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# DESIGN USER GUIDE

PLANNING, SCHEDULING & RISK

INEIGHT 

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# CHAPTER 1 – INEIGHT DESIGN OVERVIEW

InEight Design is a design management application that lets designers, engineers, and contractors manage deliverables and quantities during the design process. Design gives you visibility into a project before the design is complete so that you can mitigate risk. Design is especially useful for projects that use alternative delivery methods such as engineering, procurement, and construction (EPC) and design-build. Design brings designers, engineers, and contractors together into one application to stay on top of risks and project delivery impacts and provide transparency.

Design consists of two modules: Engineering and Quantity forecasting. Your organization might use one module more than the other depending on your industry and business processes.

The Engineering module lets you plan, allocate resources, and track the progress of design scope and deliverables.

Quantity forecasting lets EPC contractors consume design changes in quantity form, relate design changes and quantities to the budget, forecast, resource needs, and schedule, among other needs.

Design also integrates with the following InEight applications:

- Control – Budget data is used to accurately forecast.
- Report – Compares latest design quantity to the Control budget.
- Explore – Dashboards are available for both modules.
- Plan – Component data can be sent to Quantity forecasting.

# 1.1 OPEN DESIGN

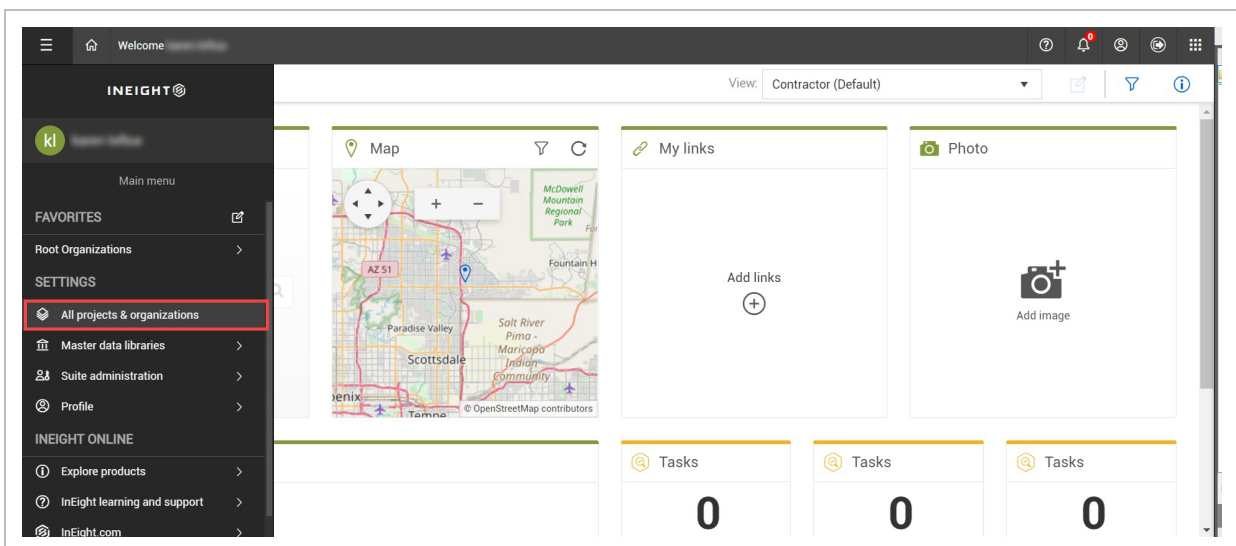
## 1.1.1 Summary

You can open Design from the main menu at the project level.

## 1.1.2 Steps

To open Design using the main menu at the project level:

1. Use the URL provided, and then open the InEight software in your web browser.
2. Open the **Main menu**, and then click **All projects & organizations**.

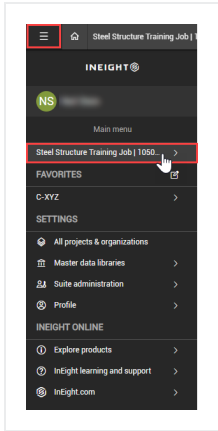


3. From the Projects tab of the All projects & organizations page, select a project by clicking the project name hyperlink. The Project home landing page opens.

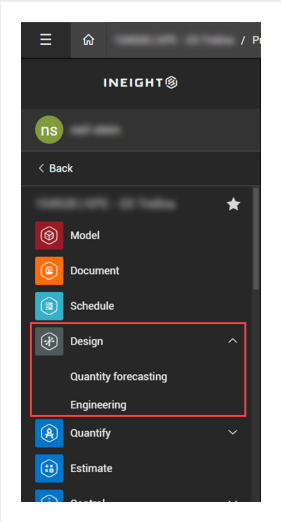
ID	Name	Stat...	Organization	Created by	Created on	Original contract ...	Contract number	Date project start...
1050	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1051	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1052	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1053	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1054	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1055	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1056	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1057	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1058	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1059	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1060	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1061	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1062	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1063	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1064	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1065	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1066	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1067	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1068	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1069	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			
1070	Steel Structure Training Job	NEW	Steel Structure Training Job	John Doe	2023-10-26 10:50			

**TIP** If your project is not shown on the initial screen, you can search by clicking the **Search** icon in the upper right. This search function searches all terms in all columns.

- From the Project home landing page, click the **Main menu** icon, and then click the **project name** to open the second-level menu.



- From the second-level drop-down menu, select **Design**, and then select the **Engineering** or **Quantity forecasting** module.



# CHAPTER 2 – ADMINISTRATION OVERVIEW

## 2.0.1 Summary

As an administrator, you can configure settings for the Engineering and Quantity forecasting modules at the organization and project levels.

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# CHAPTER 3 – ORGANIZATION SETTINGS

## CHAPTER 3 – ORGANIZATION QUANTITY FORECASTING SETTINGS

The organization Quantity forecasting settings gives you access to the following configurations:

- Project values
- Account code and Discipline sets
- Design tracking stages
- Design elements
- Note tags
- Cause codes

The configured settings are available for each project in the organization. You can manage quantity forecasting settings for your organization in Settings > Design > **Quantity Forecasting**.

For general information about InEight cloud platform settings, see [Organization Settings](#).

### 3.0.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.1 PROJECT VALUES

You can configure the criteria for how project value types are associated to a quantity item and if they are required in projects in the organization in org > Settings > Design > Quantity Forecasting > **Project values**. The values that have Include turned to *On* show as optional in all projects within the organization. The values that have Required turned to *On* show as required in all projects in the organization.

**Project values**

Select which project values are to be used in quantity items.

Name	Include	Required
Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Construction commodity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Segment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Subsystem	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Turnover	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Enable Account code set and Discipline set

**Design tracking stages**

Position	*Design stage title
04	<input type="text" value="Enter design stage title"/>
<input type="checkbox"/> 01	30%
<input type="checkbox"/> 02	60%
<input type="checkbox"/> 03	90%

In the project > Settings > Quantity Forecasting > Attribute and project values > **Project values** section, you only see the project values that are included at the organization level.

**Include** – When you turn the Include option to *On* for a project value, the project value becomes available as an attribute in the quantity item. By default, the value is turned *Off* in the project. You have the option to turn the Include option to *On*.

**Required** - When you turn the Required option to *On* for a project value, the project value type is a required attribute on the quantity item. The project-level toggles for these values are automatically turned to *On* and cannot be changed. The system will check that these required fields are maintained when adding or editing quantity items in the project. Required fields will show with an asterisk in the project to let you know which fields are required when adding or editing quantity items.

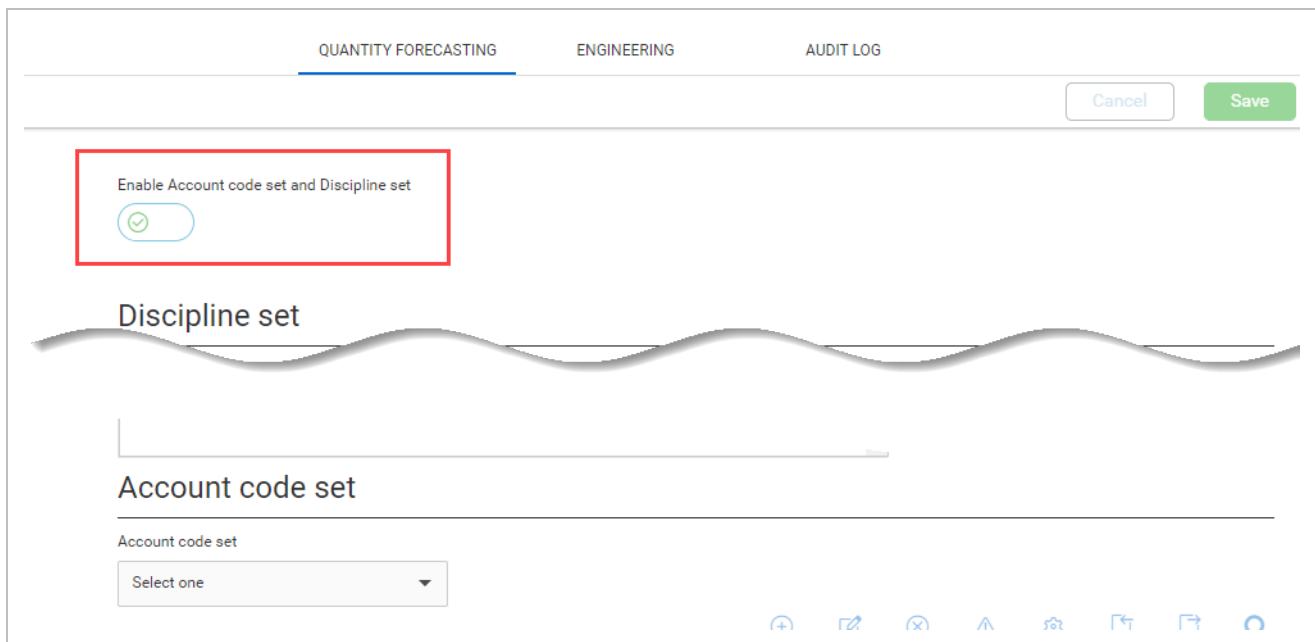
### 3.1.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

- Include will be disabled if any quantity item has data maintained or if Required is turned to *On*. Required becomes disabled if quantity item data exists but there are quantity items that do not have that project value type maintained.

## 3.2 ACCOUNT CODE AND DISCIPLINE SETS

You can enable the option to use account code and discipline sets by turning the **Enable Account code set and Discipline set** toggle to *On*.



The screenshot shows the 'QUANTITY FORECASTING' tab selected in a settings interface. At the top right, there are 'Cancel' and 'Save' buttons. A red box highlights the toggle switch for 'Enable Account code set and Discipline set', which is currently turned on. Below this, there are two sections: 'Discipline set' and 'Account code set'. The 'Account code set' section includes a dropdown menu labeled 'Account code set' with the text 'Select one' and a downward arrow. At the bottom right, there is a row of small navigation icons.

When the feature is set to *On*, you can manage disciplines sets and account code sets. You must first create discipline sets to create account code sets.

### 3.2.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.3 DISCIPLINE SET

Discipline sets are used to link to an account code set, which will limit the account code set to use only those disciplines in the set. When the **Enable Account code set and Discipline set** toggle is set to *On*,

you can manage disciplines for your organization in Settings > Design > Quantity Forecasting > **Discipline set**.

Discipline set

Discipline set

Discipline one

	Position	*Discipline	*Discipline group	
+	04	Select discipline	Select discipline group	
<input type="checkbox"/>	01	Aggregates and Paving	1	⊗
<input type="checkbox"/>	02	Building	1	⊗
<input type="checkbox"/>	03	Bulk Commodities	2	⊗

The standard disciplines can be added or removed from a set to limit which disciplines are available. When disciplines are added to a set, they must be associated to a Discipline Group.

### 3.3.1 Steps

You can do any of the following actions:

- **Create a new discipline set** - Click the **Discipline set** drop-down list, and then select **New discipline set**. Enter a new name, and then click **Create**.
- **Add discipline group** – Select a discipline set from the list, click the **Configure discipline group** icon, enter an ID and description, and then click **Add** icon. You cannot delete a discipline group assigned to a discipline in the set.

The screenshot shows the 'Discipline set' configuration interface. At the top, there are tabs for 'QUANTITY FORECASTING', 'ENGINEERING', and 'AUDIT LOG'. Below the tabs, there are 'Cancel' and 'Save' buttons. The main area is titled 'Discipline set' and contains a dropdown menu for 'Discipline set' with 'MR1' selected. Below this is a table with columns for 'Position', '\*Discipline', and '\*Disciplin'. A 'Configure discipline group' modal window is open, showing a table with columns for 'Position', '\*ID', and '\*Description'. The modal window has a close button and up/down arrows for sorting.

	Position	*Discipline	*Disciplin
+	11	Select discipline	Select dis
<input type="checkbox"/>	01	Aggregates and Paving	1
<input type="checkbox"/>	02	Building	1
<input type="checkbox"/>	03	Bulk Commodities	2
<input type="checkbox"/>	04	Change Orders, Contract All...	2
<input type="checkbox"/>	05	Commercial Cost	4
<input type="checkbox"/>	06	Engineering	3

	Position	*ID	*Description	
+	07	Enter ID	Enter description	
<input type="checkbox"/>	01	1	1	⊗
<input type="checkbox"/>	02	2	2	⊗
<input type="checkbox"/>	03	3	3	⊗
<input type="checkbox"/>	04	4	4	⊗
<input type="checkbox"/>	05	5	5	⊗
<input type="checkbox"/>	06	7	7	⊗

- **Add discipline to a discipline set group** – Click the **Discipline set** drop-down list, and then select a discipline set. Click the **Select discipline** drop-down list, and then select a discipline. Click the **Select discipline group** drop-down list, and then select a discipline group. Click the **Add discipline to set** icon. You cannot delete a discipline assigned to an account code in an account code set.
- **Remove a discipline or a discipline group** - Click the **Remove discipline from the set** or the **Remove discipline group** icon to the right. You cannot delete a discipline group assigned to a discipline in the set or a discipline assigned to an account code in an Account Code set.
- **Edit a discipline group or a discipline** - Click in the fields, and then enter text.
- **Sort** - Select the item, and then click the up and down arrows to the right of the table to adjust the position of a discipline or discipline group.

### 3.3.2 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.4 ACCOUNT CODE SET

Account code sets (ACS) are used to configure metadata in an account code to better drive data reliability when leveraging account codes on quantity items. Account code sets also help you narrow down account codes to only those you need to use in Design for specific projects. ciYou can only add account codes that exist in Main menu > Master data libraries > **Account codes**.

When the **Enable Account code set and Discipline set** toggle is set to *On*, you can manage account code sets for your organization in Settings > Design > Quantity Forecasting > **Account code set**.

<input type="checkbox"/>	Account code	Account code description	Design element	Primary UoM	Alternate System UoM	Ground	Disci
<input type="checkbox"/>	30.06.02.002	Mobilization and Demobilization ...	Mobilization / Demobili...	Ea	Ea	Above	Oper
<input type="checkbox"/>	30.06.02.006	Equipment Setup, Dismantle, Rec...	Mobilization / Demobili...	Ea	Ea	Under	Overf
<input type="checkbox"/>	30.06.02.009	Overland Major Crane Moves - La...	Crane Walk	LF	m	Above	Oper
<input type="checkbox"/>	30.06.02.012	Tower Crane Setup and Dismantle	Mobilization / Demobili...	Ea	Ea	Above	Oper
<input type="checkbox"/>	30.06.02.012.02	Tower Crane Setup - Foundation ...	Mobilization / Demobili...	Ea	Ea	Above	Oper
Subtotals		Count: 17,263					

### 3.4.1 Steps

You can do any of the following actions:

- **Create a new account code set** - Click the **Account code set drop-down** list, and then select **New account code set** from the list. Enter a new name, and then click **Create**.
- **Add account code set values to an account code set group** - Click the **Configure account code group** icon, enter an ID and description, and then click **Add** icon. Account code groups are account code set specific. Account code groups can be added individually or in bulk using the import process. You cannot add or import account codes to a set without at least one account code group maintained. You cannot delete account code groups tagged to an Account code in

the set. Account code values assigned to an account code in the set cannot be removed.

The screenshot shows the 'Account code set' configuration interface. The main window displays a list of account codes with checkboxes. A modal window titled 'Configure account code set values' is open, showing a table of account code groups. The table has columns for Position, \*ID, and \*Description. The first row is highlighted with a blue background and contains a plus icon, the number 06, and 'Enter ID' and 'Enter description' text boxes. Below it are rows for positions 01 through 05, each with a checkbox, a number, and a description, and a red 'X' icon in the final column. The modal also includes a close button (X) and a title bar.

- **Add account codes to an Account code set** - Click the **Add account code** icon, select an account code from the list, and then click **Assign**. Select the required and optional attributes for the account code, and then click **Add**.
- **Remove an account code or an account code group** - To remove an account code, select the account code, and then click the **Remove account code** icon. To remove an account code group, click the **Remove account code group** icon to the right. You cannot remove an account code group assigned to an account code set in the set or an account code assigned to a project.
- **Edit an account code group or account code** – To edit an account code group, click in the fields, and then enter text. To edit an account code, select an account code, and then click the **Edit account code** icon. In the Edit account code slide-out panel, make your changes, and then click **Save**.
- **Sort** - Select the item, and then click the up and down arrows to the right of the table to adjust the position of account code groups.
- **Update account codes that have been modified in InEight Platform** - The Update account codes feature alerts you of any account code updates made to the master account code library in Platform that impacts any account code in an ACS, such as deleted account codes or modified UoMs.

Account code set

Account code set: SASA      Discipline set: 1K      Include selected account code set in project settings?

<input type="checkbox"/>	Account code	Account code description	Design element	Primary UoM	Alternate System UoM	Ground	D
<input type="checkbox"/>	61.09.14	Concrete on Metal Deck	Concrete on Metal Dec...	SF	m2	Above	Cr
<input type="checkbox"/>	61.09.14.002	Concrete on Metal Deck	Concrete on Metal Dec...	SF	m2	Above	Cr
<input type="checkbox"/>	61.09.14.002.02	Concrete on Metal Deck - Fab Fo...	Fab Forms	SF	m2	Above	Cr
<input type="checkbox"/>	61.09.14.002.04	Concrete on Metal Deck - Edge o...	Concrete on Metal Dec...	LF	m	Above	Cr
<input type="checkbox"/>	61.09.14.002.06	Concrete on Metal Deck - Deck P...	Concrete on Metal Dec...	SF	m2	Above	Cr
Subtotals		Count: 17,263					

You can review and update the account codes using the Update account codes wizard. Click the **Update account codes** icon to launch wizard and sync account codes in the set with the master data account code in Platform.

QUANTITY FORECASTING      ENGINEERING      AUDIT LOG

Account code set

**Update account codes**

The following account codes have either been deleted or had a UoM modified in Core. Please select which account codes you would like to update in the account code set.

<input type="checkbox"/>	Update type	Account code	Account code description	Design Element	Design Element UoM	Primary UoM	Alternate System UoM	Modified Primary UoM	Moc
<input type="checkbox"/>	Modified UoM	61.09.14	Concrete on Metal Deck	Concrete on Metal...	SF	SF		CY	m3
<input type="checkbox"/>	Modified UoM	61.09.14.002	Concrete on Metal Deck	Concrete on Metal...	SF	SF		CY	m3
<input type="checkbox"/>	Modified UoM	70.25.24	Pipeline Tie-In	Pipeline Tie-In - LF	LF	LF		Ea	Ea

0 item selected

Cancel      Update

Any account codes that are updated in the ACS are also updated in projects that have the ACS assigned. To update modified UoM update types, the Design element UoM assigned on the account code in the ACS must match the modified UoM. You cannot select the account code



without the UoM match. You can edit the Design element assignment directly in the wizard to assist with the UoM alignment.

- **Make an ACS available in project settings** - Select an account code, and then turn the **Include selected account code set in project settings** toggle to *On*.

At the project level, you can tie an account code set to your project. For more information, see **Account code set** in the [General](#).

### 3.4.2 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.5 DESIGN TRACKING STAGES

Design tracking stages are used to track how scope quantities change across an organization’s design’s milestones. You can manage Design tracking stages for your organization in Settings > Design > Quantity Forecasting > **Design tracking stages**.

	Position	*Design stage title	
+	12	<input type="text" value="Enter design stage title"/>	
<input type="checkbox"/>	01	30% Qty	⊗
<input type="checkbox"/>	02	60% Qty	⊗
<input type="checkbox"/>	03	90% Qty	⊗
<input type="checkbox"/>	04	100% Qty	⊗
<input type="checkbox"/>	05	Option A Qty	⊗
<input type="checkbox"/>	06	Current IFC Qty	⊗
<input type="checkbox"/>	07	Option B Qty	⊗
<input type="checkbox"/>	08	add	⊗
<input type="checkbox"/>	09	Stage 1	⊗

### 3.5.1 Steps

You can do any of the following actions:

- **Add** - Enter a Design stage title, and then click the **Add** icon. Design stage titles must be unique.
- **Edit** - Click in the fields, and then enter text.
- **Delete** - Click the **Delete Design tracking stage** icon to the right. You cannot delete tracking stages assigned to a project.
- **Sort** - Select the Design tracking stage, and then click the up and down arrows to the right of the table to adjust the position of a Design stage.

When Design tracking stages are created, they become available to add in the settings for projects in the organization. For more information, see [Design tracking stages](#) in project level settings.

### 3.5.2 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.6 DESIGN ELEMENTS

Design elements are used to group like scope into specific coding that you can associate to a quantity item and roll up quantity, hours, and cost to the design element level to drive decision making information on a project.

You can manage design elements for your organization in Settings > Design > Quantity forecasting > **Design elements**.

Design elements

ID	*Design Element	*UoM	Alternate System UoM	Parent(optional)	Include in rollup	
	<i>Enter design element title</i>	<i>Select UoM</i>		<i>Select design elemen</i>	<input type="checkbox"/>	
<input type="checkbox"/> 1514	30 - Operational Supp...	PLS	PLS			<input type="checkbox"/>
<input type="checkbox"/> 1515	50 - Removals and De...	CY	m3			<input type="checkbox"/>
<input type="checkbox"/> 1516	51 - Grading	CY	m3			<input type="checkbox"/>
<input type="checkbox"/> 1517	52 - Civil Utilities	LF	m			<input type="checkbox"/>
<input type="checkbox"/> 1518	53 - Aggregates and P...	SY	m2			<input type="checkbox"/>
<input type="checkbox"/> 1519	54 - Temporary Work	PLS	PLS			<input type="checkbox"/>
<input type="checkbox"/> 1542	58 - Routine Maintena...	LMI	LKm			<input type="checkbox"/>
<input type="checkbox"/> 1520	60 - Deep Foundations	Ea	Ea			<input type="checkbox"/>
<input type="checkbox"/> 1521	61 - Concrete	CY	m3			<input type="checkbox"/>
<input type="checkbox"/> 1522	62 - Metals	Ton	MT			<input type="checkbox"/>
<input type="checkbox"/> 1523	70 - Piping	LF	m			<input type="checkbox"/>
<input type="checkbox"/> 1524	71 - Mechanical Equip...	Ea	Ea			<input type="checkbox"/>

### 3.6.1 Steps

You can do any of the following actions:

- **Add** - Enter a unique name, select a UoM, and optionally select a parent Design element to group elements together, and then click the **Add design element** icon. The Alternate System UoM will be automatically populated based UoM selected. You can also use the import process to import Design elements using the Export and Import icons.
- **Edit** - Click in the fields, and then enter text.
- **Delete** - Click the **Delete Design element** icon on the right. You cannot delete terminal Design elements assigned to a quantity item.
- **Sort** - Select the Design element, and then click the up and down arrows to the right of the table to adjust the position of a Design element.

- **Include in rollup** - The Include in rollup option is only applicable to terminal Design elements. The setting can only be selected when the terminal Design element UoM matches its parent Design element UoM.

When Design elements are created, they become available to add in the settings for projects in the organization. For more information, see [Design element setup](#) in project settings.

### 3.6.2 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.
- Only terminal Design elements can be associated to a quantity item.
- A parent Design element cannot be deleted when associated with a terminal Design element.
- Design element names must be unique and are required to have a UoM.

## 3.7 NOTES

### 3.7.1 Tags

Tags are used when entering notes or quantity item change log entries. You can manage tags for your organization in Settings > Design > Quantity forecasting > Notes > **Tags**.

The screenshot shows the 'Notes' configuration interface. At the top, there are three tabs: 'QUANTITY FORECASTING' (selected), 'ENGINEERING', and 'AUDIT LOG'. On the right side, there are 'Cancel' and 'Save' buttons. The main content area is titled 'Notes' (highlighted with a red box) and contains a 'Tags' section. The 'Tags' section features a table with the following columns: Position, \*ID, \*Description, and Required. The table has five rows, with the first row being a new entry and the others being existing tags.

	Position	*ID	*Description	Required	
+	06	<input type="text" value="Enter ID"/>	<input type="text" value="Enter Description"/>	<input type="checkbox"/>	
<input type="checkbox"/>	01	QR	Quantity Reduction	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	02	QG	Quantity Growth	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	03	EA	Estimating Aware	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	04	A1	A1	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	05	A2	A2	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### 3.7.2 Steps

You can do any of the following actions:

- **Add** - Enter a tag ID, description, set the Required toggle, and then click the **Add tag** icon.
- **Edit** - Click in the fields, and then enter text.
- **Delete** - Click the **Delete tag** icon on the right of the table. Tags assigned to a quantity item cannot be deleted.
- **Sort** - Select the tag, and then click the up and down arrows to the right of the table to adjust the position of a tag.

When the required toggle is set to *On*, the tag is added to all the projects in the organization. Tags not set as required are available to add to all projects in Project Settings. For more information about Tags, see **Notes** in [General](#) project settings.

### 3.7.3 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.8 CAUSE CODES

Cause codes are a standard set of coding you can configure for your organization to highlight reasons why change was observed on the project. When a quantity item change occurs, you are required to use cause codes.

You can manage cause codes for your organization in Settings > Design > Quantity Forecasting > **Cause codes**.

