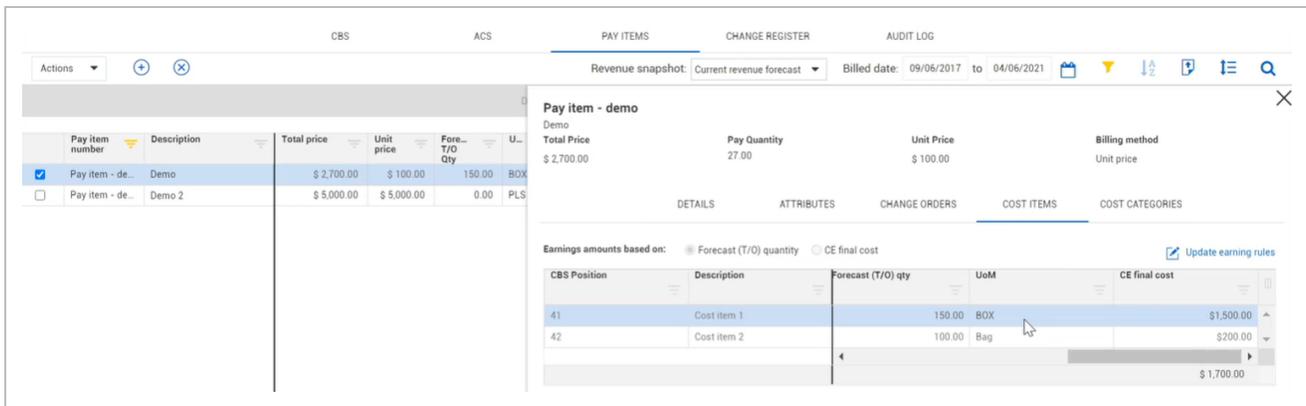


The toggle is only applicable to unit price pay items. It lets you enable the pay item forecast take-off quantity to be calculated based on the sum of all the assigned cost items forecast takeoff quantities.

When enabled, you can no longer edit your pay item forecast takeoff quantity in the Pay item register. If you click a field, you can no longer edit that field.

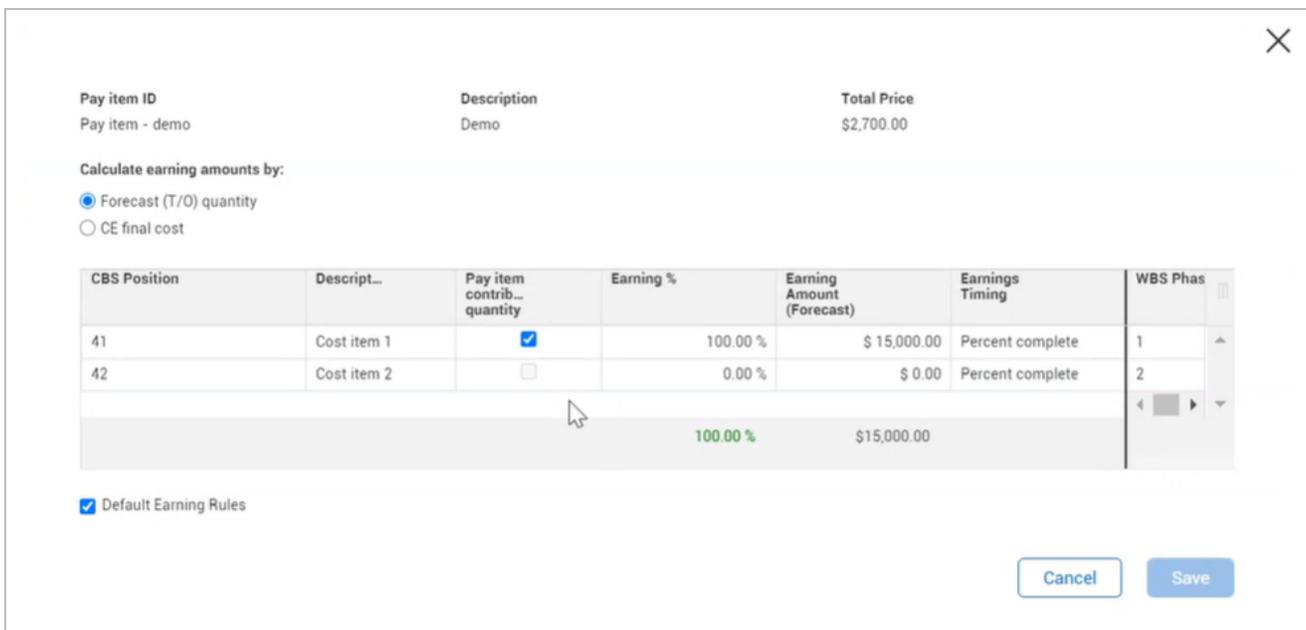
The Fixed final price and Cost plus values can be edited. The calculation is the sum of all the contributing cost item's forecast takeoff quantities. It can contribute to the pay item forecast if it has the same unit of measure.