QUANTITY FORECASTING    ENGINEERING    AUDIT LOG

Cause codes

	Position	*ID	*Description	
<input type="button" value="⊕"/>	13	<input type="text" value="Enter ID"/>	<input type="text" value="Enter description"/>	
<input type="checkbox"/>	04	DP	Design Progression	<input type="button" value="⊗"/>
<input type="checkbox"/>	05	DG	Design Growth	<input type="button" value="⊗"/>
<input type="checkbox"/>	06	EEO	Engineering Error or Omission	<input type="button" value="⊗"/>
<input type="checkbox"/>	07	ESEO	Estimating Error or Omission	<input type="button" value="⊗"/>
<input type="checkbox"/>	08	VDMC	Vendor Design or Material Change	<input type="button" value="⊗"/>
<input type="checkbox"/>	09	PCC	Prime Contract Change	<input type="button" value="⊗"/>
<input type="checkbox"/>	10	C1	C1	<input type="button" value="⊗"/>
<input type="checkbox"/>	11	C2	C2	<input type="button" value="⊗"/>
<input type="checkbox"/>	12	C3	C3	<input type="button" value="⊗"/>

### 3.8.1 Steps

You can do any of the following actions:

- **Add** - Enter an ID and a description, and then click the **Add Cause code** icon.
- **Edit** - Click in the fields, and then enter text.
- **Delete** - Click the **Delete cause code icon** to the right. You cannot delete cause codes assigned to a quantity change note on a project.
- **Sort** - Select the cause code, and then click the up and down arrows to the right of the table to adjust the position of a cause code.

When cause codes are created, they become available to all projects in the organization. For more information, see [Quantity change notes](#).

## 3.8.2 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

# 3.9 ORGANIZATION ENGINEERING SETTINGS

## 3.9.1 Considerations ..... 31

As an administrator, you can configure settings for the Engineering module at the organization level. Settings at the organization level are inherited by associated child organizations and projects.

The organization Engineering settings gives you access to the following configurations:

- Project values
- Disciplines
- Resource types
- Milestones
- Design elements
- Schedule
- Teams
- Resources
- Account code set
- Cause codes

You can manage engineering settings for your organization in Settings > Design > **Engineering**.

For general information about InEight cloud platform settings, see [Organization Settings](#).

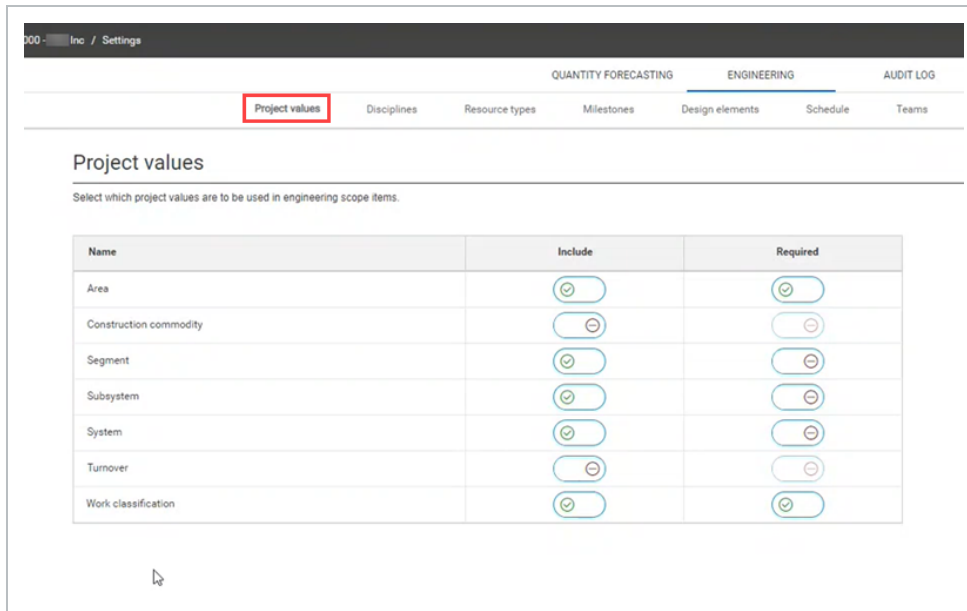
## 3.9.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.10 PROJECT VALUES

You can select which project values can be associated to engineering scope items and if they are required in a project. The values are configured at the organization level in Settings > Design > Engineering > **Project values**. Project values configured at the organization level are available in all projects.

To configure project values, go to Engineering > **Project values**.



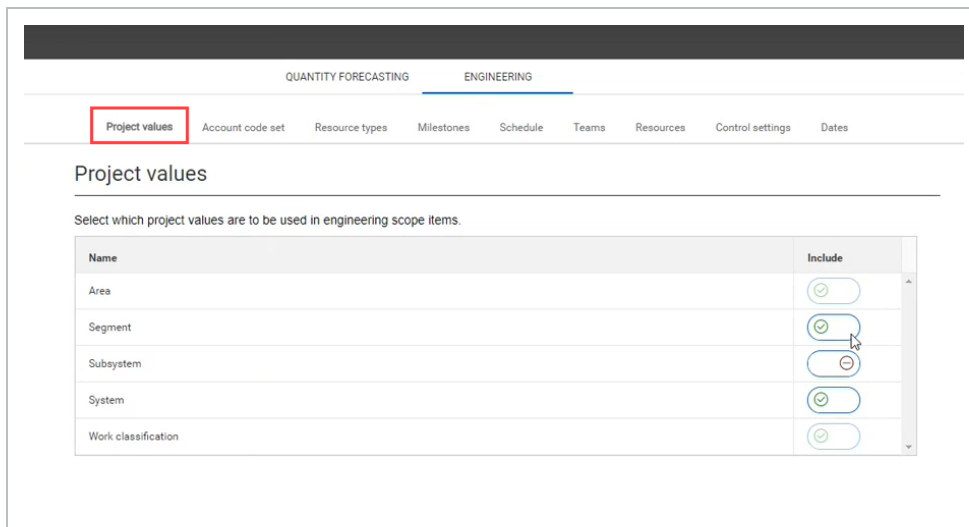
The screenshot shows the 'Project values' configuration page. At the top, there is a navigation bar with 'Inc / Settings' on the left and 'QUANTITY FORECASTING', 'ENGINEERING', and 'AUDIT LOG' on the right. Below this is a sub-navigation bar with 'Project values' (highlighted with a red box), 'Disciplines', 'Resource types', 'Milestones', 'Design elements', 'Schedule', and 'Teams'. The main content area is titled 'Project values' and includes the instruction 'Select which project values are to be used in engineering scope items.' Below this is a table with three columns: 'Name', 'Include', and 'Required'. The table lists seven project values with toggle switches for each.

Name	Include	Required
Area	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Construction commodity	<input type="checkbox"/>	<input type="checkbox"/>
Segment	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Subsystem	<input checked="" type="checkbox"/>	<input type="checkbox"/>
System	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Turnover	<input type="checkbox"/>	<input type="checkbox"/>
Work classification	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

When you include project values, those values are available for selection in Settings at the project level. You can select or deselect the values that are not required for the project.

When you require a project value, the value is required at the project level. The project-level toggles for these values are automatically disabled.





QUANTITY FORECASTING    ENGINEERING

Project values    Account code set    Resource types    Milestones    Schedule    Teams    Resources    Control settings    Dates

### Project values

Select which project values are to be used in engineering scope items.

Name	Include
Area	<input checked="" type="checkbox"/>
Segment	<input type="checkbox"/>
Subsystem	<input checked="" type="checkbox"/>
System	<input checked="" type="checkbox"/>
Work classification	<input checked="" type="checkbox"/>

### 3.10.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 3.11 DISCIPLINES

You can define disciplines to associate with resource types and claiming schemes in the Engineering module. Examples of disciplines are architectural, civil, or drainage.

You can manage the disciplines for your organization in Settings > Design > Engineering > **Disciplines**.

QUANTITY FORECASTING      ENGINEERING      AUDIT LOG

Project values      **Disciplines**      Resource types      Milestones      Design elements      Schedule      Teams      Resources      Account code set      Cause codes

### Disciplines

	Position	*ID	*Description	
+	36	<i>Enter ID</i>	<i>Enter Description</i>	
<input type="checkbox"/>	01	A	Architectural	⊗
<input type="checkbox"/>	02	B	Building	⊗
<input type="checkbox"/>	03	H	CES Structures	⊗
<input type="checkbox"/>	04	C	Civil	⊗
<input type="checkbox"/>	05	D	Drainage	⊗
<input type="checkbox"/>	06	E	Electrical	⊗
<input type="checkbox"/>	07	Z	Environmental	⊗
<input type="checkbox"/>	08	K	ESDC	⊗

### 3.11.1 Steps

You can do any of the following actions:

- **Add** – Enter an ID and Description, and then click the **Add discipline** icon.
- **Edit** - Click in the fields, and then enter text.
- **Remove** - Click the **Remove discipline** icon to the right. You cannot remove a discipline assigned to a resource type or a claiming scheme.
- **Sort** - Select a discipline, and then click the up and down arrows to the right of the table to adjust the position of the discipline.

When disciplines are created, they become available to add in resource types and claiming schemes for projects in the organization. For more information, see [Resource types](#) in project settings and [Configure claiming schemes](#).

### 3.11.2 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- Disciplines must be added to create resource types.

## 3.12 RESOURCE TYPES

Resource types are associated with disciplines and must be managed in your project to add claiming schemes. For more information, see [Configure claiming schemes](#). Resource types are created at the organization level.

You can manage resource types for your project in settings > Design > Engineering > **Resource types**.

QUANTITY FORECASTING      ENGINEERING

Project values   Account code set   **Resource types**   Milestones   Schedule   Teams   Resources   Control settings   Dates   Documents

### Resource type

	Position	*ID	*Description	Discipline	
+	20		Select resource type		
<input type="checkbox"/>	01	TLR	Track Light Rail	Track	⊗
<input type="checkbox"/>	02	BGS	Building Stations	Building	⊗
<input type="checkbox"/>	03	EEN	Electrical Engineer	Electrical	⊗
<input type="checkbox"/>	04	EVN	Environmental	Environmental	⊗
<input type="checkbox"/>	05	PMG	Project Management	Indirects	⊗
<input type="checkbox"/>	06	PCT	Project Controls	Indirects	⊗
<input type="checkbox"/>	07	QAM	Quality Management	Indirects	⊗
<input type="checkbox"/>	08	DCT	Document Control	Indirects	⊗

### 3.12.1 Steps

You can do any of the following actions:

- **Add** – Click the **Select resource type** drop-down list, select a resource type, and then click the **Add resource** icon.
- **Remove** - Click the **Remove resource type** icon to the right. You cannot remove a resource type that has been assigned to a project.
- **Sort** - Select a resource type, and then click the up and down arrows to the right of the table to adjust the position of the resource type.

All resource types are created at the organization level and are automatically inherited in projects. For more information, see Resource types in organization settings.

### 3.12.2 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- When you assign a resource type to a claiming scheme step, its associated ID and discipline is automatically populated.

## 3.13 MILESTONES

### 3.13.1 Summary

You can define completion milestones in the Engineering module to assign to claiming scheme steps. Examples of completion milestones might be Issue for Review or Issue for Construction.

A system-generated milestone named Scope Complete is automatically assigned to every project ensuring that all scope item's scope can be planned with dates.

Milestones are created at the organization level in Settings > Design > Engineering > **Milestones**. After creation, you can assign milestones at the suborganization level.

At the project level, all milestones from the parent organization are automatically inherited and you can assign or remove resource types as necessary.

To add a new milestone at the organization level, enter an ID, a description, and a discipline, and then click the **Add resource** icon. To edit resource types, click in the fields, and then enter text. To remove a resource type, click the **Remove resource type** icon to the right. To adjust the position of a resource type in the list, select the resource type, and then click the up or down arrows to the right of the table.

		QUANTITY FORECASTING		ENGINEERING		
		Disciplines	Resource types	Milestones	Design elements	Schedule
Milestones						
	Position	*ID	*Description			
<input type="checkbox"/>	37	IFC	Issue for Construction			
<input type="checkbox"/>	04	ITD	Type Selection Submittal			⊗
<input type="checkbox"/>	05	IPD	Prelim Submittal			⊗
<input type="checkbox"/>	06	IID	Interim Submittal			⊗
<input type="checkbox"/>	07	IRD	Final Submittal			⊗
<input type="checkbox"/>	08	ICD	IFC Submittal			⊗
<input type="checkbox"/>	09	IFA	Issue for Approval			⊗
<input type="checkbox"/>	10	IFD	Issue for Design			⊗
<input type="checkbox"/>	11	AFC	IFC Approved			⊗

To add a milestone at the project level from the parent organization, select a description from the drop-down list, and then click the **Add milestone** icon.

### 3.13.2 Considerations

- You must have the permission Edit engineering settings.
- You cannot edit or remove a milestone when it is assigned to a project.

### 3.13.3 Related links

After milestones are set up, you can assign them to claiming scheme steps. For more information, see [Configure claiming schemes](#).

## 3.14 DESIGN ELEMENTS

### 3.14.1 Summary

Design elements are subdisciplines that you can associate to scope items in the Engineering module. Design elements are used to group labor types above account codes for rolling up data. You can define and configure design elements at the organization level in Settings > Design > Engineering > **Design**

**elements.** Design elements configured at the organization level are available to all projects in that organization.

To add a new design element, enter a unique name, select a UoM, and an associated EPC option (engineering, procurement, or construction). You can also select a parent design element to group elements together. Click the **Add design element** icon.

ID	*Design element	*UoM	Alternate system UoM	*EPC	Parent(optional)
	ALARM	Ea	Ea	Engineering	Select design element p
6140	CLOSEOUT	Sht	Sht	Engineering	
6141	CM (SH)	Sht	Sht	Engineering	
6142	CM (SF)	SF	m2	Engineering	
6143	COMMUNICATIONS (Ea)	Ea	Ea	Engineering	
6144	COMMUNICATIONS (LF)	LF	m	Engineering	
6145	COMMUTER RAIL	LF	m	Engineering	
6146	CONCRETE (Ea)	Ea	Ea	Engineering	
6147	CONCRETE (SH)	Sht	Sht	Engineering	
6148	CONSTRUCTION QUALITY	MWk	kW	Engineering	
6149	CONSULTANT	PLS	PLS	Engineering	
6150	CULVERT	SF	m2	Engineering	
6151	CW	Sht	Sht	Engineering	

To edit design elements, click in the fields, and then enter text or select a new option. To delete a design element, click the **Delete design element** icon to the right. To adjust the position of a design element in the list, select the design element, and then click the up or down arrows to the right of the table.

You can also import and export a Microsoft Excel spreadsheet of design elements.

### 3.14.2 Considerations

- You must have the permission Edit engineering settings.
- The Alternate system UoM field is automatically populated according to the units of measure in the InEight Platform master data library.
- You cannot delete a design element or edit its UoM when it is assigned to a scope item.
- You cannot delete a parent design element when it has other design elements associated with it.
- Although you can group design elements together using parents, you can only assign terminal design elements to scope items.

### 3.14.3 Related links

You can assign a design element to a scope item in the Resources section of the Add and Edit scope item dialog boxes. See [Scope item resources](#) for more information.

## 3.15 TEAMS

Teams are used to group resources to assign to claiming steps for scope items. Teams created at the organization level are inherited to all projects in the organization. For more information, see [Teams](#) in organization settings.

You can manage teams for your project in Settings > Design > Engineering > **Teams**.

	Position	ID	*Team	Is Vendor	Organization	Vendor	View All Scope Items	Limit Claiming to Team	
+	18	T1	KPE - Power Gen	<input type="checkbox"/>	SE2008 - Kiewit Power Engi...		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	12	T83	Clark Transportation Consultin...	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	13	T55	SHELADIA ASSOCIATES INC	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	14	T67	Tourney Consulting Group LLC	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	15	T41	M J Engineering and Land Surv...	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	16	T7	KIE	<input type="checkbox"/>	SE5001 - Kiewit Infrastru...		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	17	T2	KPE - Water	<input type="checkbox"/>	SE2008 - Kiewit Power E...		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

You can do the following actions:

- **Add** – Click the Enter team drop-down list, select a team, and then click the Add team icon.
- **Remove** - Click the Remove team icon to the right. You cannot remove a team assigned in a project.
- **Sort** - Select a team, and then click the up and down arrows to the right of the table to adjust the position of the team.
- **View All Scope Items** - When selected, team members can view all scope items, even if they are not assigned as the planned team.

- **Limit claiming to Team** - When selected, team members can only claim on scope items they are assigned to as the planned team.

The View All Scope Items and Limit Claiming to Team options are available when the Limit user assignments to only those Teams associated with the project toggle is set to *On* in the Resources settings for your project. For more information, see [Resources](#) in project settings.

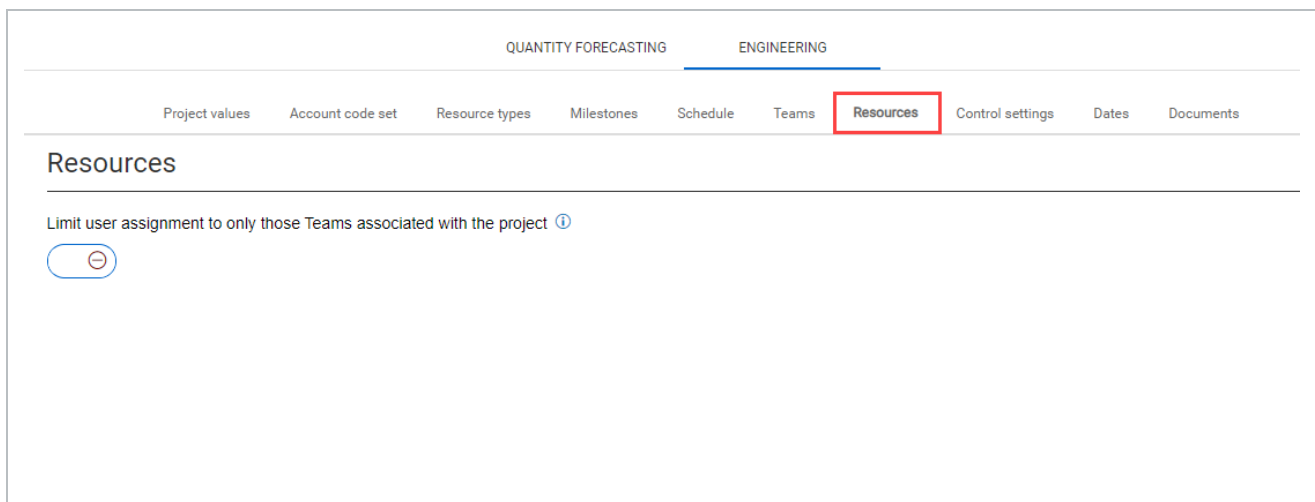
### 3.15.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.

## 3.16 RESOURCES

Resources users are used in the Engineering module to for assignment to claiming steps on scope items. Resources configured at the organization level are available to all projects in the organization. For more information, see [Resources](#) in organization settings.

You can manage resources user assignment limits for your project in Settings > Design > Engineering > **Resources**.



**Limit user assignments to only those Teams associated with the project** - When set to *Off*, any user with project permissions will be available to assign on the project. When set to *On*, only those users who are associated to Teams assigned on the project will be available to assign on the project.

By default, this toggle is set to *Off*. To set the toggle to *On*, at least one team must be added to the project.



### 3.16.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- When you set the Limit user assignment to only those Teams associated with the project toggle to *On* after the project has started, the system validates that all users assigned to incomplete claiming steps are associated with teams added to the project.

## 3.17 ACCOUNT CODE SET

Account code sets are used to group together account codes and tag them for use with scope items. This lets you narrow down the account codes in the master data library to only those necessary for use in Design for specific projects.

Account code sets are created at the organization level. To make an account code set available in project settings, select an account code set at the organization level. For more information, see [Account code set](#) in organization settings.

You can manage account code set settings for your project in Settings > Design > Engineering > **Account code set**.

The screenshot shows the 'Account code set' configuration page. At the top, there are tabs for 'QUANTITY FORECASTING' and 'ENGINEERING'. Below these are navigation links: 'Project values', 'Account code set' (highlighted with a red box), 'Resource types', 'Milestones', 'Schedule', 'Teams', 'Resources', 'Control settings', 'Dates', and 'Documents'. The main content area is titled 'Account code set' and contains the following settings:

- Tied to account code set?**: A toggle switch that is currently turned on (checked).
- \*Account code set locks on upload of scope item structure**: A dropdown menu currently set to 'KEGI AC Set'.
- Select UoM from Account Code Set:**: Two radio button options: 'Primary UoM' (which is selected) and 'Alternate System UoM'.
- Validate UoM for claiming?**: A toggle switch that is currently turned off (unchecked).

**Tied to account code set** - You can tie an account code set to your project by turning the Tied to account code set toggle to *On*. You can then select an account code set. Only account codes in that set are available to assign to scope items in the project.

**Select UoM from Account Code Set** - You can set either the primary or alternate system UoM to be used throughout the project. The primary and alternate system UoM are configured at the organizational level.

**Validate UoM for claiming toggle** – You can choose to validate the account code primary UoM from the master library. When the Validate UoM for claiming toggle is turned to *On*, the UoM in account

code, scope item, and WBS must match to enable claiming. By setting the Validate UoM for claiming toggle to *Off*, only the UoM for the scope item and WBS must match.

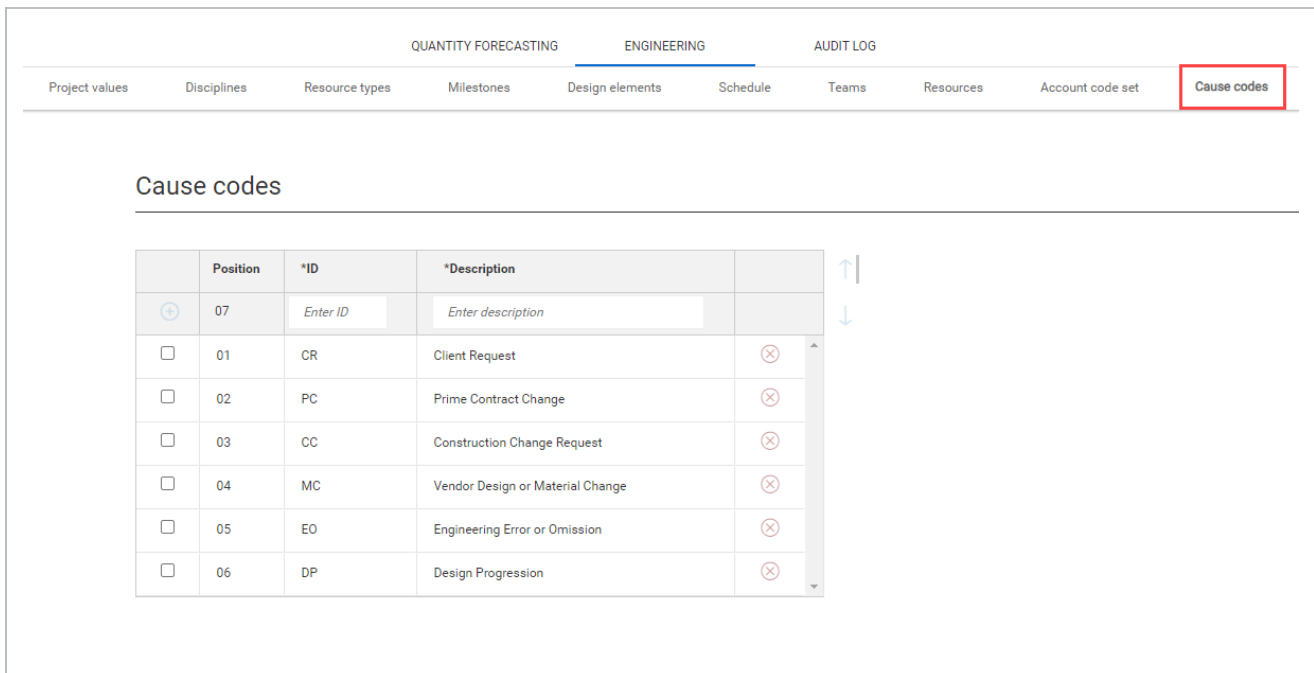
### 3.17.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- To turn the **Tied to account code set** toggle to *On* or *Off*, the scope items grid for the project must be empty.

## 3.18 CAUSE CODES

In the Engineering module, cause codes are required when a quantity change occurs. For more information, see [Update scope item quantity](#).

You can manage cause codes for your organization in Settings > Design > Engineering > **Cause codes**.



The screenshot displays the 'Cause codes' management page in the InEight Platform. The navigation menu at the top includes 'Project values', 'Disciplines', 'Resource types', 'Milestones', 'Design elements', 'Schedule', 'Teams', 'Resources', 'Account code set', and 'Cause codes' (highlighted with a red box). Below the menu, the 'Cause codes' section is visible, featuring a table with the following data:

	Position	*ID	*Description	
+	07	<input type="text" value="Enter ID"/>	<input type="text" value="Enter description"/>	
<input type="checkbox"/>	01	CR	Client Request	<input type="checkbox"/>
<input type="checkbox"/>	02	PC	Prime Contract Change	<input type="checkbox"/>
<input type="checkbox"/>	03	CC	Construction Change Request	<input type="checkbox"/>
<input type="checkbox"/>	04	MC	Vendor Design or Material Change	<input type="checkbox"/>
<input type="checkbox"/>	05	EO	Engineering Error or Omission	<input type="checkbox"/>
<input type="checkbox"/>	06	DP	Design Progression	<input type="checkbox"/>

### 3.18.1 Steps

You can do the following actions:

- **Add** - Enter an ID description, and then click the **Add cause code** icon.
- **Remove** - Click the **Remove cause code** icon to the right. You cannot remove a cause code assigned to a scope item on a project.
- **Edit** - Click in the fields, and then enter text or select an option.
- **Sort** - Select a cause code, and then click the up and down arrows to the right of the table to adjust the position of the cause code.

Cause codes configured at the organization level are available to all projects.

### 3.18.2 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.

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# CHAPTER 4 – PROJECT SETTINGS

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## 4.1 QUANTITY FORECASTING SETTINGS

### 4.1.1 Summary

As an administrator, you can configure settings for the Quantity forecasting module at the organization and project levels. Settings at the organization level are inherited by associated child organizations and projects. At the project level, you can further refine some settings to customize how they are applied in each project.