For example, you cannot add unlike units of measure. Only cost items that have the same unit of measure as the pay item can contribute to that pay item's forecast takeoff quantity.



In the image above, the two cost items have different units of measure.

Cost item 1 has a unit of measure of box, which also has the pay item contribute quantity box checked. Cost item 2 has a unit of measure of bag with the pay item contribute quantity box unchecked. When you go into the update earning rules editor, you cannot check the pay item contribute quantity box for cost item 2 because the unit of measure does not match with cost item 1.



If you deselect the pay item contribute quantity box for cost item 1, the cost item's quantity does not contribute to the pay item's quantity. Then, the pay item quantity is zero. If it is checked, cost item 1 with the unit of measure of box has a forecast takeoff quantity of 150. This means the pay item also has a forecast takeoff quantity of 150.

In the CBS, you can change the Unit of Measure from bag to box, and then forecast take off quantity updates.

By default they both now have the pay item contribute quantity checked and the pay item forecast take off quantity is the sum of any cost items that have pay item contribute quantity checked.

Tasks		
CBS position	Description	WBS phase code
<input type="checkbox"/>	41	Cost item 1
<input checked="" type="checkbox"/>	42	Cost item 2
<input type="checkbox"/>	43	Cost item 3
<input type="checkbox"/>	44	Cost item 4

Task details		
Resource	Forecast (T/O) quantity	UoM
	150.00	BOX
	100.00	Bag
	100.00	PLS
	1.00	PLS

For example, with cost item 2 updated, the forecast takeoff quantity from of 100 is added to the forecast takeoff quantity of cost item 1. The total forecast takeoff quantity is now 250. It includes both of them since they now both have a matching unit of measure.

Also, this affects you earnings percent as well if you have forecast takeoff quantity selected. The pay item contribute quantity for both cost items drives your earnings percent if the forecast takeoff quantity radio button is selected. It also decides which cost items are going to contribute to the pay item's forecast takeoff quantity.

When you turn on the pay item forecast quantity rollups, the Pay item contribute quantity column does not show by default. To add it, go into the columns chooser, and then select that column. After it is brought into your view, it remains there until you deselect it from the columns chooser.

Pay item - demo ✕

Demo

Total Price	Pay Quantity	Unit Price	Billing method
\$ 2,700.00	27.00	\$ 100.00	Unit price

DETAILS ATTRIBUTES CHANGE ORDERS **COST ITEMS** COST CATEGORIES

Earnings amounts based on: Forecast (T/O) quantity CE final Pay item contribute quantity [Update earning rules](#)

CBS Position	Description	Pay item contribute quantity	Earning %	Earning Amount (Forecast)
41	Cost item 1	<input checked="" type="checkbox"/>	60.00 %	\$ 15,000.00
42	Cost item 2	<input type="checkbox"/>	40.00 %	\$ 10,000.00
			100.00 %	\$25,000.00

When you are in the Update earnings rule dialog box, the Pay item contribute quantity column is a default column in that view because it column is editable in the Update earning rule dialog box. That column is not editable in the main table. You can only select to add it to your main table view in the pay item slide-out panel for informational purposes.

The Pay item contribute quantity column is not available if the setting is off or if you are looking at a unit price pay item. If the setting was turned on and a user brought in the column and then decided to turn that setting off, then those columns would disappear.

12.1.15.18 Pay item forecast takeoff quantity roll down

When the amount of contract deliverables changes on unit price contracts, manually updating all the quantities for every associated cost item can be time consuming. Pay item forecast take off quantity allocations can be proportionally rolled down to the assigned cost items by setting the Enable pay item Forecast (T/O) qty roll down switch to *On* in Settings > Control > **Revenue**.

Pay item to Cost item Forecast (T/O) qty relationship

Enable pay item Forecast (T/O) qty rollups Unit price pay item Forecast (T/O) quantities will roll down to the contributing cost items' Forecast (T/O) quantities

Enable pay item Forecast (T/O) qty rollups
 Enable pay item Forecast (T/O) qty roll down

The unit price pay item Forecast (T/O) quantities proportionally rolls down to the contributing cost items' Forecast (T/O) quantities. Pay item to cost item roll down changes also show in the CBS Audit log.

The screenshot displays two tables from a software application. The top table, titled 'PAY ITEMS', has columns: Pay item position, Pay item number, Description, Current unit price, Current pay qty, Current forecast (T/O) qty, UoM, and Current billing method. The bottom table, titled 'Task details', has columns: Resources and Forecast (T/O) qty. A red arrow points from the 'Current forecast (T/O) qty' value of 8.000 in the 'PAY ITEMS' table to the 'Forecast (T/O) qty' value of 8.000 in the 'Task details' table.

Pay item position	Pay item number	Description	Current unit price	Current pay qty	Current forecast (T/O) qty	UoM	Current billing method
3	BP	Office	\$ 124,730.58	1.000	8.000	PLS	Cost plus

Resources	Forecast (T/O) qty
	1.000
6	73,181.000
9	8.000

The Allow as-built setting must be set to *All* or *Quantity* for the selected cost items.

12.1.15.19 Markup

For more information, see [Markup](#).

In Revenue tab, you can configure a default markup percent that applies the markup to the entire project. The Markup percent table adds a markup per cost category and per resource type on all of the cost categories in resources in the project.

PROJECT TRACKING ESTIMATE RESOURCES SCHEDULE **REVENUE** OTHERS

Markup

Default markup percent

0.00 %

Cost categories	Markup percent
Labor	0.00 %
Construction Equipment	0.00 %
FOM Rented Equipment	0.00 %
Supplies	0.00 %
Materials	0.00 %
Subcontract	0.00 %

Resources	Markup percent
Labor	0.00 %
Construction equipment	0.00 %
Rented construction equipment	0.00 %
Installed material	0.00 %
Installed equipment	0.00 %
Supplies	0.00 %

For example, if you added 10% to Labor resources, then any labor resources automatically have a 10% markup added to it and that affects the resources charge rate. Then that charge rate affects the amount of revenue that cost items can bill for and earn.

After you set labor at 10% and click Save, you are prompted with this dialog box confirming that you are making a change to an existing markup.

⚠ You are making a change to an existing cost category/resource markup on this project.

How would you like to proceed?

- Update all existing cost categories and resources in the project. *This will change the current charge rates*
- Update matching existing cost categories and resources. *This will change the current charge rates for cost items they were modified*
- Only apply to cost items and resources created in the future

Cancel Confirm

From this dialog box, you can choose to update all existing cost categories. For this example, it adds 10% resource markup percent for all labor resources.

The option to update matching existing cost categories selection changes the current charge rates for cost items that were modified. Anything that has not been modified such as a labor resource that has not been manually modified, this option overrides it with 10%.

You can also specify whether to only apply cost items and resources created in the future. When selected, no changes are made to existing resources. Any newly created resources, in this example labor resources, have a 10% markup added to them.

Cost categories are applicable in plug cost items that do not have resources or are not resource-driven. The cost categories have only a blanket cost category markup that helps drive the total revenue amount on the cost item.

You can view this information from Markup columns such as Billing rate markup amount, CE billable amount, Markup amount, and CE revenue amount.

The screenshot displays a software interface with a 'Tasks' table on the left and a 'Details' view for 'Cost item 1' on the right. The 'Tasks' table has columns for 'CBS position', 'Description', and 'WBS phase code'. The 'Details' view includes a table with columns for 'Current budget', 'Total cost (to date)', 'Current estimate', 'Live forecast', 'Forecast remaining cost', and 'Billing rate markup amount'. A dropdown menu is open, showing options like 'Forecast remaining cost', 'Markup %', 'Open committed cost', 'Billing rate markup amount', 'CE billable amount', 'Markup amount', 'CE revenue amount', and 'Total committed cost'. The 'Billing rate markup amount' and 'CE revenue amount' options are highlighted with a red box.