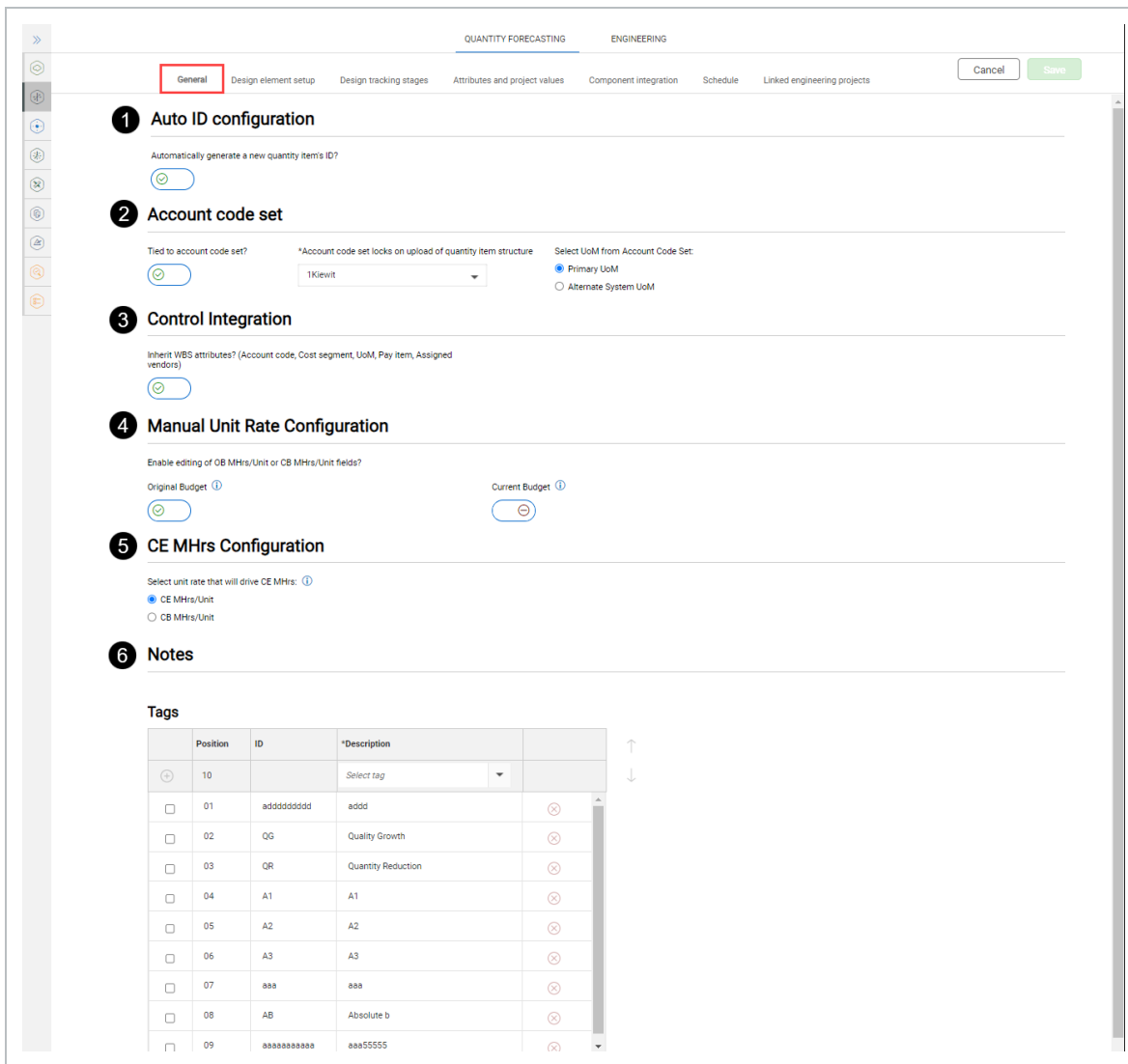
For general information on InEight cloud platform settings, see [Organization Settings](#) and [Project Settings](#).

Detailed information about Quantity forecasting module settings can be found in the links below.

## 4.2 GENERAL

The general settings gives you access to general project configurations. From your project's home page, you can manage the general settings in Settings > Design > Quantity Forecasting > **General**.

The image and table below is an overview of the General settings tab:



### General settings tab

	Title	Description
1	<b>Auto ID configuration</b>	Allows project admins to set whether an ID is system generated or user specified when a new Quantity Item is added to the project.
2	<b>Account code set</b>	Allows project admins to enable the use of Account Code Sets on a

### General settings tab (continued)

	Title	Description
		<p>project and select which Account Code Set to use. Account Code Sets are created in the Org Settings and consist of many Account Codes that are tagged with Design Element, UoM, Ground, Discipline, Qty Source information. When an Account Code Set is tied to a project, the tagged attribute fields will be auto populated on the Quantity Item when an Account Code is assigned. The Quantity Items grid must be empty to enable/disable the Account Code Set project setting. When an Account Code Set is tied to a project, only those Account Codes in the set will be available to assign to the Quantity Item. This setting gives project admins the option to use either the Primary UoMs or Alternate System UoMs on the project when an Account Code is assigned to a Quantity Item. Project admins can also enable the ability to edit the inherited UoMs and their usage in the column, add or edit in the slide-out panel, and via import. To disable the feature, all Quantity Item UoMs must align to the assigned Account Code's UoM from the associated Account Code Set.</p>
3	<b>Control Integration</b>	Enable integration of InEight Control's WBS attributes for the



### General settings tab (continued)

	Title	Description
		<p>project. Quantity items will inherit the Account code, Cost segment, UoM, Pay item, and Assigned attributes. The inherited attributes are disabled in the quantity item fields. To enable Control Integration, the WBS phase code must be selected as <b>Required</b> and <b>Unique</b> in the Quantity Forecasting &gt; <b>Fields and component integration</b> settings tab and existing data must align with Control's WBS attributes.</p>
4	<b>Manual Unit Rate Configuration</b>	<p>Allows project admins to manually set the OB MHrs/Unit and/or CB MHrs/Unit on all the Quantity Items in the project. When the setting is enabled, the OB and/or CB MHrs will not be generated using the unit rates from InEight Control. With the setting enabled, the "Get OB MHrs/Unit" and/or the "Get CB MHrs/Unit" will be removed from the Actions menu and the OB MHrs/Unit and/or CB MHrs/Unit fields will become editable. The system requires all OB MHrs/Unit and/or CB MHrs/Unit fields to be empty to turn this setting Off. If you were functioning off Control OB and/or CB Unit Rates, then the system will allow you to turn this setting On, but all the OB and/or CB Unit Rate fields will be cleared.</p>
5	<b>CE MHrs Configuration</b>	<p>Allows project admins to specify</p>

### General settings tab (continued)

	Title	Description
		<p>which unit rate should be used to calculate the CE MHRs on each Quantity Item in the project. The setting allows for either the CE unit rate or the CB unit rate to be used to drive the CE MHRs. This setting will be applied to all Quantity Items in the project. The setting can be changed in the middle of a project. If the setting is changed, the user will be prompted with a warning message and the system will automatically update the CE MHRs on every Quantity Item using the updated unit rate.</p>
6	Notes	<p><b>Tags</b> - Allows project admins to add and remove tags on project which can be added to the individual notes maintained on a Quantity Item. Once a tag is created in the Organization Settings, then it will become available to add to a project through this project settings.</p>

#### 4.2.1 Considerations

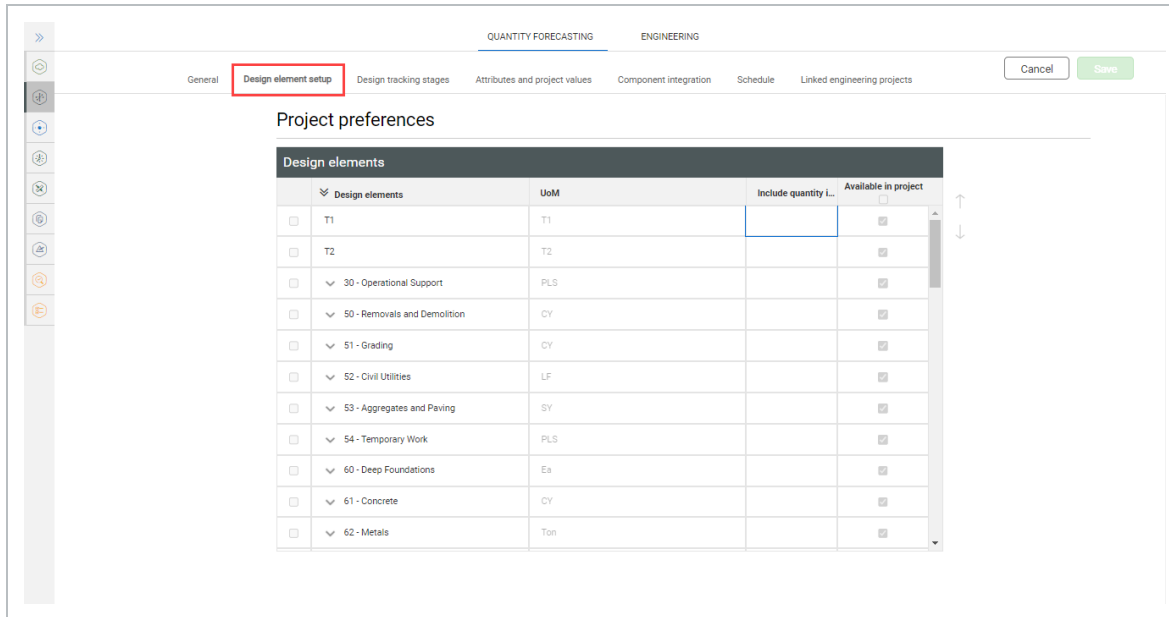
You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 4.3 DESIGN ELEMENT SETUP

Design elements are used to group like scope into specific coding and associate it to a quantity item. The quantity, hours, and cost can then be rolled up to the design element level to drive decision making information on a project. Design elements are configured in organization settings and are

available to all projects in the organization. For more information, see **Design elements** in organization settings.

You can manage Design elements in the project's Settings > Design > Quantity forecasting > **Design element setup** tab. You can select which Design elements are available on the project.



Design elements configured at the organization level are available to all projects in the organization. For more information, see **Design elements** in organization settings.

When an Account code set is enabled on the project, the Include quantity in the rollup calculation and Available in project options are disabled in the Design elements grid, as the project uses the Design elements tagged to the account codes in the Account code set. For more information, see **Account code set** in the project's General settings.

### 4.3.1 Steps

You can perform the following actions for Design element setup:

- **Available in project** - Select which Design elements to make available in the project.
- **Sort** - Select the Design elements, and then click the up or down arrows to the right of the table to adjust the position of a Design element.

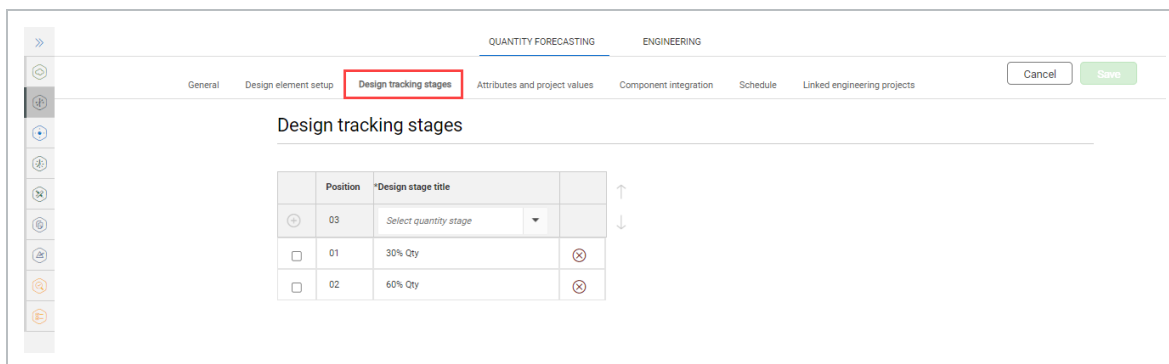
## 4.3.2 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 4.4 DESIGN TRACKING STAGES

Design tracking stages are used to track how scope quantities change throughout the design process. Design tracking stages are created in organization settings and are available to add to all projects in the organization. For more information, see **Design tracking stages** in organization settings.

You can manage Design tracking stages in the project's settings (Design > Quantity forecasting > **Design tracking stages** tab).



By adding a design tracking stage to a project, a field is added to the Quantity Items grid and quantity item slide-out panel. Tracking stages can then be imported into the project.

### 4.4.1 Steps

You can perform the following actions for Design tracking stages:

**Add** – Click the Select quantity stage drop-down, select a stage from the list, and then click the Add icon.

**Remove** - Click the Remove icon to the right. You cannot remove Design stages that have been assigned to quantity items.

**Sort** - Select the Design tracking stage, and then click the up or down arrows to the right of the table to adjust the position of a Design stage.

Design tracking stages created in organization settings become available to add in the project settings for every project in the organization. For more information, see **Design tracking stages** in organization settings.

### 4.4.2 Considerations

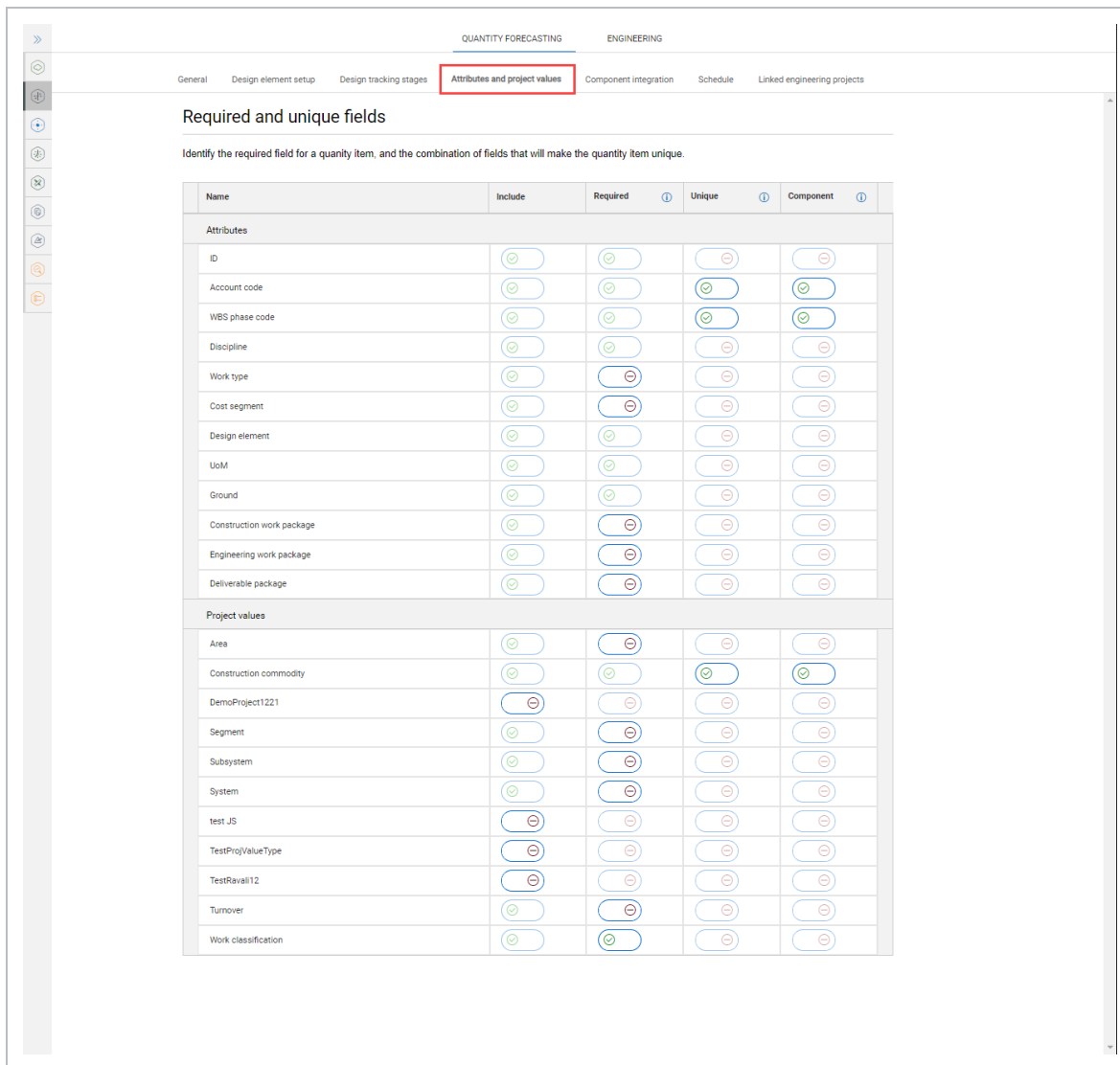
You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

You cannot delete Design tracking stages that are assigned to a project.

## 4.5 ATTRIBUTES AND PROJECT VALUES

You can configure the criteria for how attributes and project value types are associated to a quantity item and if they are required in a project in project > Settings > Design > Quantity Forecasting > **Attributes and project values** tab. For each attribute and project value, you can configure which one is included, required, and unique.

The following image shows the Attributes and project values tab:



**Include** – When you turn the Include option to *On* for a value, the value is made available to select from as optional in quantity items.

**Required** - When you turn the Required option to *On* for a value, the value is a required attribute on the quantity item. Required fields will show with an asterisk in the project to let you know which fields are required when adding or editing quantity items. Design checks that these required fields are maintained when adding or editing quantity items in the project.

**Unique** - The Unique toggle lets you set to *On* a combination of fields for setting quantity items uniqueness. For example, if you select System, Area, and Turnover in the Unique setting, then Design does not allow two quantity items to exist in that project with the same System, Area, and Turnover combination. Design checks this unique setting every time a quantity item is added or edited in the project. The field must first be set as required to set it as a unique field. The setting is primarily needed

for the integration with InEight Plan to automatically associate Plan components to the quantity items in Design. The uniqueness of the field eliminates a potential conflict with quantity items during the Plan component sync and association process.

**Component** - When the Plan component integration is enabled for the project in the [Component integration](#) tab, you can configure which values will integrate with Plan components. To turn the Component field to *On*, you must first set the field as required and unique. Unique and Component fields must match.

### 4.5.1 Attributes

The attribute values are part of the Design application and are used to configure the project's quantity items. All attributes have Include turned to *On* by default. You can change the values for each project.

### 4.5.2 Project values

You can select which project value types can be associated to quantity items and if they are required in a project. The Project value types have Include set to *Off* by default. The project values are supplemental attributes configured at the organization level. For more information, see [Project values](#) in organization settings.

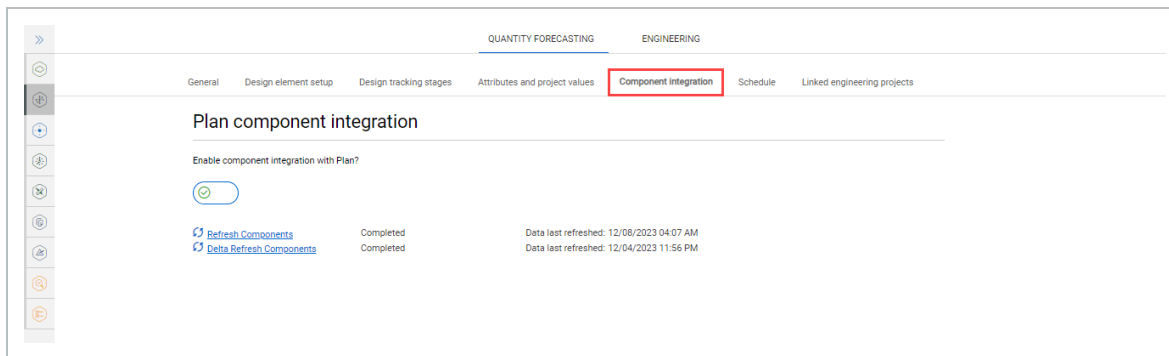
### 4.5.3 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 4.6 COMPONENT INTEGRATION

### 4.6.1 Plan Component Integration

In the Component integration tab, you can enable the integration with InEight Plan components.



Setting the Enable component integration with Plan toggle to *On* enables the following:

- The Get Plan Components option in the project > Design > Quantity Items > **Actions** menu.
- The Component column in project > Settings > Design > Quantity Forecasting > **Attributes and project values** tab. You can configure criteria for how component data is assigned to a quantity item.

Sync components by clicking **Refresh Components** or **Delta Refresh Components**. The status and last refresh date are shown next to the refresh options so you can be informed of when the last refresh was completed.

When you enable component integration with Plan, at least one attribute must be turned to *On* in the project > Settings > Quantity Forecasting > Attributes and project values > **Component** column. For more information, see [Attributes and project values](#).

When components with these attributes are synced from Plan, Design automatically associates the components to the quantity item when a quantity item exists with matching attributes.

The component attributes must match the unique configured attributes. Changes to Component integration settings cannot be saved until these are selected.

## 4.6.2 Considerations

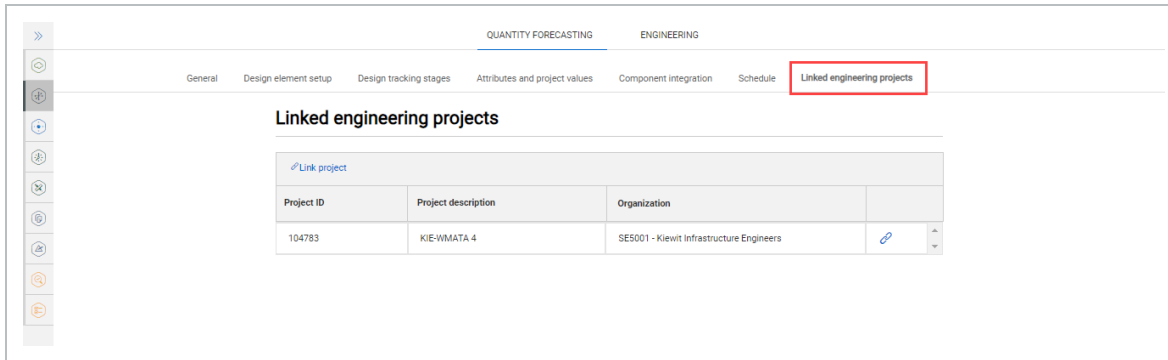
- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 4.7 LINKED ENGINEERING PROJECTS

You can link projects with the goal of sharing deliverable and engineering work packages from the Engineering module to the Quantity forecasting module and show Engineering Work Packages in



InEight Plan. You can manage linked engineering projects in project settings ( Design > Quantity Forecasting > **Linked engineering projects** tab).



To share engineering work packages between different projects and Plan, you must link the projects.

**NOTE**

By default, each project is already linked to itself, so you can always share deliverable and engineering work packages in the same project.

In the Quantity forecasting module, there are two fields that are linked and populated from the Engineering module:

- **Deliverable package:** This field draws data from Actions > Configure work packages > **Deliverable Package** in the Engineering module for linked projects.
- **Engineering work package:** This field draws data from Actions > Configure work packages > **Engineering Work Package** in the Engineering module for linked projects.

**Edit quantity item** [X]

DETAILS | QUANTITIES | COMPONENTS | NOTES

Select one [v]      Select one [v]

OB Mhrs/Unit [ ]      CB Mhrs/Unit 650.00

Commodity Select one [v]      Construction work package Select one [v]

**Deliverable package** PWD [v]      **Engineering work package** Bridge [v]

User defined field 1 C1001.01010      User defined field 2 [ ]

User defined field 3 [ ]      User defined field 4 [ ]

User defined field 5 [ ]      User defined field 6 [ ]

Design Complete

Cancel Save

**NOTE** These fields are also available as columns in the quantity items grid.

After you associate a deliverable or engineering work package with a quantity item, you cannot delete the package or unlink the project.

### 4.7.0.1 Integration with Plan

In Plan's Work packaging module, you can associate EWP's from Design to Construction work packages (CWP). For more information on associating EWP's, see Engineering work package (EWP) in Plan's [Work](#)

[package creation](#) topic.

## 4.7.1 Steps

### Link projects

1. From the Linked engineering projects tab, click **Link project**
2. In the dialog box, select one or more projects, and then click **Add**

**NOTE**

You will only see projects you have permission for.

To unlink a project, click the **Unlink** project button next to the project.

## 4.8 ENGINEERING SETTINGS

### 4.8.1 Summary

As an administrator, you can configure settings for the Engineering module at the organization and project levels. Settings at the organization level are inherited by associated child organizations and projects. At the project level, you can further refine some settings to customize how they are applied in each project.

For general information on InEight cloud platform settings, see [Organization Settings](#) and [Project Settings](#).

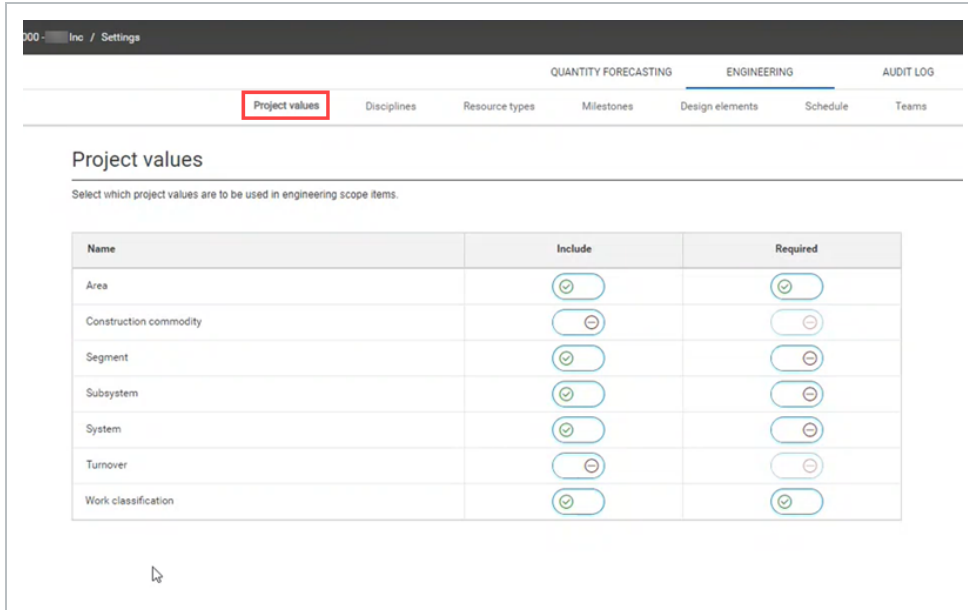
Detailed information about Engineering module settings can be found in the links below.