The column Markup amount uses the following formula:

- Markup percent x your current estimate = markup amount.

The Billing rate markup amount, for plug cost items is always set to zero because you can only have a billing rate on resources. So if this is a detailed cost item, this is just showing your billing rate markup amount for all of those resources.

The column CE billable amount uses the following formula:

- The Current estimate amount + your Billing rate markup amount = CE billable amount.

The column CE revenue amount uses the following formula:

- The CE billable amount + your Markup amount = CE revenue amount.

The CE revenue amount is how much revenue a cost item can have. This is only applicable for cost plus pay items. You can apply markups on cost items and they do not affect the revenue on those cost items. The markups affect the revenue for cost plus pay items and any cost items that are assigned to cost plus pay items.

12.1.16 Sync Integrations (project level)

Schedule sync integrations to run at specific times such as Pushing the CBS structure or Pushing Billed Revenue.

Sync Integrations schedule

[+ Add sync schedule](#)

* Sync type: Select one

* Time zone: (UTC-07:00) Mountain Time (US & Canada)

* Start Date: 03/03/2022

* Time to run sync: 12:00 AM

* Repeat: **Never** | Daily | Weekly | Monthly

[Cancel](#) [Add](#)

Scheduled syncs

Push CBS structure

Sync type: Push CBS structure
Time to run sync: 12:00 AM MST
Repeat: Never

Start date: 03/08/2022
Repeat on:
End: After 1 occurrence(s)

12.1.17 Others (project level)

12.1.17.20 Required Cost Items

You can prevent the project from syncing when required cost items are not included by setting the *Prevent project from syncing if required cost items are not added toggle* to Yes.

Required cost items

Prevent project from syncing if required cost items are not added

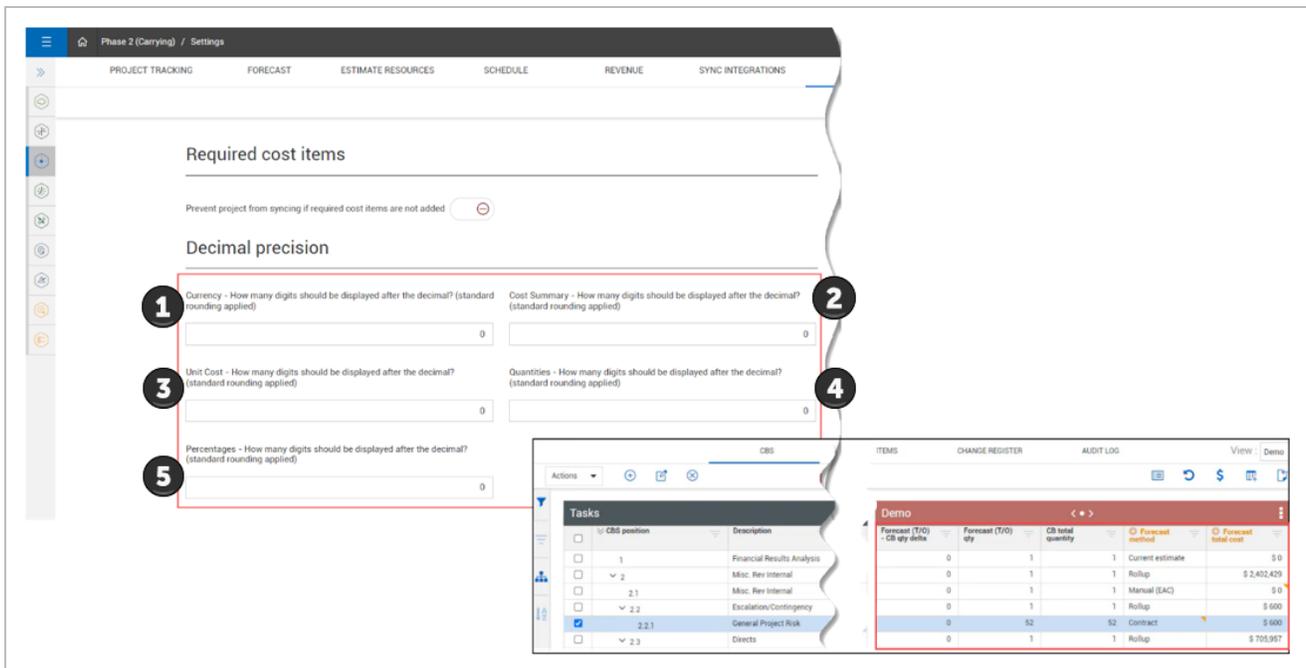
12.1.17.21 Decimal Precision

The image and table below summarize the different decimal precision options:

Overview - Decimal Precision

Name		Function
1	Currency	Number of decimal places for currencies. Any field that includes currency data will be affected by this setting.
2	Cost Summary	Number of decimal places for total cost information both at the terminal and non-terminal level.
3	Unit Cost	Number of decimal places for any unit cost displayed.
4	Quantities	Number of decimal places for any quantities displayed.
5	Percentages	Percent complete calculations at both the terminal and non-terminal level.

Numeric fields can be configured to omit decimals for currency, unit cost, percentages, cost summary and quantities.



12.1.18 Others (org level)

12.1.18.22 Required Cost Items

A *Prevent project from syncing if required cost items are not added* toggle has been added to prevent the project from syncing if required cost items are not added. The Required cost items feature lets you create standardized or most commonly used cost items at the organization level and then add them at the project CBS level.

Required cost items ?

Prevent project from syncing if required cost items are not added

+ ✎ ×

<input type="checkbox"/>	Description	WBS phase code	UoM	Account code	Allow as-built
<input checked="" type="checkbox"/>	RC1	44446666	Acre	99.99	Quantities
<input type="checkbox"/>	RC2	44445555	Cubic Meter		Quantities
<input type="checkbox"/>	RC3	44447777	Barrel	00.03.01.010	Quantities

12.1.18.23 Change Order Details

Change Order fields can be configured as validated drop-down list fields at the organization level.

After the toggle is set to *On*, the Discipline, Issue #, and CCO fields are validated in the drop-down list values. When the toggle is set to *Off*, these fields are free text fields with no validations.

In the example below, six validated issues have been selected to be associated with this change order after it is submitted.

PROJECT TRACKING FORECAST ESTIMATE RESOURCES SCHEDULE OTHERS

Required cost items ?

Prevent project from syncing if required cost items are not added

<input type="checkbox"/>	Description	WBS phase code	UoM	Account code	Allow as-built
<input type="checkbox"/>	RCL1	888888	Bag		All
<input type="checkbox"/>	RCL2	58900	cm2		All
<input type="checkbox"/>	RequiredTest1233434	9834343	Acre	00.03.01.004.5thr...	None
<input type="checkbox"/>	RQCL1	56789	Barrel		All
<input type="checkbox"/>	RQCL12	7788990	Bag	00.03.01.004	None

Change order details

Make fields validated dropdowns

Choose your Budget move workflow

Associated
Define Budget moves with a From and To process to provide ultimate traceability of budget moves.

Non-Associated

Budget move workflow

Associated Issues

Search:

<input type="checkbox"/>	Issue ID	Issue name
<input checked="" type="checkbox"/>	11	test issue
<input checked="" type="checkbox"/>	10	issue - demo
<input checked="" type="checkbox"/>	9	Asbestos removal
<input checked="" type="checkbox"/>	8	Extra camera request
<input checked="" type="checkbox"/>	7	Frayed cable
<input checked="" type="checkbox"/>	5	Schedule delay
<input type="checkbox"/>	4	Cracked concrete
<input type="checkbox"/>	3	Broken valve
<input type="checkbox"/>	2	Scope Increase
<input type="checkbox"/>	1	Feed motor on drill malfunction, procure M...

Clear Cancel Assign

Issue #

11 - test issue 10 - issue - demo 9 - Asbestos remo. 8 - Extra camera re. 7 - Frayed cable 5 - Schedule delay

Discipline

Change management tag 1 Change management tag 2 Change management tag 3

Change management user defined 1 Change management user defined 2 Change management user defined 3

Review

1. How many administrative levels are there when you create a new role?
 - a. 1
 - b. 2
 - c. 3
 - d. 4

2. There are several options when setting up project tracking. What setting is NOT included in these options?
 - a. How import of your CBS structure will be configured
 - b. How percent complete for individual cost items will be calculated
 - c. Configuring and naming tags
 - d. Capping percent complete at 100%

Summary

As a result of this lesson, you can:

- Create and manage InEight Control roles and permissions
- Navigate and define the different type of InEight Control project settings