## 4.9 PROJECT VALUES

### 4.9.1 Summary

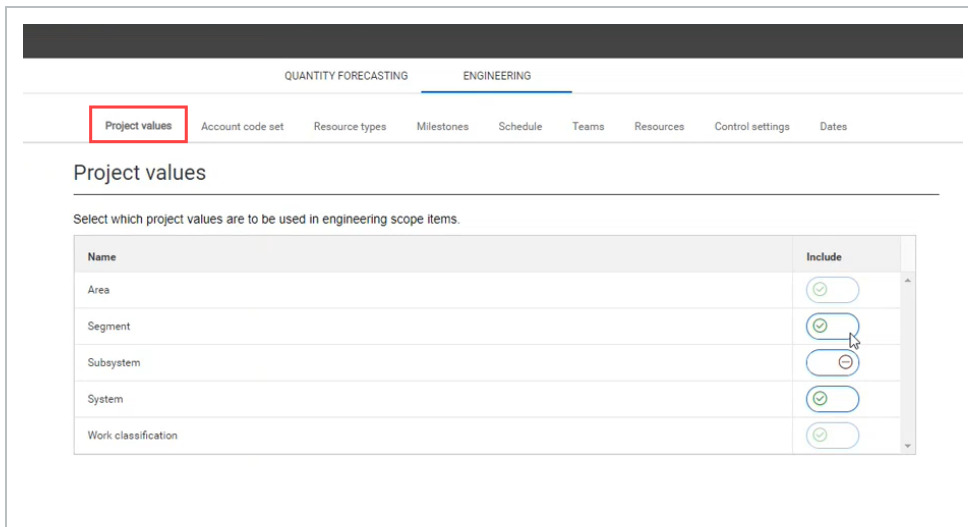
You can select which project values can be associated to engineering scope items and if they are required in a project. The values are configured at the organization level in Settings > Design > Engineering > **Project values**. Project values configured at the organization level are available in all projects.

To configure project values, go to Engineering > **Project values**.

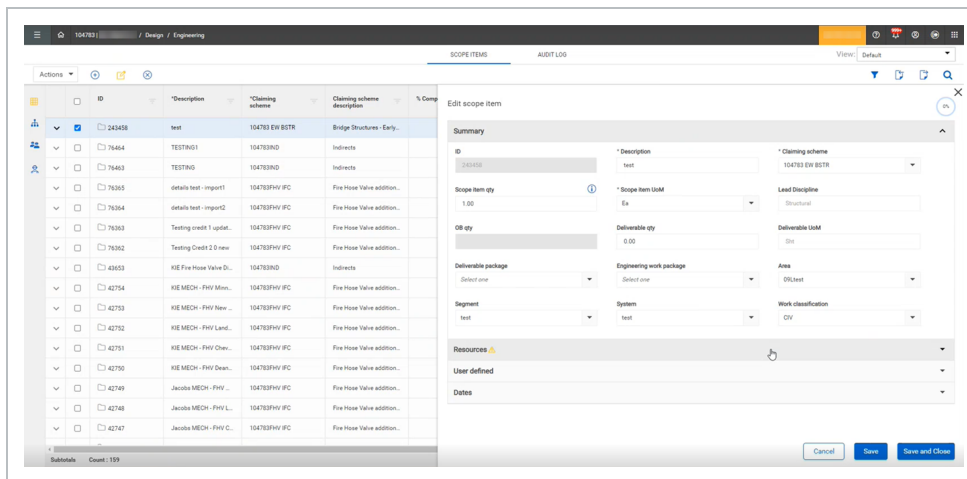


When you include project values, those values are available for selection in Settings at the project level. You can select or deselect the values that are not required for the project.

When you require a project value, the value is required at the project level. The project-level toggles for these values are automatically disabled.



The selected project values are shown in the Scope item grid and slide-out panel. You can also export and import them in a Microsoft Excel spreadsheet.



## 4.9.2 Considerations

- You must have the Edit engineering settings permission.

## 4.9.3 Related links

After project values are set up, you can configure **disciplines**. For more information on how to configure disciplines, see [Disciplines](#).

# 4.10 ACCOUNT CODE SET

Account code sets are used to group together account codes and tag them for use with scope items. This lets you narrow down the account codes in the master data library to only those necessary for use in Design for specific projects.

Account code sets are created at the organization level. To make an account code set available in project settings, select an account code set at the organization level. For more information, see [Account code set](#) in organization settings.

You can manage account code set settings for your project in Settings > Design > Engineering > **Account code set**.

The screenshot shows the 'Account code set' configuration page. At the top, there are tabs for 'QUANTITY FORECASTING' and 'ENGINEERING'. Below the tabs is a navigation bar with items: 'Project values', 'Account code set' (highlighted with a red box), 'Resource types', 'Milestones', 'Schedule', 'Teams', 'Resources', 'Control settings', 'Dates', and 'Documents'. The main content area is titled 'Account code set' and contains the following settings:

- Tied to account code set?**: A toggle switch that is turned *On* (indicated by a green checkmark).
- \*Account code set locks on upload of scope item structure**: A dropdown menu currently showing 'KEGI AC Set'.
- Select UoM from Account Code Set:** Two radio button options: 'Primary UoM' (selected) and 'Alternate System UoM'.
- Validate UoM for claiming?**: A toggle switch that is turned *Off* (indicated by a minus sign).

**Tied to account code set** - You can tie an account code set to your project by turning the Tied to account code set toggle to *On*. You can then select an account code set. Only account codes in that set are available to assign to scope items in the project.

**Select UoM from Account Code Set** - You can set either the primary or alternate system UoM to be used throughout the project. The primary and alternate system UoM are configured at the organizational level.

**Validate UoM for claiming toggle** – You can choose to validate the account code primary UoM from the master library. When the Validate UoM for claiming toggle is turned to *On*, the UoM in account code, scope item, and WBS must match to enable claiming. By setting the Validate UoM for claiming toggle to *Off*, only the UoM for the scope item and WBS must match.

### 4.10.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- To turn the **Tied to account code set** toggle to *On* or *Off*, the scope items grid for the project must be empty.

## 4.11 RESOURCE TYPES

Resource types are associated with disciplines and must be managed in your project to add claiming schemes. For more information, see [Configure claiming schemes](#). Resource types are created at the organization level.

You can manage resource types for your project in settings > Design > Engineering > **Resource types**.

QUANTITY FORECASTING      ENGINEERING

---

Project values   Account code set   **Resource types**   Milestones   Schedule   Teams   Resources   Control settings   Dates   Documents

---

### Resource type

	Position	*ID	*Description	Discipline	
+	20		Select resource type		
<input type="checkbox"/>	01	TLR	Track Light Rail	Track	<input type="checkbox"/>
<input type="checkbox"/>	02	BGS	Building Stations	Building	<input type="checkbox"/>
<input type="checkbox"/>	03	EEN	Electrical Engineer	Electrical	<input type="checkbox"/>
<input type="checkbox"/>	04	EVN	Environmental	Environmental	<input type="checkbox"/>
<input type="checkbox"/>	05	PMG	Project Management	Indirects	<input type="checkbox"/>
<input type="checkbox"/>	06	PCT	Project Controls	Indirects	<input type="checkbox"/>
<input type="checkbox"/>	07	QAM	Quality Management	Indirects	<input type="checkbox"/>
<input type="checkbox"/>	08	DCT	Document Control	Indirects	<input type="checkbox"/>

### 4.11.1 Steps

You can do any of the following actions:

- **Add** – Click the **Select resource type** drop-down list, select a resource type, and then click the **Add resource** icon.
- **Remove** - Click the **Remove resource type** icon to the right. You cannot remove a resource type that has been assigned to a project.
- **Sort** - Select a resource type, and then click the up and down arrows to the right of the table to adjust the position of the resource type.

All resource types are created at the organization level and are automatically inherited in projects. For more information, see Resource types in organization settings.

### 4.11.2 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.

- When you assign a resource type to a claiming scheme step, its associated ID and discipline is automatically populated.

## 4.12 MILESTONES

### 4.12.1 Summary

You can define completion milestones in the Engineering module to assign to claiming scheme steps. Examples of completion milestones might be Issue for Review or Issue for Construction.

A system-generated milestone named Scope Complete is automatically assigned to every project ensuring that all scope item's scope can be planned with dates.

Milestones are created at the organization level in Settings > Design > Engineering > **Milestones**. After creation, you can assign milestones at the suborganization level.

At the project level, all milestones from the parent organization are automatically inherited and you can assign or remove resource types as necessary.

To add a new milestone at the organization level, enter an ID, a description, and a discipline, and then click the **Add resource** icon. To edit resource types, click in the fields, and then enter text. To remove a resource type, click the **Remove resource type** icon to the right. To adjust the position of a resource type in the list, select the resource type, and then click the up or down arrows to the right of the table.

The screenshot displays the 'Milestones' management interface within the 'ENGINEERING' module. The 'Milestones' tab is selected, and the table below lists various milestones. The 'Issue for Construction' milestone is highlighted with a red box, and its 'Add resource' icon (a plus sign in a circle) is also highlighted with a red box. The 'Remove resource type' icon (a red X in a circle) is visible for each row. Up and down arrows are present to the right of the table for reordering.

	Position	*ID	*Description	
<input type="checkbox"/>	37	IFC	Issue for Construction	
<input type="checkbox"/>	04	ITD	Type Selection Submittal	
<input type="checkbox"/>	05	IPD	Prelim Submittal	
<input type="checkbox"/>	06	IID	Interim Submittal	
<input type="checkbox"/>	07	IRD	Final Submittal	
<input type="checkbox"/>	08	ICD	IFC Submittal	
<input type="checkbox"/>	09	IFA	Issue for Approval	
<input type="checkbox"/>	10	IFD	Issue for Design	
<input type="checkbox"/>	11	AFC	IFC Approved	



To add a milestone at the project level from the parent organization, select a description from the drop-down list, and then click the **Add milestone** icon.

## 4.12.2 Considerations

- You must have the permission Edit engineering settings.
- You cannot edit or remove a milestone when it is assigned to a project.

## 4.12.3 Related links

After milestones are set up, you can assign them to claiming scheme steps. For more information, see [Configure claiming schemes](#).

## 4.13 TEAMS

Teams are used to group resources to assign to claiming steps for scope items. Teams created at the organization level are inherited to all projects in the organization. For more information, see [Teams](#) in organization settings.

You can manage teams for your project in Settings > Design > Engineering > **Teams**.

		QUANTITY FORECASTING		ENGINEERING							
		Project values	Account code set	Resource types	Milestones	Schedule	<b>Teams</b>	Resources	Control settings	Dates	Documents
Team											
	Position	ID	*Team	Is Vendor	Organization	Vendor	View All Scope Items	Limit Claiming to Team			
+	18	T1	KPE - Power Gen	<input type="checkbox"/>	SE2008 - Kiewit Power Engi...		<input checked="" type="checkbox"/>	<input type="checkbox"/>			
<input type="checkbox"/>	12	T83	Clark Transportation Consultin...	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	13	T55	SHELADIA ASSOCIATES INC	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	14	T67	Tourney Consulting Group LLC	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	15	T41	M J Engineering and Land Surv...	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	16	T7	KIE	<input type="checkbox"/>	SE5001 - Kiewit Infrastru...		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
<input type="checkbox"/>	17	T2	KPE - Water	<input type="checkbox"/>	SE2008 - Kiewit Power E...		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>		

You can do the following actions:

- **Add** – Click the Enter team drop-down list, select a team, and then click the Add team icon.
- **Remove** - Click the Remove team icon to the right. You cannot remove a team assigned in a project.
- **Sort** - Select a team, and then click the up and down arrows to the right of the table to adjust the position of the team.
- **View All Scope Items** - When selected, team members can view all scope items, even if they are not assigned as the planned team.
- **Limit claiming to Team** - When selected, team members can only claim on scope items they are assigned to as the planned team.

The View All Scope Items and Limit Claiming to Team options are available when the Limit user assignments to only those Teams associated with the project toggle is set to *On* in the Resources settings for your project. For more information, see [Resources](#) in project settings.

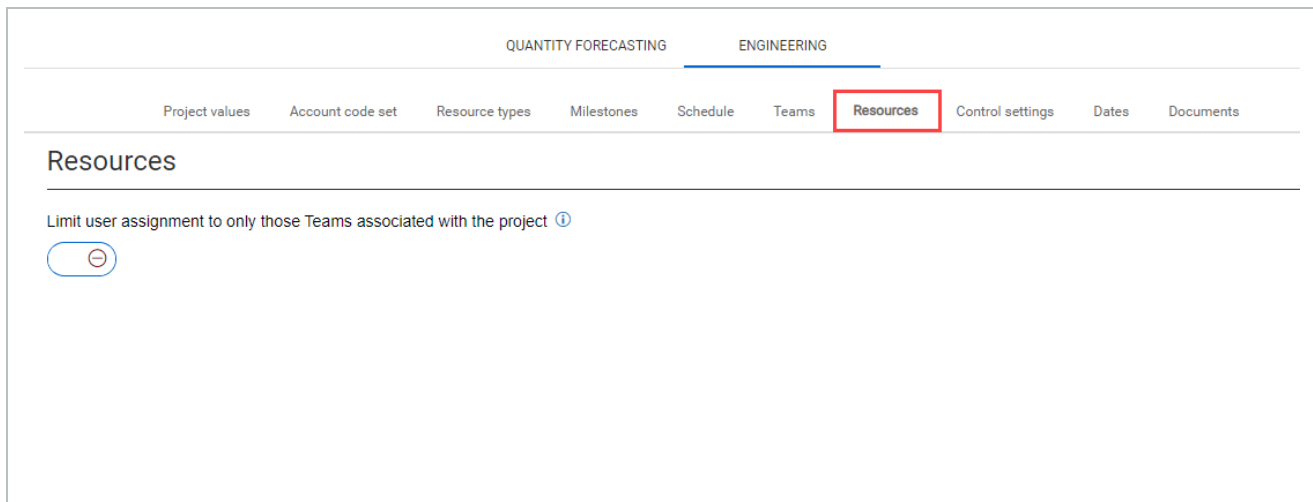
### 4.13.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.

## 4.14 RESOURCES

Resources users are used in the Engineering module to for assignment to claiming steps on scope items. Resources configured at the organization level are available to all projects in the organization. For more information, see [Resources](#) in organization settings.

You can manage resources user assignment limits for your project in Settings > Design > Engineering > **Resources**.



**Limit user assignments to only those Teams associated with the project** - When set to *Off*, any user with project permissions will be available to assign on the project. When set to *On*, only those users who are associated to Teams assigned on the project will be available to assign on the project.

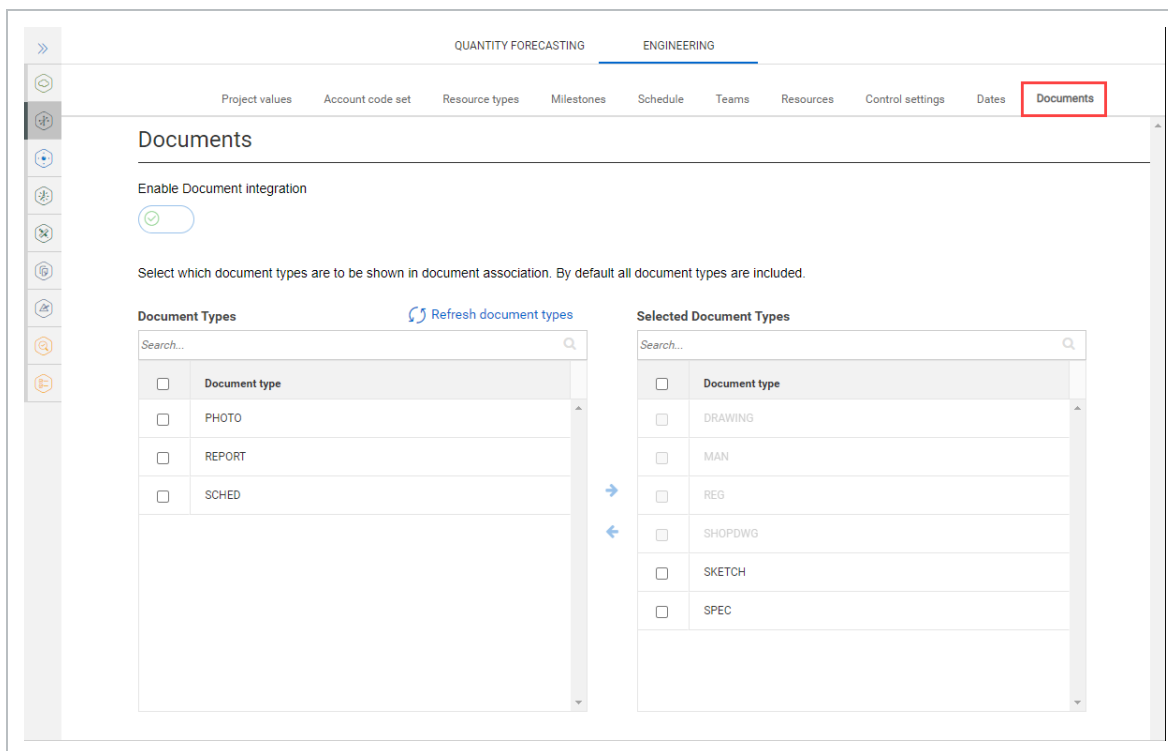
By default, this toggle is set to *Off*. To set the toggle to *On*, at least one team must be added to the project.

### 4.14.1 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Engineering.
- When you set the Limit user assignment to only those Teams associated with the project toggle to *On* after the project has started, the system validates that all users assigned to incomplete claiming steps are associated with teams added to the project.

## 4.15 DOCUMENTS

You can integrate documents from InEight Document with scope items for your project in Settings > Engineering > **Documents**.



To associate documents from Document with scope items, turn the **Enable Document integration** toggle to *On*. To enable Document integration, you must first setup the project in InEight Platform > Suite Administration > **Application integrations**.

When Document integration is set to *On*, the Document Types grids show. This is where you can manage the document types to show in document association. The Associate documents action is also made available in Engineering > Scope Items > **Actions** drop-down menu.

### Document types

The Document Types grid shows all available document types from Document. Click **Refresh document types** to sync them from Document. You can select which document types from the Document register are shown in the Associate documents page when associating documents to scope items.

### Selected Document Types

The Selected Document Types grid shows the document types to be synced. Document types that have an active association cannot be removed unless you remove their associations.

To add a document type, select it from the Document Types list, and then click **Move right**. To remove a document type, select it from the Selected Document Types list, and then click **Move left**.

### Associate documents

You can associate documents in project > Engineering > Scope Items > Actions > **Associate documents** page. For more information about associating documents, see [Associate documents](#).

### 4.15.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform, a role with the applicable permissions in Engineering, and applicable permissions in InEight Document.

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# CHAPTER 5 – ENGINEERING MODULE OVERVIEW

## 5.0.1 Summary

The Engineering module lets you perform design planning, resourcing, and progress tracking. The module lets you take off your design scope in a standardized method and associate configurable master and project-level data. The design scope is taken off as a combination of claiming schemes and scope items. Resources can be allocated to the scope items.

The Engineering module is integrated with InEight Control to let you assign WBS phase codes to a scope item. This lets earned quantity value flow to integrated WBS phase codes in Control, where you can manage budgets, earned value, and earned revenue.

## 5.1 SCOPE ITEMS

The Scope items page is the main page of the Engineering module. All individual engineering deliverables are created and tracked as scope items in the grid on this page.

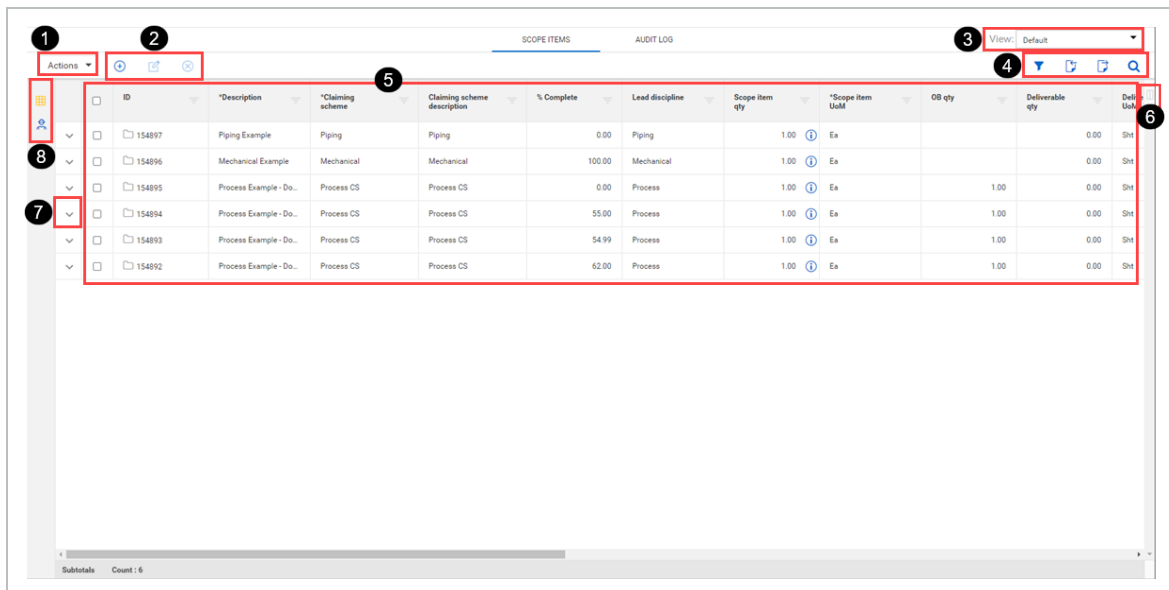
The following table and image give an overview of each section of the Scope items page and what can be performed there.

### Overview - Scope items page

Title		Description
1	<b>Actions menu</b>	Do any of the following: <ul style="list-style-type: none"> <li>• Configure claiming schemes</li> <li>• Configure work packages</li> <li>• Configure project values</li> </ul>

### Overview - Scope items page (continued)

	Title	Description
		<ul style="list-style-type: none"> <li>• Unlock Budget</li> <li>• Role assignment</li> </ul>
2	<b>Scope item buttons</b>	Add, edit, and delete scope items.
3	<b>View</b>	Select, save, rename, and delete views.
4	<b>Upper right toolbar</b>	<ul style="list-style-type: none"> <li>• Create query filter - Opens the query builder</li> <li>• Import and Export - Import and export sets of data</li> <li>• Find - Search scope items</li> </ul>
5	<b>Scope items</b>	Grid showing scope items and related information organized by columns.
6	<b>Column chooser</b>	Select which columns are shown or hidden.
7	<b>Show/Hide claiming steps</b>	Shows claiming scheme steps, details, and history. It also lets you claim completion for each scope item.
8	<b>Additional views</b>	Choose whether to view all scope items or only those Assigned to Me.





## 5.1.1 Considerations

You must have the permission View scope items.

# 5.2 ADD A SCOPE ITEM

## 5.2.1 Summary

You can add a scope item manually in the Scope items page.

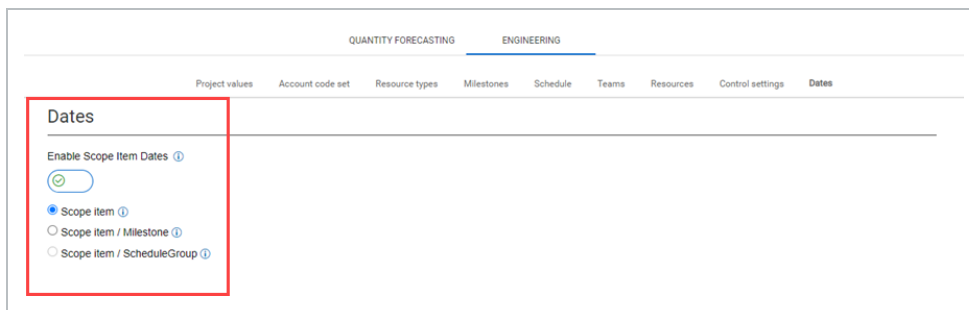
The Add scope item slide-out panel contains the following sections:

- Summary – Basic details of the scope item, including:
  - ID – This field is automatically populated.
  - Description - Must be unique.
  - Claiming scheme – Must be set up on the Configure claiming schemes page.
  - Scope item qty and UoM – If an account code set in enabled for the project, the UoM must match the UoM of the resource type's associated account code in the Resources tab, which is automatically populated after you select a claiming scheme. Scope item UoM must also match WBS phase code UoM to claim progress.
  - Lead Discipline – This field is automatically populated based on the claiming scheme.
  - OB qty – This field is initially populated by the Scope Item qty field when the budget is locked. It is not editable but is shown for tracking purposes. If you edit the scope item qty, you must enter a reason to explain the difference. See [Update scope item quantity](#) for more information.
  - Deliverable qty and UoM – The quantities and units of the design deliverables, such as sheets.
  - Construction work area, Work classification, and Deliverable package – You can use these fields to group your scope of work.
  - Engineering work package – This field can be used to group your scope of work separately from deliverable packages. For example, you might group multiple deliverable packages under one engineering work package.
- Resources – Shows the resources assigned to the selected claiming scheme so you can know what percentage of scope needs to be done by each resource. See [Scope item resources](#) for more information.

- User defined – These are free-form text fields with a maximum of 250 characters each.
- Dates

Actual start dates are an aggregated value based on the claim date that you specified when beginning claiming.

The Actual start date is based on the project setting for Dates:



- If the Dates project setting is set to Scope item, the system captures the first claim date made on the scope item in the Actual start field.
- If the Dates project setting is set to Scope item / Milestone, the system captures the first claim date made on each milestone on a claiming scheme in the Actual start field.
- If the Dates project setting is set to Scope item / ScheduleGroup, the system captures the first claim date made on each schedule group on a claiming scheme in the Actual start field.

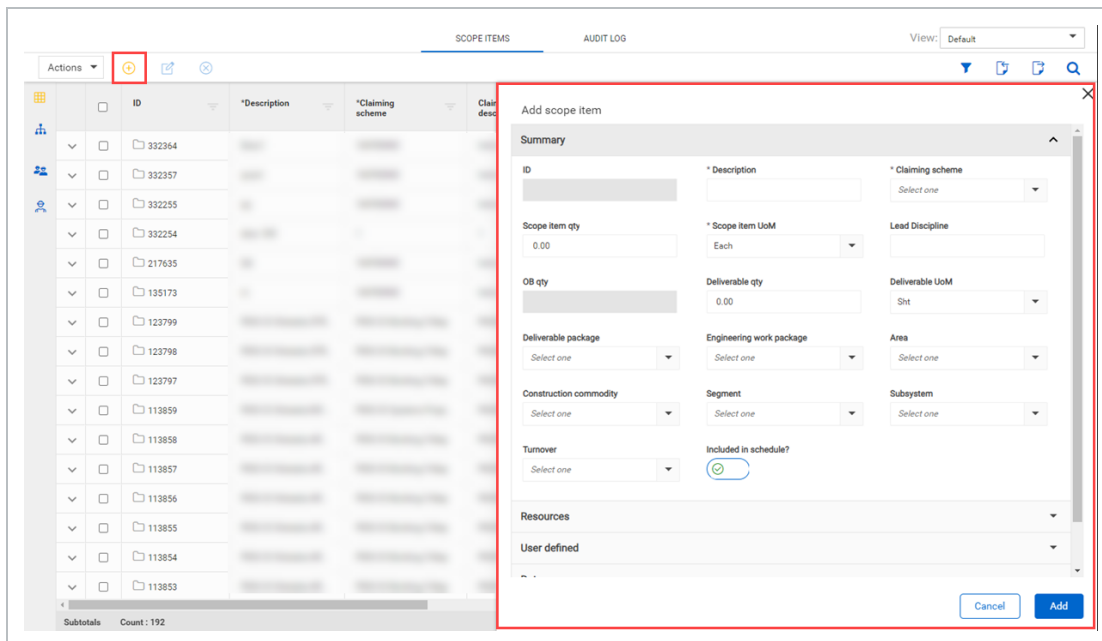
## 5.2.2 Considerations

- To add a scope item, you must first add claiming schemes to associate with the scope item. For more information, see [Configure claiming schemes](#).
- You must have the permission Add scope items.

## 5.2.3 Steps

To add a scope item:

1. Click the **Add scope item** icon in the upper left. The Add scope item slide-out panel opens.



2. Fill out the required fields:

- Description
- Claiming scheme
- Scope item UoM

#### NOTE

If an account code set is enabled for the project, Scope item UoM must match the UoM of account code on the Resources tab. Scope item UoM must also match WBS phase code UoM to claim progress.

3. Click **Add**.

## 5.2.4 Related links

- You can also add new scope items in bulk with the import process. For more information, see [Import new scope items](#)
- For more information about the Resource section, see [Scope item resources](#).
- After a scope item is added with a WBS phase code assigned to all assigned resource types, you can claim on it. For more information, see [Claim on a scope item](#).

## 5.3 EDIT A SCOPE ITEM

### 5.3.1 Summary

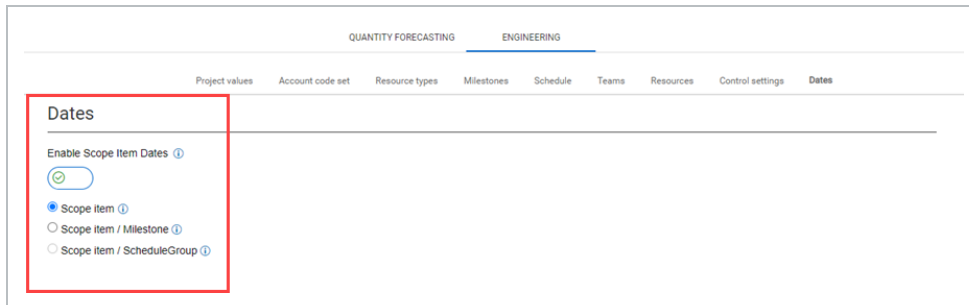
You can edit a scope item manually in the Scope items page.

The Edit scope item slide-out panel contains the following sections:

- Summary – Basic details of the scope item, including:
  - ID – This field is automatically populated.
  - Description - Must be unique.
  - Claiming scheme – Cannot be edited after claiming has been made.
  - Scope item qty and UoM – If you edit the quantity after claiming has been made, you must enter a reason in the Update scope item qty dialog box. See [Update scope item quantity](#) for more information. If an account code set in enabled for the project, the UoM must match the UoM of the resource type's associated account code in the Resources tab, which is automatically populated after you select a claiming scheme. Scope item UoM must also match WBS phase code UoM to claim progress.
  - Lead Discipline – This field is automatically populated based on the claiming scheme.
  - OB qty – This field is editable only if the budget is unlocked. If you edit the scope item qty, you must enter a reason to explain the difference. See [Update scope item quantity](#) for more information.
  - Deliverable qty and UoM – The quantities and units of the design deliverables, such as sheets.
  - Construction work area, Work classification, and Deliverable package – You can use these fields to group your scope of work.
  - Engineering work package – This field can be used to group your scope of work separately from deliverable packages. For example, you might group multiple deliverable packages under one engineering work package.
- Resources – Shows the resources assigned to the selected claiming scheme so you can know what percentage of scope needs to be done by each resource. See [Scope item resources](#) for more information.
- User defined – These are free-form text fields with a maximum of 250 characters each.
- Dates

Actual start dates are an aggregated value based on the claim date that you specified when beginning claiming.

The Actual start date is based on the project setting for dates:



- If the Dates project setting is set to Scope item, the system captures the first claim date made on the scope item in the Actual start field.
- If the Dates project setting is set to Scope item / Milestone, the system captures the first claim date made on each milestone on a claiming scheme in the Actual start field.
- If the Dates project setting is set to Scope item / ScheduleGroup, the system captures the first claim date made on each schedule group on a claiming scheme in the Actual start field.

## 5.3.2 Considerations

You must have the permission Edit scope items.

## 5.3.3 Steps

To edit a scope item:

1. Select the check box to the left of one scope item and then click the **Edit scope item** icon in the upper left. The Edit scope item slide-out panel opens.

The screenshot shows the 'Edit scope item' dialog box. The background table lists scope items with IDs from 332505 down to 332459. The dialog box is titled 'Edit scope item' and contains a 'Summary' section with the following fields:

- ID: 332505
- \*Description: lock - creating new
- \*Claiming scheme: 104783IND
- Scope item qty: 30.00
- \*Scope item UoM: Each
- Lead Discipline: Indirects
- OB qty: [empty]
- Deliverable qty: 0.00
- Deliverable UoM: Sht
- Deliverable package: Select one
- Engineering work package: Select one
- Area: Select one
- Construction commodity: Select one
- Segment: Select one
- Subsystem: Select one
- Turnover: Select one
- Included in schedule?:

At the bottom of the dialog are three buttons: 'Cancel', 'Save', and 'Save and Close'.

2. Edit the fields you want to update.
3. Click **Save** or **Save and Close**.

## 5.3.4 Related links

For more information about the Resource section, see [Scope item resources](#).

After a scope item is added with a WBS phase code assigned to all assigned resource types, you can claim on it. For more information, see [Claim on a scope item](#).

## 5.4 SCOPE ITEM RESOURCES

### 5.4.1 Summary

The Resources section of the Add and Edit scope item side panels lists the resource types associated to steps in the claiming scheme assigned to the scope item.

The Resources section is organized into a grid.

Edit scope item 0%

Summary

Resources

Resource type	WBS phase code	Account code	UoM	Design element	Role	Planned team
Civil Engineer	1245	88.40.46.006.04	EA	PERMIT (Ea)		
Civil Designer	1244	88.40.46.006.02	EA	PERMIT (Ea)		

User defined

Dates

Resources

Role	Planned team	Assigned user	% Complete	WBS % Claim Ratio	CE Mhrs/Unit	Scope item qty	Scope item Mhrs
			0.00	90.00	16.00	1.00	16.00
			0.00	10.00	144.00	1.00	144.00

The following columns are automatically populated based on the selected claiming scheme:

- % Complete – Percent claimed by the resource type on the scope item.
- WBS % Claim Ratio – Sum of % Claim across claiming steps with the associated WBS.
- CE Mhrs/Unit – CE unit rate from Control of the associated WBS. See [Considerations](#) for more information.
- Scope item qty – Automatically populated from the Summary section.
- Scope item Mhrs – (CE Mhrs/Unit) × Scope item qty

The following columns can be assigned for each resource type:

- WBS
- Account code

- Design element - See [Design elements](#) for more information.
- Role - Only roles configured in the Role assignment dialog box are available. See [Role assignment](#) for more information.
- Planned team - If roles are enabled, this field is automatically populated based on role assignment. If roles are disabled, you can assign any team according to resource project settings.
- Assigned user - If roles are enabled, this field is automatically populated based on role assignment. If roles are disabled, you can assign any user according to resource project settings.
- CE Mhrs/Unit – See [Considerations](#) for more information.

These assignments are inherited by claiming steps with the associated resource type in the claiming scheme.

### 5.4.2 Considerations

- If account code sets are enabled for the project, only account codes from the assigned account code set are available to assign to a resource type on the scope item. The design element is automatically populated based on the account code assigned. The account code UoM must match the Scope item UoM in the Summary section.
- When you assign a WBS phase code, the account code is automatically populated with the account code associated with the WBS in InEight Control. If an account code has already been assigned to the scope item's resource type, then the system checks if the account code matches Control. If the account code does not match, a warning message is shown, and the account code assignment is overridden to match Control.
- You cannot edit the WBS phase code if percent complete is above zero. If you claim up and then back down to zero, you can edit the WBS phase code.
- The CE Mhrs/Unit column can be manually edited when a WBS phase code has not been assigned. After you assign a WBS phase code, CE Mhrs/Unit is inherited from the WBS phase code.
- After the CE Mhrs/Unit column is filled, the Scope item Mhrs is automatically calculated.
- When you assign a role to a scope item, the role, planned team, and assigned user are inherited by the claiming steps. You can still update the role on individual steps if the step has not been claimed.



## 5.5 IMPORT NEW SCOPE ITEMS

Importing lets you add scope items in bulk. All imported scope items that pass validations are added to the Scope items page. The imported scope items that fail validations are added to the Error resolution page. All imports are shown in Audit log > **Import history**.

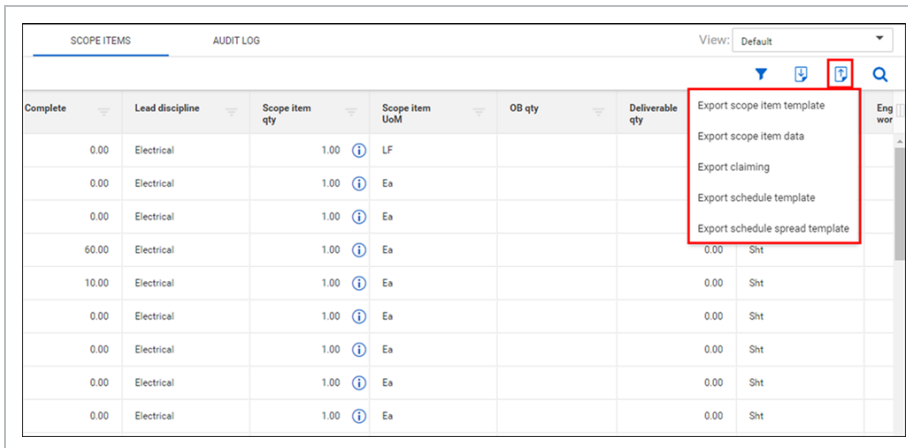
### 5.5.1 Considerations

You must have the permission Import scope items.

### 5.5.2 Steps

To import new scope items:

1. On the Scope items page, click the **Export** icon, and then select **Export scope item template**. A Microsoft Excel spreadsheet is downloaded.



2. Fill in the fields in the spreadsheet, and then save it.
3. On the Scope items page, click the **Import** icon, and then select **Import scope items**.

Import scheme description	% Complete	Lead discipline	Scope item qty	Scope item UoM	OB qty	Del UoM
Structure 3 Step	0.00	Structural	0.00			
Structure 3 Step ...	0.00	Structural	25.00	Ea		0.00 Sht
age 3 Step (AB)	100.00	Drainage	0.50	Ea		1.00 Sht
cts	100.00	Indirects	38.00	MWk		0.60 Sht
cts	100.00	Indirects	20.00	MWk		38.00 Sht
cts	0.00	Indirects	1.00	MWk		20.00 Sht
cts	0.00	Indirects	1.00	MWk		1.00 Sht
cts	0.00	Indirects	1.00	MWk		1.00 Sht

4. Click **Browse**, and then select the saved spreadsheet.
5. Click **Import**. The import status is shown, and then the Import history page opens. If there are any errors, they are shown in the table.
6. If there are issues, click **Completed with issues** in the Status column to open Scope item error resolution, and then click the scope item ID to view and resolve issues before saving.

### 5.5.3 Related links

You can also add individual new scope items manually using the interface. For more information, see [Add a scope item](#).

## 5.6 CLAIM ON A SCOPE ITEM

### 5.6.1 Summary

You can claim earned quantity against a scope item directly on the Scope items page. Claiming is done in the Claiming tab of a slide-out panel that can be expanded for each scope item in the grid.

### 5.6.2 Considerations

- To claim, you must have the permission Edit claiming.
- To claim against a scope item, a WBS phase code must be assigned to all resource types associated with the scope item.
- If any compliance issues exist on a scope item, you cannot claim against it.

- For partial claiming using the Claim qty field, you can enter any quantity less than or equal to the scope item quantity. If Claim qty equals Scope item qty, the Complete check box is automatically selected.
- If you enter a partial quantity, and then later claim additional quantity in the same step, you must enter the total amount up to that point, not an incremental amount. For example, if a step is partially claimed for 10, and you want the current claimed quantity to be 100, you must enter 100, not 90.
- You can enter a value in the Claim qty % column if partial claiming is enabled. After you enter the percentage value, the Claim qty field is automatically filled with the corresponding quantity value.
- Claiming history can be seen in the History tab of the scope item slide-out panel and in the Claiming history tab of the Audit log.

### 5.6.3 Steps

To claim a step on a scope item:

1. On the Scope items page, click the down arrow to the left of the scope item. An expanded panel opens to the Claiming tab.

Step	Complete	Step name	% Claim	Partial claiming	Claim qty	Date	Milestone completion	Resource type	Actual Team	Claimed by
1	<input type="checkbox"/>	Review Applicable Standards and Lessons Learned - Engineering	0.00%	<input type="checkbox"/>	0.00	04/18/2022		Civil Engineer		
2	<input type="checkbox"/>	Review Contract Requirements and Deliver Provided Documents - Engineering	0.00%	<input type="checkbox"/>	0.00	10/22/2021		Civil Engineer		
3	<input type="checkbox"/>	Review Applicable Standards and Lessons Learned - Design	0.00%	<input type="checkbox"/>	0.00	04/18/2022		Civil Designer		
4	<input type="checkbox"/>	Review Contract Requirements and Deliver Provided Documents - Design	0.00%	<input type="checkbox"/>	0.00	04/18/2022		Civil Designer		

2. Select the check box in the Complete column for the step.
3. You can edit the Date and Claimed by fields. By default, these fields are automatically populated with today's date and the user who selected the check box.

**NOTE** You cannot select a future date.

4. You can enter a partial quantity in the Claim qty column.

**NOTE** Partial claiming must be enabled for the associated claiming scheme step to use this feature.

5. Click **Save** or **Save and Close**. The claim is locked and the Date, Actual team, and Claimed by fields cannot be edited.

To make changes to a claim, the step must be unclaimed, and then reclaimed.

You can also claim on scope items in bulk. For more information, see [Import claiming](#).

## 5.7 UNDO CLAIMING

Undo claim wizard lets you undo claims for a step or scope item, which reduces the claiming back to 0% complete. This reverses all claims for the specific step or scope item to the day the original claim occurred.

All original claims and claim reversal are captured for audit purposes.

### 5.7.1 Considerations

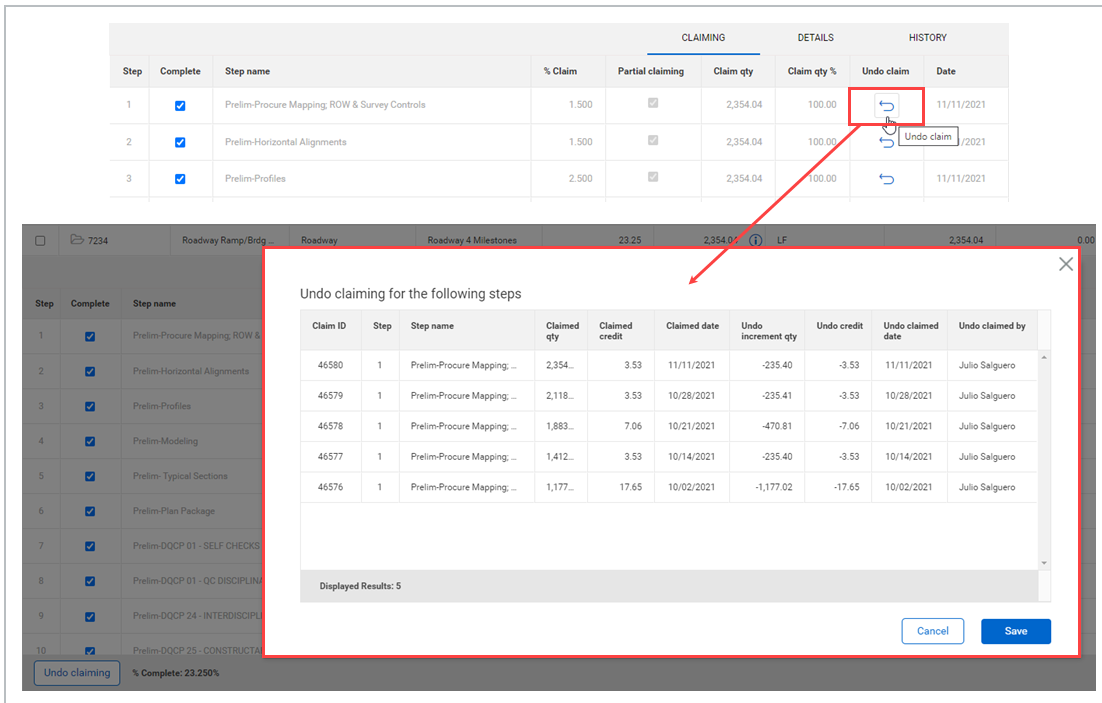
- You must have the permission Edit claiming.
- You can undo claiming for a step or an entire scope item. See the steps below for more information.
- When a step or scope item has not been claimed and is at 0%, the undo claiming icons do not show.

### 5.7.2 Steps

To undo claim for a step:

1. On the Scope items page, click the **Undo claim** icon.

A dialog box shows all claims for the step.

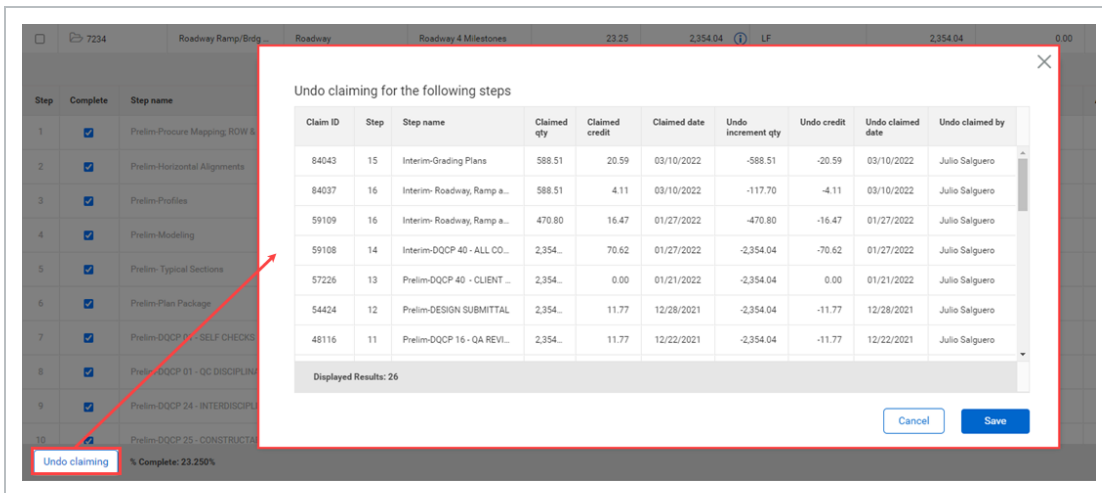


2. Click **Save** to undo claiming for the steps shown.

To undo claim for a scope item:

1. On the Scope items page, click the Undo claiming button at the bottom left.

A dialog box shows claims for all the steps in the scope item.



2. Click **Save** to undo claiming for the all the steps in the scope item.

**NOTE** When InEight Control integration is enabled, the undo claims are sent to the assigned WBS in Control.

## 5.7.3 Related links

You can also claim on scope items manually using the interface. For more information, see [Claim on a scope item](#).

## 5.8 IMPORT CLAIMING

Importing lets you claim against scope items in bulk. All imported claiming that passes validations is added to the Scope items page. The imported claims that fail validations are added to the Error resolution page. All imports are shown in Audit log > **Import history**.

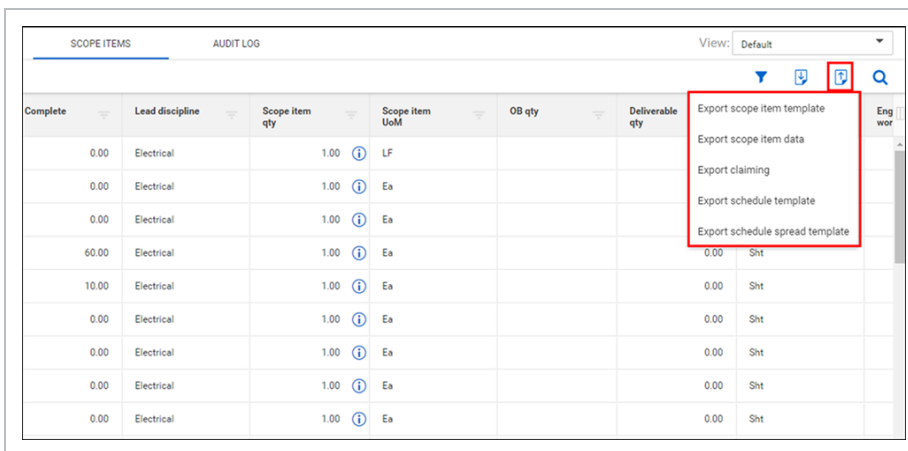
### 5.8.1 Considerations

- You must have the permission Import claiming.
- You can import all claiming based on either quantity or percentage. See the steps below for more information.

### 5.8.2 Steps

To import claiming:

1. On the Scope items page, click the **Export** icon, and then select **Export claiming**. A Microsoft Excel spreadsheet is downloaded.



Complete	Lead discipline	Scope item qty	Scope item UoM	OB qty	Deliverable qty	Eng wor
0.00	Electrical	1.00	LF			
0.00	Electrical	1.00	Ea			
0.00	Electrical	1.00	Ea			
60.00	Electrical	1.00	Ea		0.00	Sht
10.00	Electrical	1.00	Ea		0.00	Sht
0.00	Electrical	1.00	Ea		0.00	Sht
0.00	Electrical	1.00	Ea		0.00	Sht
0.00	Electrical	1.00	Ea		0.00	Sht
0.00	Electrical	1.00	Ea		0.00	Sht
0.00	Electrical	1.00	Ea		0.00	Sht

2. Fill in values in either the Claim qty % or Claim qty columns in the spreadsheet, and then save it.
3. On the Scope items page, click the **Import** icon, and then select **Import claiming**.

The screenshot shows a table titled 'SCOPE ITEMS' with columns: 'Importing scheme description', '% Complete', 'Lead discipline', 'Scope item qty', 'Scope item UseM', 'OB qty', and 'Delivered UseM'. A dropdown menu is open over the 'Scope item qty' column, showing options: 'Import scope items', 'Import claiming', 'Import schedule', and 'Import schedule spread'. The 'Import' icon in the top right of the table is highlighted with a red box.

Importing scheme description	% Complete	Lead discipline	Scope item qty	Scope item UseM	OB qty	Delivered UseM
Structure 3 Step	0.00	Structural	0.00			
Structure 3 Step ...	0.00	Structural	25.00	Ea		
age 3 Step (AB)	100.00	Drainage	0.50	Ea		0.60
cts	100.00	Indirects	38.00	MWk		38.00
cts	100.00	Indirects	20.00	MWk		20.00
cts	0.00	Indirects	1.00	MWk		1.00
cts	0.00	Indirects	1.00	MWk		1.00
cts	0.00	Indirects	1.00	MWk		1.00

4. Click **Browse**, and then select the saved spreadsheet.
5. Select either **Claim by quantity** to import only values in the Claim qty column or **Claim by percentage** to import only values in the Claim qty % column.
6. Click **Import**. The import status is shown, and then the Import history page opens. If there are any errors, they are shown in the table.
7. If there are issues, click **Completed with issues** in the Status column to open Claiming error resolution, and then resolve issues before saving.

### 5.8.3 Related links

You can also claim on scope items manually using the interface. For more information, see [Claim on a scope item](#).

## 5.9 UPDATE SCOPE ITEM QUANTITY

### 5.9.1 Summary

When you update the Scope item qty field of a scope item, the Update scope item qty dialog box guides you through adjusting the claiming on any previously claimed steps to reflect the new scope item quantity.

The Update scope item qty dialog box shows a grid of all steps with claiming history. The earned value is automatically adjusted to the new quantity value for complete steps. You can export all claimed steps for additional review by clicking the **Export** icon in the upper right of the grid.

To see previous scope item quantity changes, hover over the **Information** icon in the Scope item qty field.

Scope item qty	Cause code	Changed by	Changed date
148.00	Design Progres...		02/12/2022 03:22:18 ...
1.00	Sample		01/13/2022 11:12:39 ...

### 5.9.2 Considerations

You must have the permission Edit scope items.

### 5.9.3 Steps

To update scope item quantity:

1. Select the check box to the left of one scope item and then click the **Edit scope item** icon in the upper left. The Edit scope item slide-out panel opens.
2. Change the value in the Scope item qty field, and then click **Save** or **Save and Close**. The Update scope item qty dialog box opens.

Update scope item qty

1 Select steps — 2 Review steps

This action will update the claimed qty on each of the previously claimed steps for this scope item. An additional claim will be made on each step to capture the qty delta.

For partial claiming steps the "New claim qty" will be editable for further claiming adjustments. If the partial claiming step was previously complete, then the New claim qty will be defaulted to the New scope item qty amount. If the partial claiming step was not previously complete, then the New claim qty will be defaulted to the Claimed to date amount. The "New claim qty %" reflects the percentage of the step that will be complete based on qty specified in the "New claim qty" field.

Claim date: 04/18/2022 Cause code: Construction Change Request Note:

Step	Step name	Partial claiming	New scope item qty	Claimed to date	Claimed to date %	New claim qty	New claim qty %	Claim qty delta	Actual Team	Claimed by
1	Start Activity	<input type="checkbox"/>	100.00	1.00000000...	100.00%	100.00	100.00%	99.00		
2	Generate Deliverable/Model...	<input type="checkbox"/>	100.00	1.00000000...	100.00%	100.00	100.00%	99.00		
3	Generate Deliverable/Model...	<input checked="" type="checkbox"/>	100.00	1.00000000...	100.00%	100.00	100.00%	99.00		
4	Check for IFR	<input type="checkbox"/>	100.00	1.00000000...	100.00%	100.00	100.00%	99.00		
5	Issue IFR (50%)	<input type="checkbox"/>	100.00	1.00000000...	100.00%	100.00	100.00%	99.00		

Count: 5

Cancel Next



3. Select a cause code, if necessary. Optionally, add a note.
4. Optionally, edit the Claim date field. By default, it is set to today's date. This claim date is reflected for all steps.
5. Optionally, edit the Actual Team and Claimed by fields in the grid. By default, these fields are set to the team and user specified on the last claim.
6. Click **Next**. The Review steps page opens.
7. Review the changes, and then click **Update**.

### 5.9.4 Related links

You can also update scope item quantity for multiple scope items through the import process. For more information, see [Update scope item quantity by import](#)

## 5.10 UPDATE SCOPE ITEM QUANTITY BY IMPORT

### 5.10.1 Summary

When you update the Scope item qty field of multiple scope items through the import process after claims have been made, the Update all scope item qty dialog box guides you through adjusting the claiming on any previously claimed steps to reflect the new scope item quantities.

The Update all scope item qty dialog box shows grids of all selected scope items and steps with claiming history. You can export all scope items and claimed steps for additional review by clicking the **Export** icon in the upper right of the grid.

### 5.10.2 Considerations

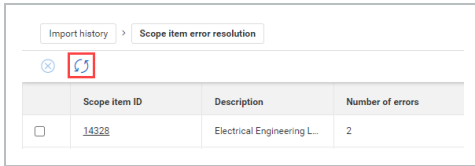
You must have the permission Edit scope items.

### 5.10.3 Steps

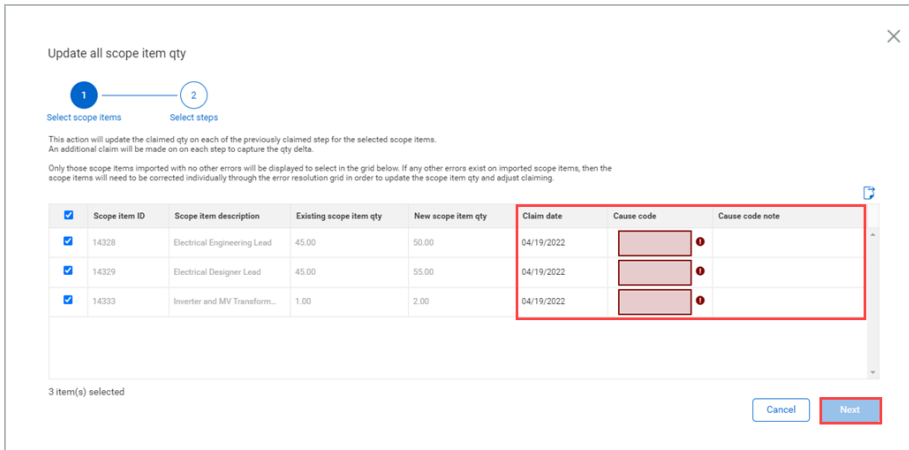
To update scope item quantities by import:

1. Import a file with changes to the quantities for more than one scope item. The import process results in an error.

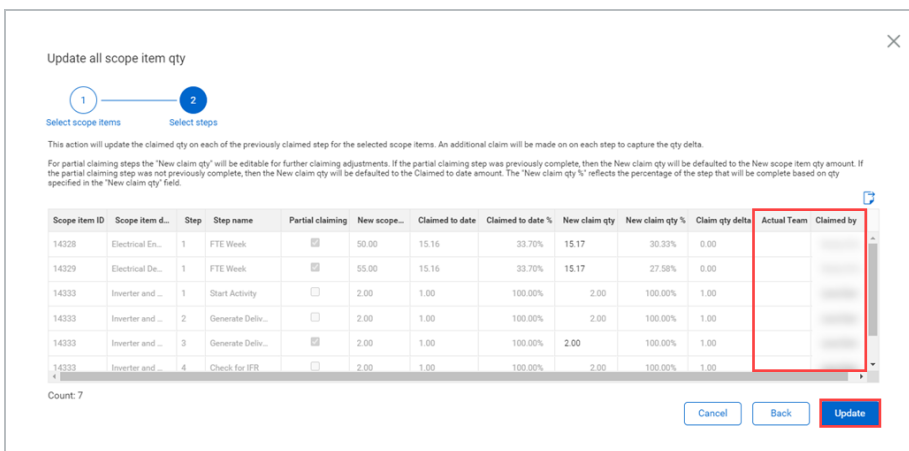
- In Import history > **Scope item error resolution**, click the **Update all scope item qty** icon at the top of the grid. The Update all scope item qty dialog box opens.



- Select the scope items whose claiming you want to adjust.



- Select a cause code. Optionally, add a note.
- Optionally, edit the Claim date. By default, it is set to today's date. This claim date is reflected for all steps.
- Click **Next**. The Select steps page opens.



7. Optionally, edit the Actual Team and Claimed by fields in the grid. By default, these fields are set to the team and user specified on the last claim.
8. Review the changes, and then click **Update**.

### 5.10.4 Related links

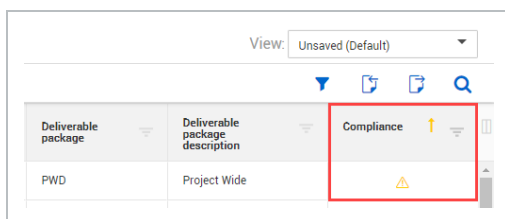
You can also update scope item quantity manually through the interface. For more information, see [Update scope item quantity](#)

Administrators can configure cause codes at the organization level. For more information, see [Cause codes \(Engineering\)](#).

## 5.11 COMPLIANCE ISSUES

### 5.11.1 Summary

Compliance warning icons are shown on any scope item where claiming is disabled due to missing data or data discrepancies. The warning icon is shown in the Compliance column on the Scope Items page.



To see which fields are causing a compliance issue, select the scope item with the issue, and then click the Edit scope item icon. In the Edit scope item slide-out panel, fields with issues show warning icons. When you hover over the warning icon, a message is shown with issue details and how to resolve the issue. You must resolve all compliance issues to enable claiming on a scope item.

WBS UoM of MWk does not align with the scope item UoM. Please resolve to enable claiming

Resource type	UoM	Design element	Role	Plar
Project Management	MWk	INDIRECTS (MWk)		KIE

The following list details possible compliance issues and how to resolve them:

- Claiming is disabled when scope item qty value is 0.00. Add quantity to the scope item to enable claiming.
- WBS phase code assignment is missing on the resource type. Assign a WBS phase code to the resource type to enable claiming.
- Account code is not in the assigned account code set. Add the missing account code to the account code set to resolve. This is applicable only if account codes are enabled for the project.
- Account code UoM does not match the scope item UoM. Update the scope item UoM to match the account code UoM or assign a different account code with an associated UoM that matches the scope item UoM. This is applicable only if account codes are enabled for the project.
- WBS UoM does not align with the scope item UoM. Update the scope item UoM to match the WBS UoM or assign a different WBS with an associated UoM that matches the scope item UoM.

### 5.11.2 Considerations

The Compliance column is not part of the default view but can be added to the grid as an available column through the column chooser.

## 5.12 AUDIT LOG

### 5.12.1 Summary

The Audit log gives you visibility to scope item changes, claiming history, import history, and scope item quantity history on a project.

The Scope item page shows changes made to any attribute field on a scope item, scope item resource type, or step details. This log also records the creation and deletion of scope items. For each change, the values before and after, the user who made the change, and the time and date the change was made are also shown.

SCOPE ITEMS		AUDIT LOG												
Scope item	Audit type	Scope item ID	Scope item description	Resource type	Step	Step name	Milestone	Schedule group	Attribute	Value before	Value after	Changed by	Changed date	
Claiming history	Scope ...	1741	SE - ENV CS...	*	*	*	*	*	IsOBQu...	False	True		05/31/20...	
Import history	Scope ...	1741	SE - ENV CS...	*	*	*	*	*	OBQua...		1.0000...		05/31/20...	
Scope item quantity history	Scope ...	1746	AB Laydown ...	*	*	*	*	*	IsOBQu...	False	True		05/31/20...	
	Scope ...	1746	AB Laydown ...	*	*	*	*	*	OBQua...		0.4000...		05/31/20...	

The Claiming history page shows all the claims made on scope items in the project. On this page, you can resend individual claims to InEight Control. When a claim is saved in the Engineering module, the claiming record is immediately sent to Control to consume the claim quantity on the associated WBS. If the claim does not make it to Control successfully, this feature can be used to resend the claim. To resend claims to Control, select one or more claim records in the grid, and then click the **Resend selected claims to Control** icon in the upper left.

SCOPE ITEMS		AUDIT LOG													
Scope item	Claim ID	Scope Item ID	Step	Step name	WBS phase code	Resource type	Claim qty	Claim qty %	Incremen qty	Incremen qty %	Claimed qty credit	Claimed date	Claimed by	Changed date	
Claiming history	<input checked="" type="checkbox"/>	107...	42746	10	IFC DQCP 40 Client/Third P...	1181	Syste...	111...	75.0...	37.000...	25.000...	0.00000...	05/04/...	Jakob...	05/04/...
Import history	<input type="checkbox"/>	107...	42753	10	IFC DQCP 40 Client/Third P...	1178	Syste...	148...	100...	148.00...	100.00...	0.00000...	05/02/...	Jako...	05/02/...
Scope item quantity history	<input type="checkbox"/>	107...	42753	12	IFC Approval	1178	Syste...	0.00...	0.00...	-148.0...	-100.0...	-11.840...	05/02/...	Jako...	05/02/...

The Import history page shows all the imports started on the project. If a file has any errors when it is imported, then the Failed record count column shows the number of records in error and the Status column has a value of Completed with errors, in a link.

SCOPE ITEMS		AUDIT LOG									
Scope item	Import type	File name	Status	Total record count	Successful record ...	Failed record count	Fixed record count	Deleted record cou...	Imported by	Started on	Ended on
Claiming history	ClaimingScheme	Export Claiming Scheme Tem...	Completed with errors	1	0	1	0	0		06/20/2022 12:4...	06/20/2022 12:4...
Import history	Schedule	Export Schedule Template (...)	Failed	1	0	1	0	0		06/17/2022 04:1...	06/17/2022 04:1...
Scope item quantity history	Schedule	Export Schedule Template.xlsx	Completed	1	1	0	0	0		06/15/2022 11:1...	06/15/2022 11:2...
	Schedule	Export Schedule Template.xlsx	Completed	1	1	0	0	0		06/15/2022 11:1...	06/15/2022 11:1...

To view and correct errors, click **Completed with errors** to open the error resolution page. For claiming schemes and scope items, click the claiming scheme or scope item ID to view and resolve issues before saving. For claiming, resolve the issues in the grid before saving.

Import history > Claiming scheme error resolution

Claiming scheme ID: **0123.EW.BSTR**

Resolve claiming scheme

ID: 0123.EW.BSTR Description: Bridge Structures - Early Works Lead Discipline: Structural

STEPS

-Step	-Step name	-% Claim	Partial claim	-Resource type	-Resource Discipline	Milestone Completion	-Schedule group	-Activity ID format
12	Enter step name	Enter % c	<input type="checkbox"/>	Select resourc...	Select milestone	Select sche...	Select acti...	
1	Final Design Development ...	5	<input checked="" type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...
2	Final Design Development ...	5	<input type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...
3	Final Design Development ...	5	<input checked="" type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...
4	Final Design Development ...	5	<input type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...
5	Final Design Development ...	5	<input checked="" type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...
6	Final Design Development ...	5	<input type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...
7	Final Design Development ...	5	<input checked="" type="checkbox"/>	Structural Engineer	Structural		RD	AccountCode/...

Subtotal: 50.000% ●

12 errors remaining Cancel Save

The Scope item quantity history page shows all scope item quantity updates on a project.

SCOPE ITEMS		AUDIT LOG						
Scope item	Scope item ID	Scope item description	Scope item qty before	Scope item qty after	Cause code	Note	Changed by	Changed date
Claiming history	1829	CSIE ELECTRICAL Ch...	1.000000000000	0.000000000000	Sample			04/27/202...
Import history	1713	STR - STEEL GIRDE...	2,148.000000...	2,149.000000...	Engineering Error or O...	couldn't claim up at previous qty		03/01/202...
Scope item quantity history	1713	STR - STEEL GIRDE...	2,147.560000...	2,148.000000...	Design Progression			02/25/202...
	1767	MECH - HVAC Minn...	12.0000000000...	13.0000000000...	Design Progression			02/14/202...

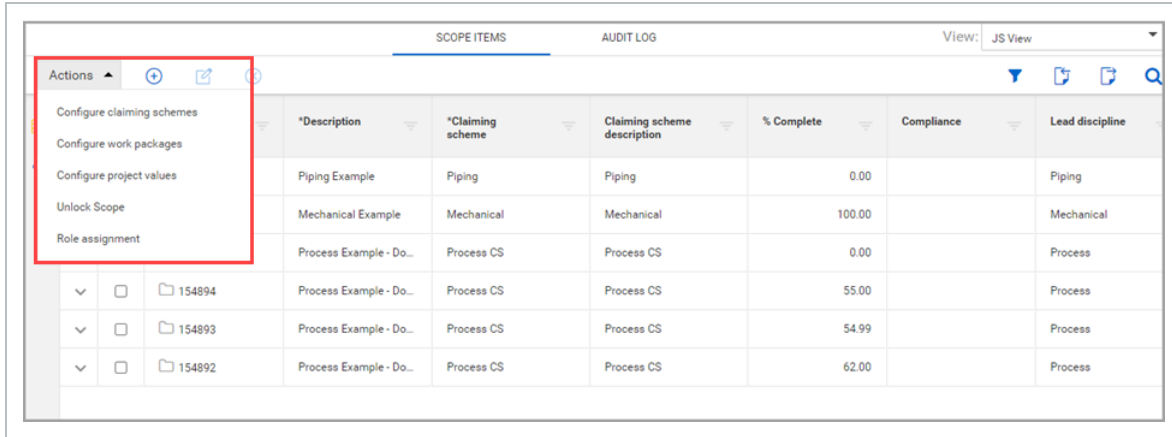
## 5.13 ACTIONS

### 5.14 ACTIONS OVERVIEW

In the Scope items page, you can perform various actions on an engineering project. The following table provides an overview of each action.

#### Overview - Actions

Action	Description
<b>Configure claiming schemes</b>	You can manage claiming schemes as the first step in setting up a project in the Engineering module. Claiming schemes are required to be configured prior to creating a scope item.
<b>Configure work packages</b>	Manage work packages in the Engineering or Deliverable package tabs. After a work package is created on a project, it will become available to assign on a Scope Item within the project.
<b>Configure project values</b>	Create project values for Segment, Construction commodity, System, Turnover packages, Subsystem, Work classification, Assigned disciplines, and Assigned commodities on a project. You can assign these to scope items.
<b>Get FC Remaining MHrs/Unit</b>	You can get the current Forecast Remaining unit rate from Control for the WBS phase codes on the project and calculate the remaining forecasted man hours on the related scope items where the WBS is assigned. Control Integration must be enabled in project settings.
<b>Lock and Unlock Scope</b>	When you initially lock scope on a project, a snapshot is taken of the original quantity for each existing scope item. Cause codes are required for any scope item quantity changes. When unlocked, the OB qty field is editable on all existing scope items. A warning will show when scope is unlocked that reads " <i>Scope is unlocked</i> ".
<b>Role assignment</b>	Manage role assignments in a project in the Current and Future Assignments tab and view its history in the User Assignment History tab.



		SCOPE ITEMS	AUDIT LOG	View: JS View			
Actions		*Description	*Claiming scheme	Claiming scheme description	% Complete	Compliance	Lead discipline
Configure claiming schemes		Piping Example	Piping	Piping	0.00		Piping
Configure work packages		Mechanical Example	Mechanical	Mechanical	100.00		Mechanical
Configure project values		Process Example - Do...	Process CS	Process CS	0.00		Process
Unlock Scope		Process Example - Do...	Process CS	Process CS	55.00		Process
Role assignment		Process Example - Do...	Process CS	Process CS	54.99		Process
		Process Example - Do...	Process CS	Process CS	62.00		Process

### 5.14.1 Considerations

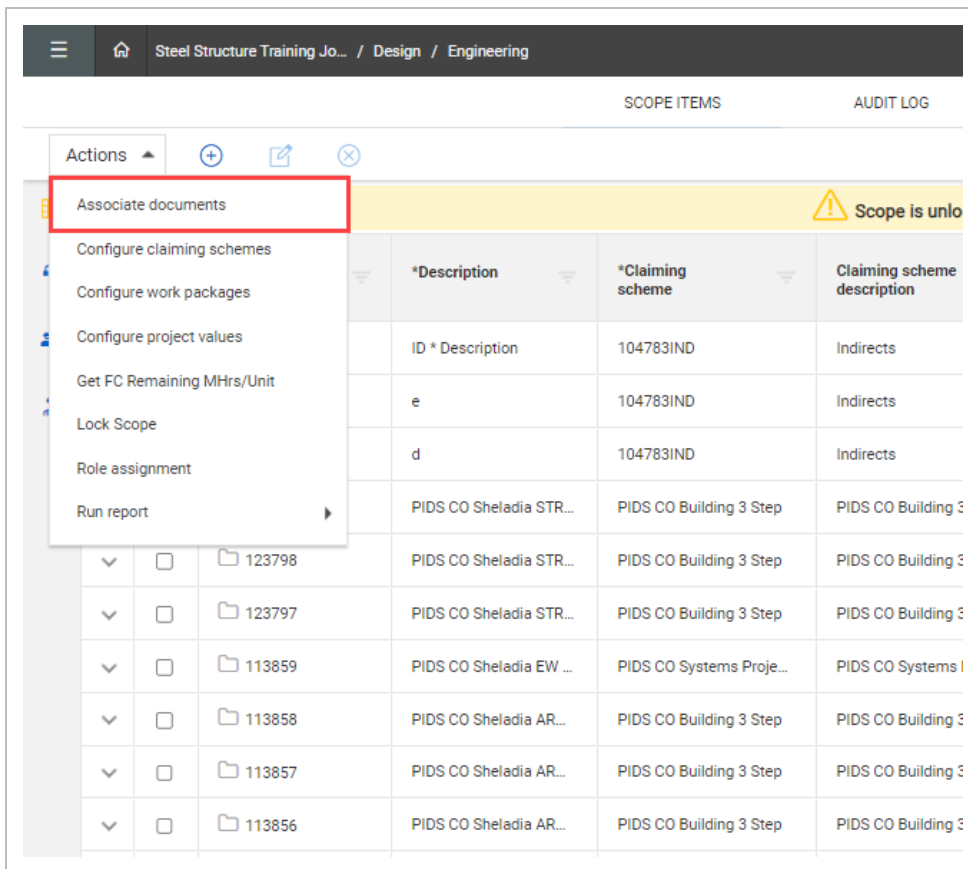
You must have applicable permissions in Engineering.

## 5.15 ASSOCIATE DOCUMENTS

## 5.16 ASSOCIATE DOCUMENTS OVERVIEW

You can associate scope items and documents to support status and progress reporting on deliverables. Go to project > Engineering > Scope Items > **Actions**, and then click **Associate documents** to open the Associate documents page.





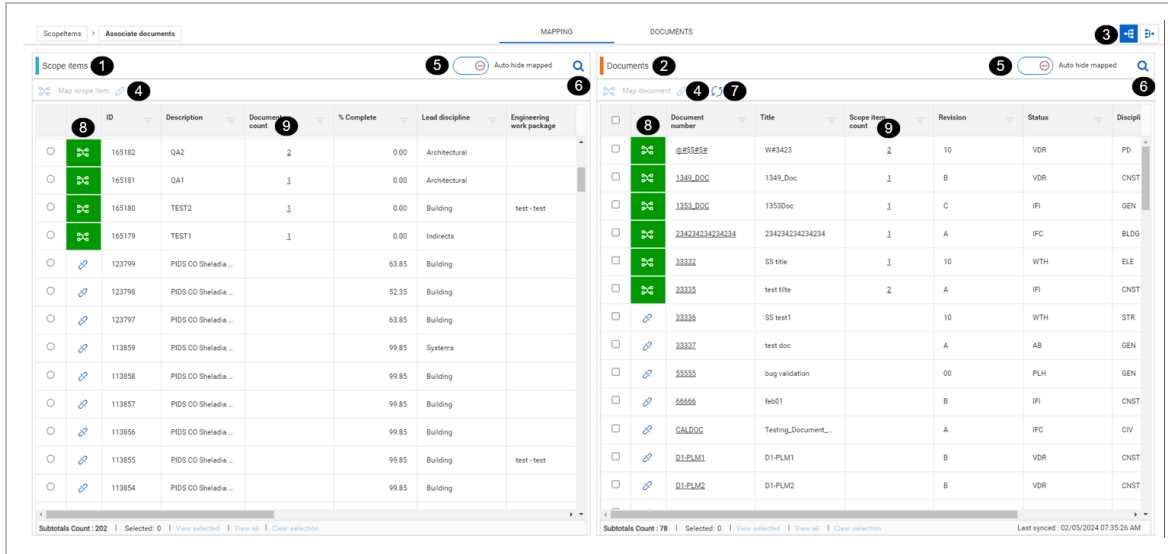
In the Associate documents page, you can view the Mappings and Documents tabs.

### 5.16.1 Considerations

- To enable Document integration, you must first setup the project in InEight Platform > Suite Administration > **Application integrations**.
- You must enable Document integration in Design > Settings > Engineering > **Documents** to access Associate documents.
- You must have the required permissions in Engineering for document associations.
- To view documents in InEight Document, you must have the applicable InEight Document permissions.

## 5.17 MAPPINGS

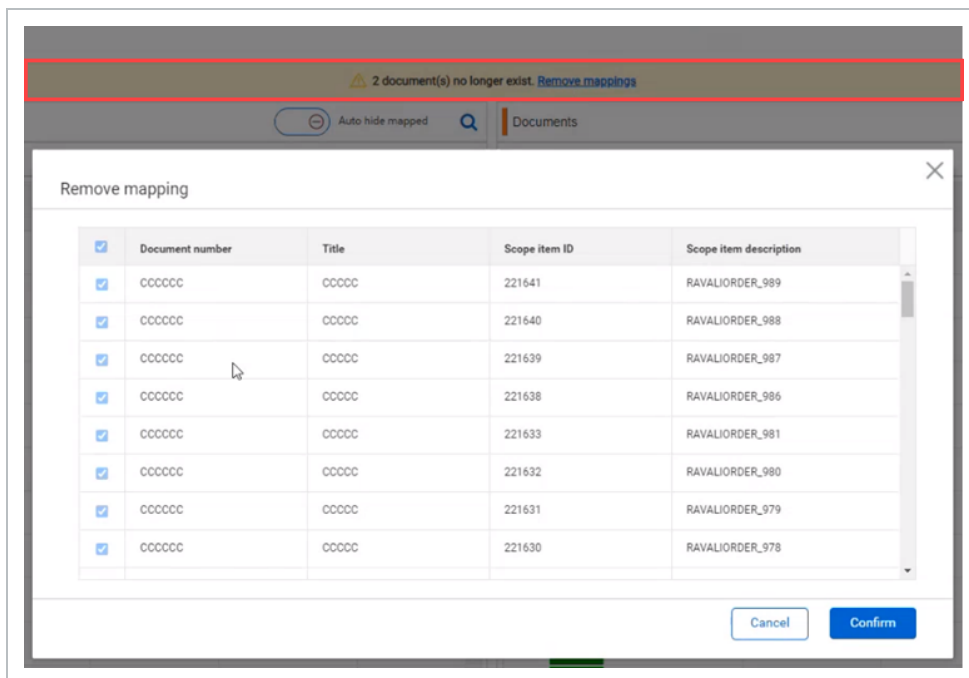
The image and table below are a summary of the Mappings tab:



	Item	Description
1	<b>Scope Items grid</b>	The left grid shows the project's list of scope items.
2	<b>Documents grid</b>	The right grid shows the list of documents synced from Document.
3	<b>Map many documents to a single scope item</b> <b>Map many scope items to single document</b>	Select to map many documents to a single scope item, or many scope items to a single document.
4	<b>Map scope item and Map document</b> <b>Unlink scope items or documents</b>	After making your selection, you can map documents to a scope item or map scope items to a document. After making your selection, unlink scope items or documents.
5	<b>Auto hide mapped</b>	Auto hide mapped scope items or documents to filter them out from the grid.

	Item	Description
6	<b>Search</b>	Use to search scope items in the Scope items grid or search documents in the Documents grid.
7	<b>Document sync</b>	Sync existing, new, and updated documents from the Document application. Synced documents will show in the Associated documents page. The Last synced status is shown on the lower right side of the panel.
8	<b>Mapped and unlinked items column</b>	View of mapped and unlinked items. Mapped items show a green mapped icon. Unlinked items show the Unlink icon.
9	<b>Document count Scope item count</b>	In the Scope items grid, the Document count column shows the number of documents mapped to a scope item. In the Documents grid, the Scope item count shows the number of scope items mapped to the document. The number is a hyperlink you can click to open a dialog box that shows the list of associated items.

When mapped documents are deleted in Document, a warning shows at the top of the page showing the number of documents that no longer exist.



You can click **Remove mappings** to view the deleted documents and remove.

## 5.18 DOCUMENTS

In the Documents tab, you can view a summary of documents associated to scope items to easily track associated items, provide real time updates, and export data.

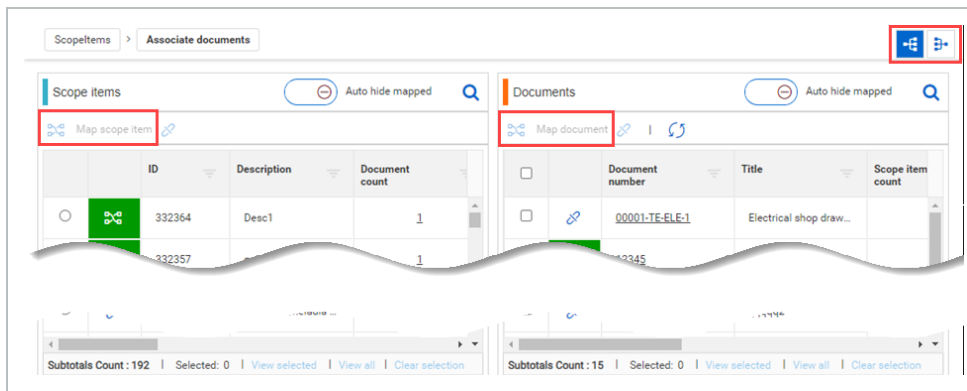
Document / Scope Item	Status / Milestone	# of scope items	% Complete	CE total Mhrs	Earned Mhrs	Forecast remaining Mhrs	Planned start	Planned finish	Current start	Current finish	Actual start	Actual finish
1349_DOC - 1349_Doc	VDR	1	0.00	110.00	0.00	0.00					11/29/2023	
1353_DOC - 1353Doc	IFI	1	0.00	39.50	0.00							
234234234234234 - 234234234234234	IFC	1	0.00	385.00	0.00						11/28/2023	
33332 - SS title	WTH	1					11/05/2023	12/13/2023	12/13/2023			
33335 - test title	IFI	2	99.86	772.38	771.32	0.43	12/10/2023	12/13/2023	12/11/2023	12/13/2023	03/04/2023	
PIDS CO KIE IT and NT SYS Integration - 003 Def...	IFC Submittal		99.85	700.05	698.99	0.43	12/10/2023	12/11/2023	12/11/2023	12/12/2023	03/04/2023	
PIDS CO KIE EW SYS Integration - Lead Respons...	Scope Complete		100.00	72.33	72.33	0.00	12/12/2023	12/13/2023	12/12/2023	12/13/2023	03/25/2023	03/25/2023
33336 - SS test1	WTH											
33337 - test doc	AB											
55555 - bug validation	PLH											
66666 - fe601	IFI											
CALDOC - Testing_Document_Upload	IFC											
D1-PLM1 - D1-PLM1	VDR											
D1-PLM2 - D1-PLM2	VDR											
D1-PLM3 - D1-PLM3	VDR											
D2-PLM1 - D2-PLM1	VDR											
D2-PLM2 - D2-PLM2	VDR											
<b>Subtotals</b>		Count: 79		45.46	1,696.44	771.32	0.43					

The Documents tab functions similarly to the work package feature, such as the percent complete column, the warning icon that shows when there are missing values, and the summary overview of all documents in the document register at the bottom of the window. The scope item's data that's associated to a document is aggregated and a summary of percent complete, hours, and min/max dates are shown per document. Additional features include:

- When scope items are associated to a document, you can expand the document to view the associated scope items.
- When multiple scope items are associated, the system aggregates the percent complete, hours, dates. The earliest start date and the latest end date are captured at the document level.

## 5.19 MAP DOCUMENTS AND SCOPE ITEMS

You can map one to multiple documents to a scope item and map one to multiple scope items to a document. Use the toggle at the top right to switch between the two options.



## 5.19.1 Considerations

You must have the required permissions in Engineering for document association.

## 5.19.2 Steps

### Map documents to scope items

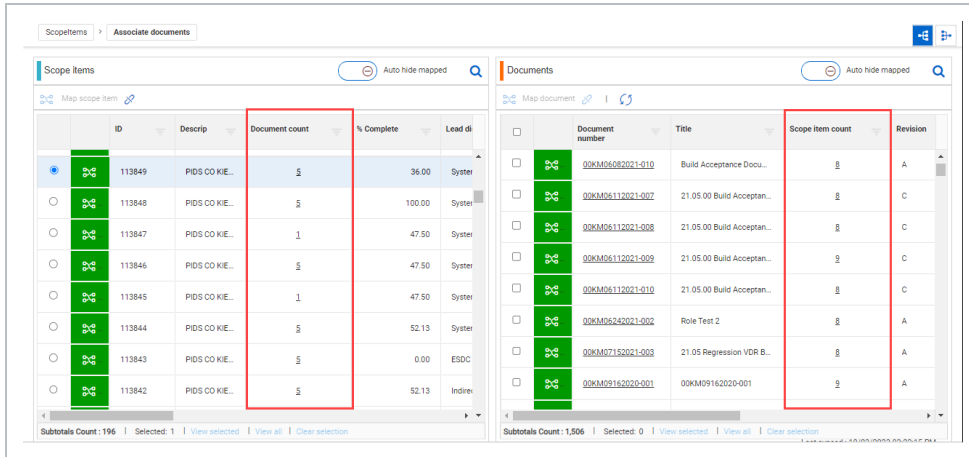
1. Click **Map many documents to a single scope item** at the top right of the page.
2. Select a single scope item in the Scope items panel, and then select one to multiple documents in the Documents panel.
3. Click the **Map document** button in the Documents panel to complete the mappings. The green linked icon will show next to the scope item indicating that it has been mapped.

### Map scope items to documents

1. Click **Map many scope items to single document** at the top right of the page.
2. Select a single document in the Documents panel, and then select one to multiple scope items in the Scope items panel.
3. Click the **Map scope item** button in the Scope items panel to complete the mappings. The green linked icon will show next to the document indicating that it has been mapped.

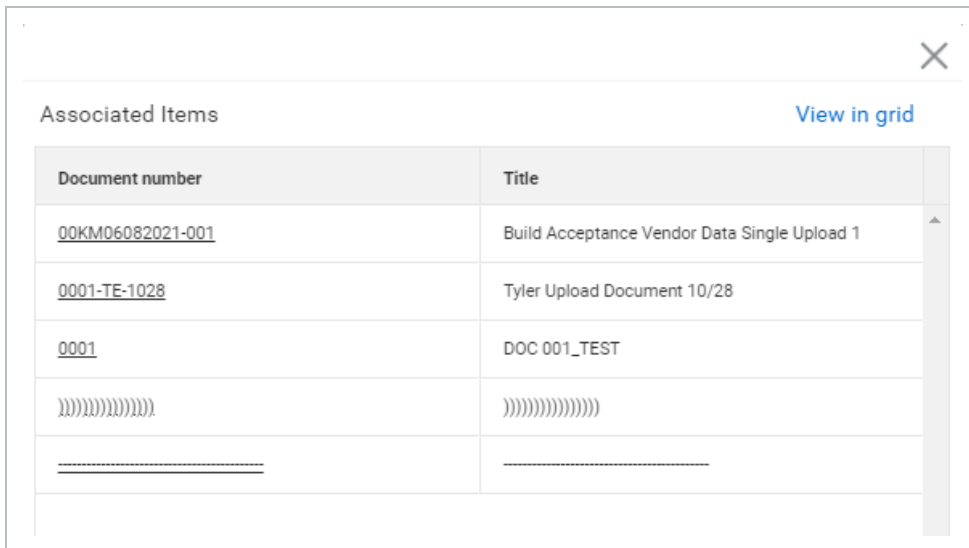
## 5.20 VIEW ASSOCIATED ITEMS

You can view items that are associated with Scope items and Documents. Click the Document or Scope item count number to open the Associated Items dialog box.



### 5.20.1 Scope item’s document count column

In the Scope items panel, the Document count column shows the number of documents associated to scope items. Click the document count hyperlink to open the Associated Items dialog box.

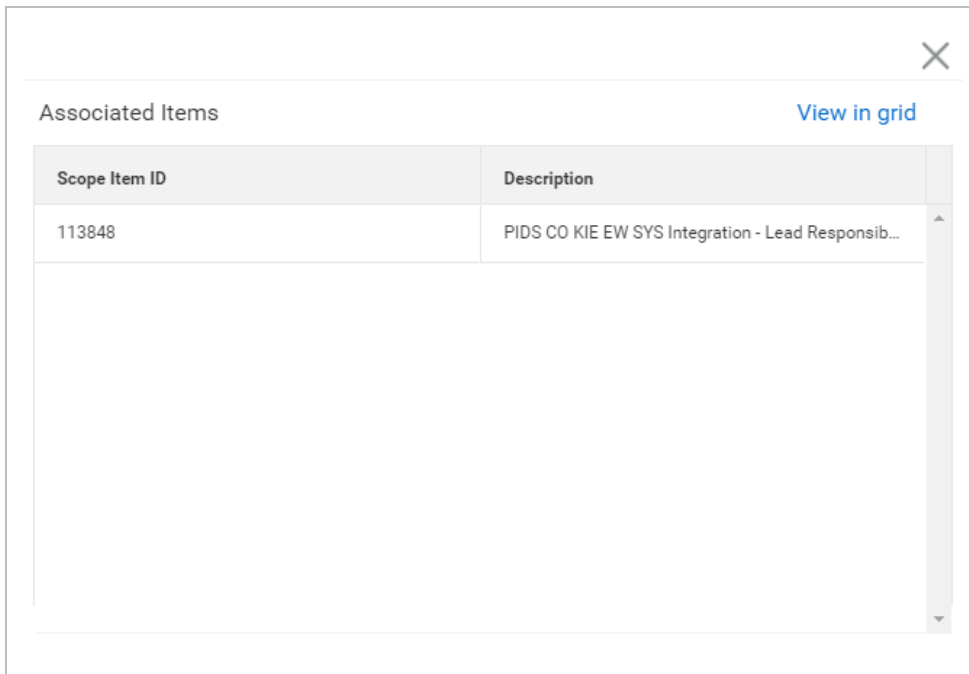


- **Document number** – The document number from Document as a hyperlink. Click on the hyperlink to open in Document.
- **Title** – The title of the document.

- **View in grid** - Filter the scope items and view them in the Scope items grid. You can click the **Document number** link to open the associated document in Document.

## 5.20.2 Document's scope item count column

In the Documents panel, the Scope item count column shows the number of scope items associated with Documents. Click the scope item's hyperlink to open the Associated Items dialog box.



Scope Item ID	Description
113848	PIDS CO KIE EW SYS Integration - Lead Responsib...

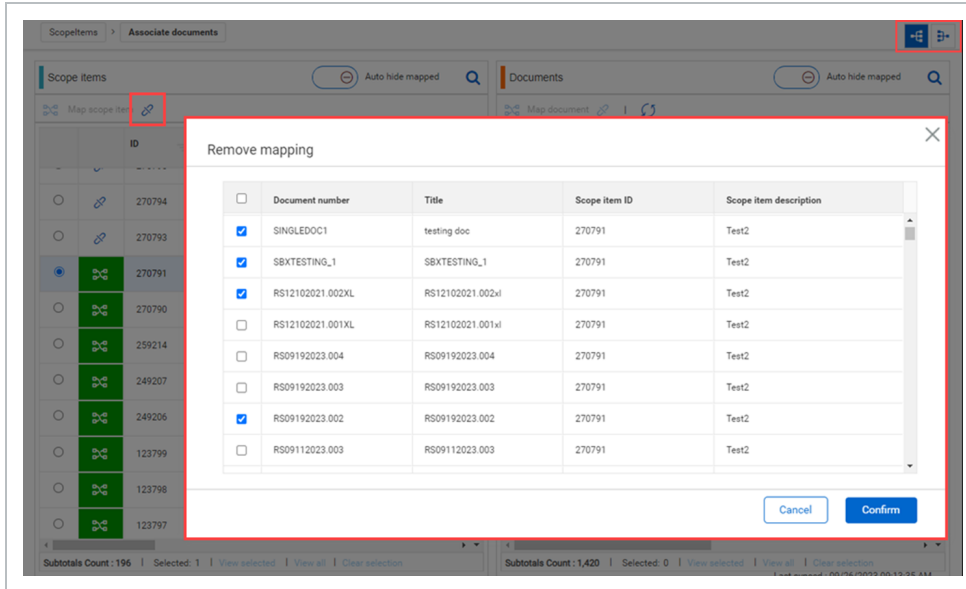
- **Scope Item ID** – Unique identifier for the scope item.
- **Description** – Unique description for the scope item.
- **View in grid** - Filter the documents and view them in the Documents grid.

## 5.20.3 Considerations

You must have the required permissions in Engineering for document association.

## 5.21 UNLINK ASSOCIATED ITEMS

You can unlink associated items from scope items and documents.



### 5.21.1 Considerations

You must have the required permissions in Engineering for document associations.

### 5.21.2 Steps

#### Unlink associated items

1. To unlink documents from a scope item, select **Map many documents to single scope item**. To unlink scope items from a document, select **Map many scope items to single document**.
2. Select the scope item or document.
3. Click the **Unlink** icon. The Remove mapping dialog box shows.
4. Select the item or items you want to unlink, and then click **Confirm**.

## 5.22 CONFIGURE CLAIMING SCHEMES

### 5.22.1 Summary

A claiming scheme is a sequence of steps and milestones used to record progress of engineering deliverables called scope items. Steps and milestones are assigned a completion percentage based on

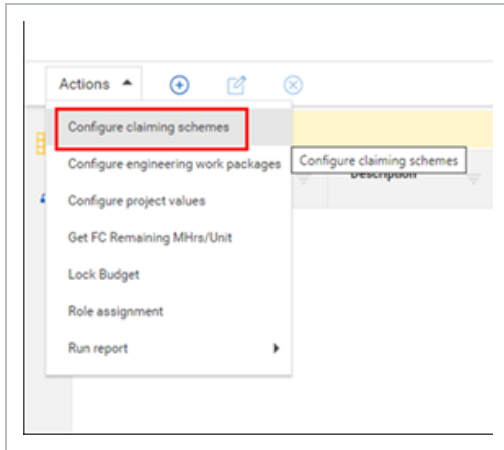


the level of effort to complete each step. This lets you progressively track progress as phases of design are completed on a daily or weekly basis.

Claiming schemes are broken out into engineering disciplines, which are set up at the organization level. See [Disciplines](#) for more information.

Configuring claiming schemes is the first step in setting up a project in the Engineering module.

To configure claiming schemes, open the Engineering module to the Scope items page, and then click Actions > **Configure claiming schemes**.



You can add claiming schemes using the following methods on the Configure claiming schemes page:

- Add button – Manually add a claiming scheme in the user interface.
- Copy button – Copy an existing claiming scheme
- Import scope items button

## 5.22.2 Considerations

- Scope Items cannot be created on a project without a claiming scheme assigned.
- You must have the permission View claiming schemes.

# 5.23 ADD A CLAIMING SCHEME MANUALLY

## 5.23.1 Summary

Claiming schemes can be manually added individually using the Add button on the Configure claiming schemes page. When you add a claiming scheme, you must also set up at least one step in the claiming scheme.

A system-generated milestone named Scope Complete is automatically assigned to a claiming scheme's last step if the last step is a null value when configured.

Claiming schemes can also be added individually using the Copy button and in bulk using the Import claiming scheme button.

## 5.23.2 Considerations

- You must have resource types and disciplines added to the organization and project to be able to add claiming schemes. See [Disciplines](#) for more information.
- The Resource discipline field of a claiming scheme step is automatically populated based on the selected resource type.
- You must assign a Lead Discipline to each claiming scheme. This discipline is separate from the resource disciplines assigned to each individual steps, which do not need to match the lead discipline. This is useful when a claiming scheme generally falls under one discipline even if individual steps' assigned resource types fall under different disciplines.
- You can optionally set up a step for partial claiming, which lets you claim only partial completion for that individual step.
- You can optionally assign a single project milestone to a step. You must have milestones set up and assigned to the project.
- The sum of % Claim across all steps must equal 100% to save a claiming scheme.
- You must have the permission Add claiming schemes.

## 5.23.3 Steps

To add a claiming scheme manually:

1. Click the **Add claiming scheme** button. The Add claiming scheme slide-out panel opens.

2. Fill out required fields:
  - ID – must be unique
  - Lead Discipline
3. Fill out the required fields for the first step:
  - Step number
  - Step name
  - % Claim – The percentage completed by this individual step.
  - Resource type
  - Schedule group
  - Activity ID format
4. Optionally, select the **Partial claiming** check box if you want to be able to claim only partial completion of this step.
5. Optionally, select a milestone under Milestone Completion for the step.
6. To add additional steps, click the **Add** icon on the right, and then repeat steps 3-5.

**NOTE**

To delete a step at any time, click the Delete claiming scheme step icon on the right.

7. Click **Add**.

## 5.23.4 Related links

After claiming schemes are added, you can add scope items associated with claiming schemes. For more information, see [Scope items](#) and [Add a scope item](#).

You can also create a claiming scheme by copying an existing one. For more information, see [Copy a claiming scheme](#).

You can also create claiming schemes in bulk by importing. For more information, see [Import claiming schemes](#).

# 5.24 COPY A CLAIMING SCHEME

## 5.24.1 Summary

You can copy an existing claiming scheme and its steps from the Configure claiming schemes page. You also have an opportunity to modify details of the claiming scheme and its steps before saving.

Copying an existing claiming scheme is useful when you want to create multiple claiming schemes whose steps are similar to each other and that only require minor modifications instead of creating each claiming scheme from scratch.

## 5.24.2 Considerations

- You can only copy one claiming scheme at a time.
- You must have the permission Add claiming schemes.

## 5.24.3 Steps

To copy an existing claiming scheme:

1. Open the Configure claiming schemes page, and then select one claiming scheme in the grid. The Copy claiming scheme button is enabled in the upper left.
2. Click the **Copy claiming scheme** button. The Copy claiming scheme slide-out panel opens.

*Step	*Step name	*% Claim	Partial claiming	*Resource type	*Resource Discipline	Milestone Completion	*Schedule group	*Activity ID format
13	Enter step name	Enter % claim	<input type="checkbox"/>	Select resource type		Select milestone	Select schedule gr...	Select activity ID format
1	Start Task - Full Template Spec and Checklist.	5,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
2	Update general references.	5,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
3	Review lessons learned.	5,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
4	Update template files with project specific information.	10,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
5	Prepare applicable attachments.	10,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
6	Check for IFR	5,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
7	Issue IFR	0,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		AA	Account Code/Area/Wor...
8	Internal/Owner Review comments received	0,000	<input checked="" type="checkbox"/>	Civil Engineer	Civil		WR	Account Code/Area/Wor...

3. Enter a unique ID, and then select a Lead Discipline.
4. Modify or delete existing steps, or add new steps, as necessary.
5. Click **Save**.

### 5.24.4 Related links

After claiming schemes are added, you can add scope items associated with claiming schemes. For more information, see [Scope items](#) and [Add a scope item](#).

You can also create a claiming scheme from scratch. For more information, see [Add a claiming scheme manually](#).

You can also create claiming schemes in bulk by importing. For more information, see [Import claiming schemes](#).

## 5.25 IMPORT CLAIMING SCHEMES

### 5.25.1 Summary

Importing lets you add claiming schemes in bulk using a Microsoft Excel spreadsheet. Each row in the spreadsheet represents one step in a claiming scheme.

All imported claiming schemes that pass validations are added to the Configure claiming schemes page. The imported claiming schemes that fail validations are added to the Error resolution page. All imports are shown in Audit log > **Import history**.

## 5.25.2 Considerations

- You must have the permission Import claiming schemes.

There are two export options:

- Template - This option exports a blank Excel template that you fill out to add new claiming schemes.
- Data export - This option exports an Excel file of all selected claiming schemes. To select all claiming schemes, select the check box in the upper left of the Configure claiming schemes page.

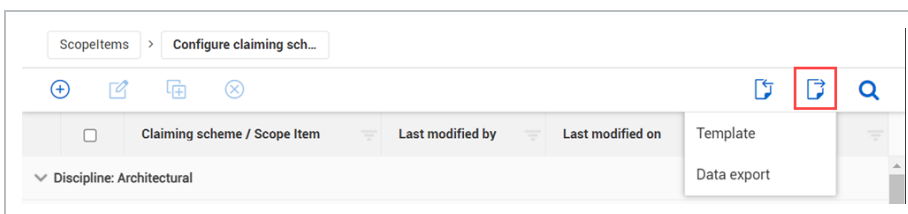
You can only import new claiming schemes, not edit existing ones. To edit an existing claiming scheme on the Configure claiming schemes page, select a claiming scheme, and then click the **Edit claiming scheme** icon.

A system-generated milestone named Scope Complete is automatically assigned to a claiming scheme's last step if the last step is a null value when configured.

## 5.25.3 Steps

To import claiming schemes using the Excel template:

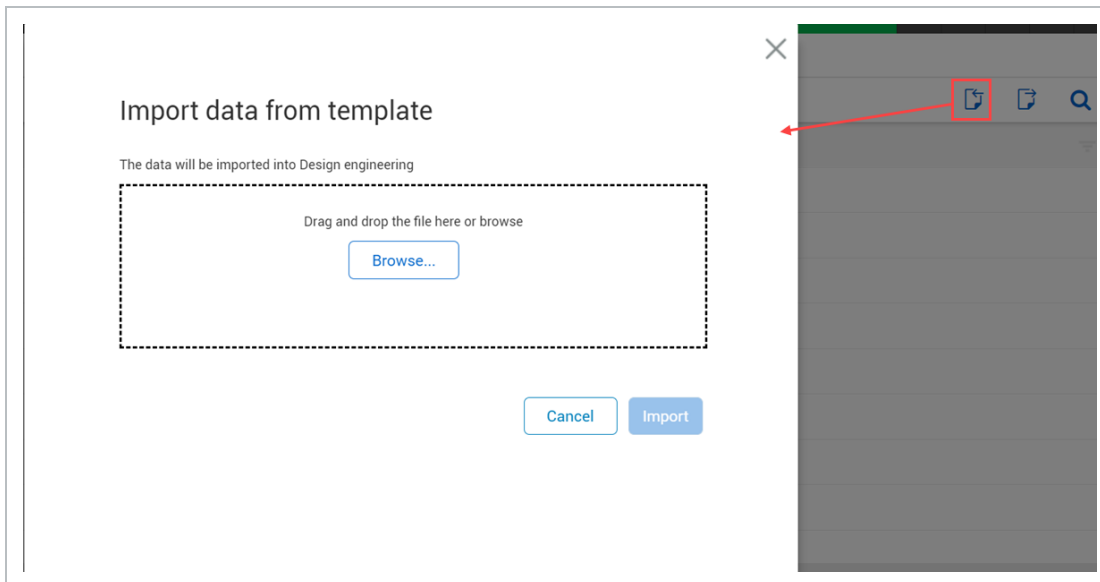
1. In the Configure claiming schemes page, click the **Export claiming scheme** icon, and then select **Template** from the drop-down menu. The Export Claiming Scheme Template.xlsx spreadsheet is downloaded.



2. Open the template in Excel.
3. Fill out the required fields for each claiming scheme and step. Each row represents one step. The ID column is the name of the claiming scheme.

ID	Description	Lead Discipline	Step	Step name	% Claim	Partial claiming	Resource type
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	1	Final Design Development Bridge Structures- 5% Step	5,000	True	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	2	Final Design Development Bridge Structures- Receive As Bults & Digitize Complete	5,000	False	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	3	Final Design Development Bridge Structures- 15% Step	5,000	True	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	4	Final Design Development Bridge Structures- Analytical Model Geometry Complete	5,000	False	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	5	Final Design Development Bridge Structures- 45% Step	5,000	True	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	6	Final Design Development Bridge Structures- Coordination with Track and Systems	5,000	False	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	7	Final Design Development Bridge Structures- 65% Step	5,000	True	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	8	Final Design Development Bridge Structures- Jacking Sequence Finalized	5,000	False	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	9	Final Design Development Bridge Structures- 95% Step	5,000	True	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	10	Final DQCP 01 - Self Checks Complete	3,000	False	Structural Engineer
0123 EW BSTR	Bridge Structures - Early Works Structural	Structural	11	Final DQCP 01 QC Disciplinary Review	2,000	True	Structural Engineer

4. Save the Excel file.
5. In the Configure claiming schemes page, click the **Import claiming scheme** icon.
6. In the Import data from template dialog box, click **Browse**, and then select the Excel file. Click **Import**. The Import history page opens with the status of the import.



7. If there are issues, click **Completed with issues** in the Status column to open Claiming scheme error resolution, and then click the claiming scheme ID to view and resolve issues before saving.

### 5.25.4 Related links

After claiming schemes are added, you can add scope items associated with claiming schemes. For more information, see [Scope items](#) and [Add a scope item](#).

You can also create claiming schemes manually. For more information, see [Add a claiming scheme manually](#).

## 5.26 CONFIGURE WORK PACKAGES OVERVIEW

A work package is a small, manageable scope of work that can be assigned for supervision, execution, and tracking.

In the Configure work packages page, the Engineering Work Package and Deliverable Package tabs are where you can create a list of work packages associated with the project. To open Configure work packages, go to Engineering > Scope Items > Actions > **Configure work packages**.

Display ID	Construction need by date	Discipline	# of scope items	% Complete	CE total Mhrs	Earned Mhrs	Forecast remaining Mhrs	Planned start	Planned finish	Current start	Current finish	Actual start
Process	07/28/2023	Process	4	49	2,800.00	1,362.49	1,437.50	12/20/2022	07/27/2023	11/15/2022	10/31/2023	05/18/2023
Mechanical	08/31/2023	Mechanical										
Piping	09/01/2023	Piping										
BBP	07/07/2023	Building	2	0	2,778.00	0.00	2,778.00	05/23/2023	06/30/2023	01/01/2023	06/30/2023	06/21/2023
Subtotal				Count: 4	34.42	5,578.00	1,362.49	4,215.50				

The Engineering Work Package and Deliverable Package have the same functions. For example, you can create the same work packages in each tab, and then group them so they roll up differently. You can choose to define and group the work packages based on your business process.

You can add, edit, and delete engineering work package and deliverable package items.

The work package grid shows the aggregated work package data for all scope items associated to the work packages on the project. When you add or remove a scope item from a package, the work package summary information is updated. When you update a scope item's hours, dates, or claiming, the summary information is also updated to reflect the changes.

Data validations are built into a work package's summary information for percent complete, hours, and dates. When a scope item associated with a package has missing or null values for hours or dates, a warning icon shows next to the values that depend on the missing or null values to calculate. For example, if a scope item has the Mhrs null due to a missing CE MHRs/qty unit rate, the warning icons show in the % Complete, CE total Mhrs and Earned Mhrs. You can hover over the warning icon for more information.

Display ID	Description	Construction need by date	Discipline	# of scope items	% Complete	CE total Mhrs	Earned Mhrs	Forecast remaining Mhrs	Planned start	Planned finish	Current start	Current finish
Process	Process Package	07/28/2023	Process	4	52.50	2,500.00	1,312.50	1,187.50	12/20/2022	07/27/2023		12/22/2022
Mechanical	Mechanical Package	08/31/2023	Mechanical	1	0.00	1,667.00	0.00	1,667.00	05/23/2023	06/30/2023		05/23/2023
Piping	Piping Package	09/01/2023	Piping	1	0.00	2,778.00	0.00	2,778.00	05/23/2023	06/06/2023		05/24/2023



## 5.26.1 Considerations

You must have the applicable permissions in Engineering.

## 5.27 WORK PACKAGES OVERVIEW PAGE

The Work packages Overview page provides transparency of various work package related items. You can open a work package overview page by clicking an Engineering or Deliverable work package in Scope Items > Actions > **Configure work packages**.

The table below is an overview of the Work and Deliverable work package overview page:

### Overview - Work package overview page

	Title	Description
1	<b>Overview of test package</b>	View and edit the current work package attributes.
2	<b>% Complete</b>	% complete is based on the scope item hours and earned progress on scope items within the work package. $((\text{Earned Qty} \times \text{CE MHRs}) \div \text{Unit}) \div \text{CE Hours}$ .
3	<b>Hours</b>	<ul style="list-style-type: none"> <li>• CE - Sum of the scope item man hours for all scope items within a package <math>(\text{Scope Item Qty} \times \text{CE MHRs}) \div \text{Unit}</math>.</li> <li>• Earned - Sum of the scope item earned hours for all scope items within a package <math>(\text{Earned Qty} \times \text{CE MHRs}) \div \text{Unit}</math>.</li> <li>• Remaining - Sum of the scope item forecast remaining man hours for all scope items within a package <math>(\text{CE Hours} - \text{Earned Hours})</math> if Control integration is off and <math>((\text{Scope Item Qty} - \text{Earned Qty}) \times \text{CE MHRs}) \div \text{Unit}</math> if Control integration is on.</li> </ul>
4	<b>Dates</b>	Start dates show the earliest date, and finish date will show the latest date from the

## Overview - Work package overview page (continued)

	Title	Description
		related scope items.
5	<b>Milestones</b>	<p>When the Project Settings - Dates setting is configured with Scope Item/Milestone, the milestones window will show. You can use the <b>Dates Chooser</b> icon to toggle between the following dates:</p> <ul style="list-style-type: none"> <li>• Planned start/finish</li> <li>• Current start/finish</li> <li>• Actual start/finish</li> <li>• Completion</li> </ul>
6	<b>Remaining steps</b>	View non-completed steps and their percent complete for all related scope items to the package. Remaining steps will be shown ascending based on step order.
7	<b>Teams</b>	Shows all teams associated to the work package and the teams' percent complete. The teams' percent complete is based on scope item hours and earned progress the team is assigned to on the scope items within the work package ( $\text{Earned Hours} \div \text{Scope Item Hours}$ ). An unassigned team will show for scope items that does not have a team assigned.
8	<b>Gantt</b>	<p>List of scope items with their related work packages. In the Gantt chart, you can view the start and finish dates for the scope items within the work package. You can use the <b>Dates Chooser</b> icon to toggle between the following dates:</p> <ul style="list-style-type: none"> <li>• Planned start/finish</li> <li>• Current start/finish</li> <li>• Actual start/finish</li> </ul>

## Overview - Work package overview page (continued)

	Title	Description
--	-------	-------------

When the Project Settings, Dates setting is configured with Scope Item/Milestone, you can expand the scope items and view the milestone dates below the scope item.

The screenshot shows the 'Overview' page for a test package. It includes several key components:

- 1 Overview of test package:** A form for package details including Type, Description, Notes, Construction need by date, and Discipline.
- 2 % Complete:** A donut chart showing 11.63% completion.
- 3 Hours:** A bar chart showing 2,417 hrs CE, 1,111 hrs Earned, and 2,136 hrs Remaining.
- 4 Dates:** A table of key dates:
 

Planned start	05/22/2023
Planned finish	07/27/2023
Current start	04/03/2023
Current finish	10/31/2023
Actual start	05/23/2023
Actual finish	
- 5 Milestones:** A table of milestones:
 

	Current start	Current finish
IFC-issue for Con...	04/03/2023	06/30/2023
IFR-issue for Inte...	05/29/2023	06/16/2023
IFR-issue for Revi...	06/19/2023	10/31/2023
- 6 Remaining steps:** A list of steps with progress indicators (e.g., Step 1: 0.00%, Issue IFR: 0.00%, Review: 0.00%).
- 7 Teams:** A list of teams and their progress (e.g., Process Design Team: 100.00%, Process Engineer Team: 6.25%, Unassigned: 0.00%).
- 8 Scope Item List:** A table with columns for Scope Item, Lead Discipline, Current start, Current finish, and a Gantt-style bar chart for the period from April 2023 to March 2024.
 

Scope Item	Lead Discipline	Current start	Current finish
154895-Mechanical Example	Mechanical	05/23/2023	06/30/2023
154895-Process Example - Doc 4	Process	04/03/2023	10/31/2023

In the scope item list, when you click on a scope item link, the Edit scope item slide-out panel opens. You can view and make changes to scope items. When changes are saved, the overview page is updated to reflect the new changes.

### 5.27.1 Considerations

You must have the applicable permissions in Engineering.

## 5.28 CONFIGURE PROJECT VALUES

You can define project-specific values to assign to scope items in the project. Types of project values are construction work areas, work classifications, and deliverable packages. You define the values for each of these. For example, a construction work area might be named Main St NE bridge, a work classification might be named Civil, and a deliverable package might be named Main St NE bridge access and laydown.

You can configure project values manually from the Scope items page or by importing a Microsoft Excel file.

### 5.28.1 Steps

To add a project value manually:

1. From the Scope items page, click **Actions**, and then select **Configure project values** from the drop-down menu. The Configure project values dialog box opens.

Position	-ID	-Description	Activity code		
28	Enter ID	Enter description	Enter activity code		
<input type="checkbox"/>	01	09L	D09 Minnesota Avenue Laydown	09L	<input type="checkbox"/>
<input type="checkbox"/>	02	10L	D10 Deanwood Laydown	10L	<input type="checkbox"/>
<input type="checkbox"/>	03	11L	D11 Cheverly Laydown	11L	<input type="checkbox"/>
<input type="checkbox"/>	04	12L	D12 Landover Laydown	12L	<input type="checkbox"/>
<input type="checkbox"/>	05	13L	D13 New Carrollton Laydown	13L	<input type="checkbox"/>
<input type="checkbox"/>	06	CBL	Cheverly Bridge Laydown	CBL	<input type="checkbox"/>

Work classification

Deliverable package

Close

2. Click the type of project value you want to add (Construction work area, Work classification, or Deliverable package).
3. In the table, enter an ID and description for the project value.
4. You can also enter an activity code. Activity codes are optional to associate with project values, but they are used to run the Engineering Activity Report.
5. Click the **Add** icon.
6. Click **Close**.

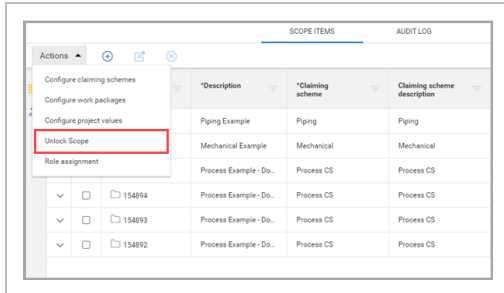
## 5.29 LOCK AND UNLOCK SCOPE

On the Scope items page, you can lock and unlock the scope on a project.

When the scope is locked for the first time on a project, the current Scope item qty value is automatically used as the OB qty value for each existing scope item in the project. When you update the scope item quantity while the scope is locked, a cause code is required. Any new scope items added after the scope is locked do not have an OB quantity.

When the scope is unlocked, then the OB qty field is editable on all existing scope items in the project.

To lock or unlock the scope from the Scope items page, click **Actions**, and then select **Unlock Scope** or **Lock Scope** from the drop-down list.



## 5.29.1 Considerations

- The scope is unlocked by default for new projects.
- To lock the scope, you must have the permission Lock project.
- To unlock the scope, you must have the permission Unlock project.

## 5.30 ROLE ASSIGNMENT

### 5.30.1 Summary

The Role assignment dialog box lets you create roles by resource type, and assign teams and users to roles. You can create roles for any resource type added to your project. When you add a claiming scheme to a scope item, a default role is automatically added for the associated resource type and claiming scheme if a role does not already exist.

The Role assignment dialog box shows the Current and future assignments tab by default when opened. On this tab, you can add roles and assign teams and users. There is also a User assignment history tab, which shows a record of all user assignment changes made.

The Current and future assignments tab shows counts of current assignments to scope items and steps.

After a role is created, you can assign it to a scope item in the Resources section of the Add and Edit scope items slide-out panels and in the Resource Assignments sheet of the Microsoft Excel import template. When you assign a role to a scope item, the Planned team and Assigned user fields are automatically populated with assignments from the Role assignment dialog box and become read-only.

## 5.30.2 Considerations

- To see role assignments, you must have the permission View role assignment. To perform actions on role assignments, you must have the permissions Edit role assignment, Add role assignment, and Delete role assignment.
- When you assign a role to a scope item, the role, planned team, and assigned user are inherited by the claiming steps. You can still update the role on individual steps if the step has not been claimed.
- You can delete a role only if it is not assigned to a scope item.
- When you update a planned team or assigned user on a role, those fields are updated on all incomplete scope items and steps with that role assigned. Any completed roles with the role assigned keep the previous planned team and assigned user.
- There is no limit on the number of roles that can be created for a resource type.
- For each existing role, you can add a future user by clicking the **Add future user** icon next to the role name. This allows another user to be assigned on a role on a future start date. The start date defaults to today's date, and can be updated to a future date. On the start date, the current user is replaced by the future user and each incomplete step is updated with the future user.
  - After a future user is added to a role, the end date of the current user on the role defaults to the day before the future user's start date.

Resource type / Role	Planned team	Assigned user	Start date	End date
Drainage Engineer				
Drainage Engineer 1	Water	Brian	06/07/2021	06/29/2022
Drainage Engineer 1	Water	Dominic	06/29/2022	
CES				

- Each role can have only one future user at a time.

## 5.30.3 Steps

To assign a role, planned team, and user to a resource type:

1. From the Scope items page, click **Actions**, and then select **Role assignment** from the drop-down menu. The Role assignment dialog box opens to the Current and future assignments tab.
2. Click the **Add role** icon next to a resource type. A new row is created below with a default name. To change the name, click on the role name, edit the name, and then press Enter.

CURRENT AND FUTURE ASSIGNMENTS						USER ASSIGNMENT HISTORY				
Resource type / Role	Planned team	Assigned user	Start date	End date	Total scope items	Scope items remaining	Total steps	Steps remaining	Note	
Systems Communications										
Systems Communications 1			06/07/2021		0	0	0	0		
Structural Engineer										
Structural Engineer 1			06/07/2021		0	0	0	0		
Architectural Landscaping										
Architectural Landscaping 1			06/07/2021		0	0	0	0		
Systems Traction Power										
Systems Traction Power 1			06/08/2021		0	0	0	0		
Systems FLS										
Systems FLS 1			06/07/2021		0	0	0	0		
Drainage Engineer										
Drainage Engineer 1	Water	Brian	06/07/2021		0	0	0	0		
CES										
CES 1			06/11/2021		0	0	0	0		

3. Click in the Planned team field for the new role, and then select a team from the drop-down list. Any team added to project settings is available to be selected.
4. Click in the Assigned user field, and then select a user from the drop-down list. Any user with access to the project is available to select.
5. Click **Save**.

### 5.30.4 Related links

For more information about assigning a resource type to a scope item, see [Scope item resources](#).



# CHAPTER 6 – QUANTITY FORECASTING MODULE OVERVIEW

## 6.0.1 Summary

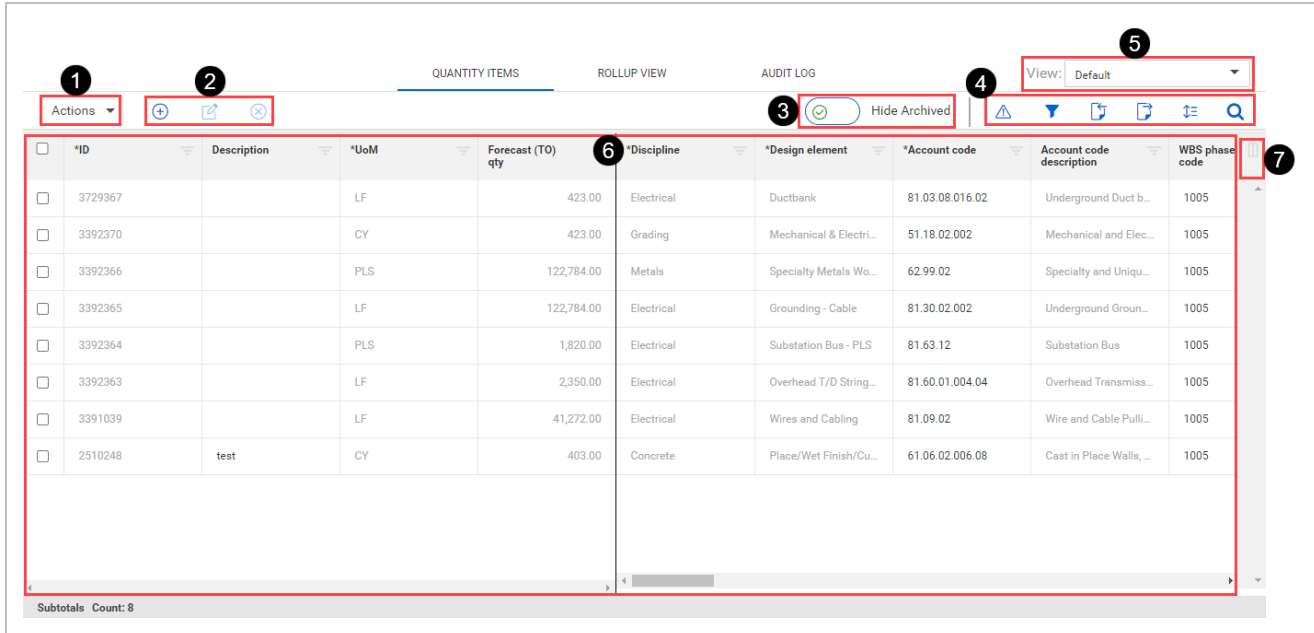
The Quantity forecasting module lets you maintain a continuous integration of quantities, man-hours, and schedule for design-build and EPC work. Quantity forecasting lets you configure a project to track quantities that are being driven by estimate, design, and construction phases on a project.

Quantity forecasting is integrated with the InEight Control and InEight Plan applications, which allows for seamless transition of data between the systems.

# 6.1 QUANTITY ITEMS

The Quantity items page contains the main grid for managing all quantity items and progressing quantities on a project.

The following image and table give an overview of each section of the Quantity items page:



## Overview - Quantity items page

Title		Description
1	<b>Actions menu</b>	Do any of the following: <ul style="list-style-type: none"> <li>• Get Control unit rates</li> <li>• Run report</li> <li>• Lock and unlock scope</li> <li>• Quantity change notes</li> </ul>
2	<b>Quantity item buttons</b>	Add, edit, and delete quantity items.
3	<b>Hide archived</b>	When a quantity item is set to archived and the toggle is turned to <i>On</i> , the quantity item will no longer load nor show in the grid to improve project load

## Overview - Quantity items page (continued)

	Title	Description
		performance. You can make the archived items show by turning the Hide Archived toggle to <i>Off</i> . When turning the toggle to <i>Off</i> , the items marked as archived will load. The toggle is set to <i>On</i> by default.
4	<b>View</b>	Select, save, rename, and delete views.
5	<b>Upper right toolbar icons</b>	<ul style="list-style-type: none"> <li>• Data conflicts - Show whether conflicts exist.</li> <li>• Create Query Filters - Open the query builder.</li> <li>• Import and Export - Import and export sets of data.</li> <li>• Row density lets you adjust the spacing of grid rows</li> <li>• Find lets you search quantity items.</li> </ul>
6	<b>Quantity items</b>	Grid showing quantity items and related information organized by column.
7	<b>Column chooser</b>	Select which columns are shown or hidden.

### 6.1.1 Considerations

You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.

## 6.2 ADD A QUANTITY ITEM

### 6.2.1 Summary

You can add a quantity item manually in the Quantity items page.

The Add quantity item slide-out panel contains the Details and Quantities tabs.

On the Details tab, the fields required to make a quantity item depend on how your project is set up. Whether each field is required or must have a unique value is set in the Fields and component integration subtab of Quantity forecasting project settings.

When a quantity item is added, and the quantity item is associated to a cost item, the quantity is sent to InEight Control. Any quantity where the UoM does not align between a cost item and a quantity item is not sent to Control.

On the Quantities tab, you can set the Quantity driver for the quantity item. The quantity driver designates which design stage drives the quantity item's forecast (TO) qty. When you select a stage as the quantity driver, the forecast (TO) qty is automatically updated with the quantity maintained on that stage. Design stages are used to group and collect quantities as the design changes. Design stages are created at the organization level and added at the project level.

You are not required to set the quantity driver when adding the quantity item, and can change it later. The quantity driver is set to CB qty by default. For more information, see [Quantity driver](#).

## 6.2.2 Considerations

You must have the permission Add quantity items.

## 6.2.3 Steps

To add a quantity item:

1. Click the **Add quantity item** button in the upper left. The Add quantity item slide-out panel opens.

The screenshot displays a software interface with a table of quantity items and a slide-out panel for adding a new item. The table has columns for ID, Description, Unit, Forecast Qty, Discipline, Design element, Account code, and WBS phase code. The 'Add quantity item' panel on the right contains several fields, some marked with an asterisk to indicate they are required: ID, Description, Account code, WBS phase code, Unit, Work type, Quantity source, Area, Subsystem, Discipline, Ground, Cost segment, Construction segment, System, and Turnover. The 'Add' button is highlighted in blue at the bottom right of the panel.

2. Fill in any required fields, as indicated by an asterisk.
3. Click **Add**.

## 6.3 QUANTITY DRIVER

### 6.3.1 Summary

The quantity driver designates which design stage drives a quantity item's forecast (TO) qty. Design stages are used to group and collect quantities as the design changes. Design stages are created at the organization level and added at the project level.

You can update the quantity driver using the Edit quantity item slide-out panel, the Quantity items grid, or the import process. When you select a stage to be the quantity driver, the Forecast (TO) qty field is automatically updated and a blue pushpin icon is added to the design stage.

When the quantity is updated and the quantity item is associated to a cost item, the quantity is sent to InEight Control. Any quantity where the UoM does not align between a cost item and a quantity item is not sent to Control.

You can set the quantity driver to be the CB quantity, any of your project's design stages, or component quantity. Component quantity is the sum of quantities of components from InEight Plan associated to the quantity item.

ID	Description	UoM	Forecast (TO) qty	Quantity driver	CB qty	30% Qty	90% Qty	Design Complete	Component Qty	Installed qty
45509		CY	158.00	Component Qty				<input checked="" type="checkbox"/>	158.00	0.00
45505		Es	24.00	Component Qty				<input checked="" type="checkbox"/>	28.00	0.00
45504		LF	19.87	Component Qty				<input checked="" type="checkbox"/>	19.87	0.00
45503		LF	12.73	Component Qty				<input checked="" type="checkbox"/>	12.73	0.00
45502		Es	1,905.00	90% Qty	0.00		1,905.00	<input type="checkbox"/>	1,905.00	0.00
45501		SP	20.16	Component Qty				<input checked="" type="checkbox"/>	20.16	0.00

### 6.3.2 Considerations

- You can select Component qty as the quantity driver only if the Design Complete check box is selected for the quantity item.
- You can set a stage as the quantity driver even if no quantity is maintained on that stage. In this case, the Forecast (TO) qty field is set to 0.00.

## 6.4 DATA EXPORT

### 6.4.1 Summary

You can export quantity items in the Quantity forecasting > **Quantity Items** page using the export tool. You can export all items or selected items using the tool.

After you start the export, the Audit log > **Export History** page opens to show you the export status and history information. The export status shows as *In progress*. The export processes run in the background, and when completed, the status changes to *Completed* and the Download export file icon becomes available.

You can then download the file by clicking the **Download export file** icon. The file is downloaded as a Microsoft Excel file to your Downloads folder.

## 6.4.2 Considerations

- You must have View quantity forecasting settings permission.
- Other users of Design with the same permission can download the file.
- The file will be available for 60 days. After 60 days, the Download export file icon is disabled.

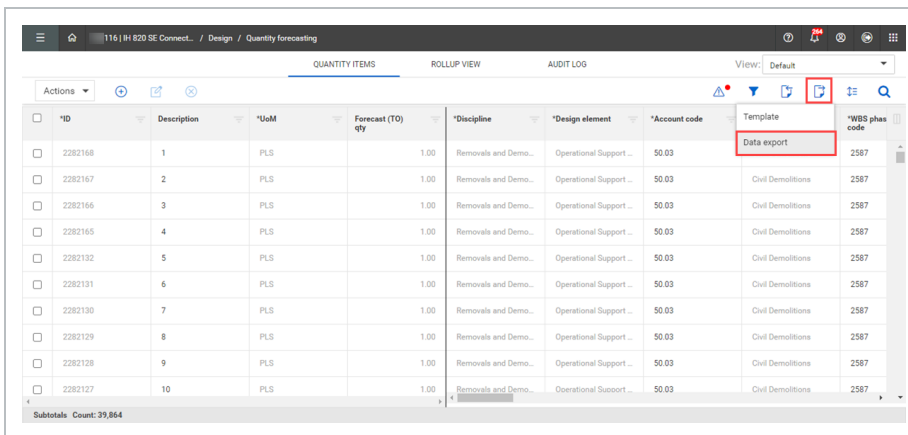
## 6.4.3 Steps

To export all quantity items:

1. Click the **Export quantity items** icon, and then select **Data export**.

### NOTE

To export selected items, click the check box next to the item or items, and then select **Data export**.



*ID	Description	*UoM	Forecast (TO) qty	*Discipline	*Design element	*Account code	Template	*WBS phase code
<input type="checkbox"/>	2282168	1	PLS	1.00	Removals and Demo...	Operational Support ...	Data export	2587
<input type="checkbox"/>	2282167	2	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282166	3	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282165	4	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282132	5	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282131	6	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282130	7	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282129	8	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282128	9	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587
<input type="checkbox"/>	2282127	10	PLS	1.00	Removals and Demo...	Operational Support ...	Civil Demolitions	2587

Subtotals Count: 29,864

The Audit log > **Export History** page opens.

File name	Status	Total record count	Exported by	System time stamp
QuantityItem04182023073957...	In progress	0	Julio Salguero	04/18/2023 12:39:00 PM
QuantityItem04182023040922...	Completed	39,864	Jakob Sjuets1	04/18/2023 09:09:00 AM
QuantityItem04182023031201...	Completed	39,864	Jakob Sjuets1	04/18/2023 08:12:00 AM
QuantityItem04182023025824...	Completed	1	Jakob Sjuets1	04/18/2023 07:58:00 AM
QuantityItem04182023025617...	Completed	39,864	Jakob Sjuets1	04/18/2023 07:56:00 AM
QuantityItem04182023024543...	Completed	39,864	Jakob Sjuets1	04/18/2023 07:45:00 AM
QuantityItem04182023024325...	Completed	39,864	Jakob Sjuets1	04/18/2023 07:43:00 AM

2. In Export History, click the **Download export file** icon to download the file.

## 6.5 ACTIONS

In the Quantity Items page, you can perform various actions on a project. The table and image below shows the available actions:

### Overview - Actions

Action	Description
<b>Get Control unit rates</b>	Update the OB MHrs/Unit, CB MHrs/Unit, CE MHrs/Unit, and Forecast Remaining MHrs/Unit on the Quantity Items with current rates from InEight Control. For more information, see Get Control unit rates.
<b>Run report</b>	Run the Design Activity Report in a new tab. For more information, see Run report.
<b>Get Plan components</b>	Sync the components from InEight Plan to Design and then have the system auto-associate the Plan components to the Quantity Items in Design based on the Component Rollup configured in the project settings. For more information, see Get Plan components.
<b>Lock and Unlock scope</b>	Lock and unlock scope on a project. A warning will show when scope is unlocked that reads " <i>Scope is unlocked</i> ". For more information, see Lock and unlock scope.
<b>Quantity change notes</b>	Create notes to capture quantity change by discipline on a project. You can assign a Discipline, Design Element, Quantity, Cause Code, and Tags to a Quantity Change Note. For more information, see Quantity

### Overview - Actions (continued)

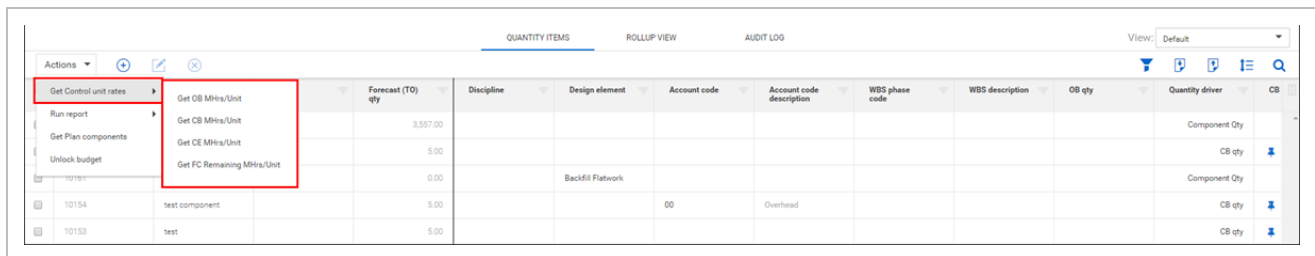
Action	Description
	change notes.

#### 6.5.1 Considerations

- You must have applicable permissions in Quantity forecasting.
- OB Mhrs/Unit, CB Mhrs/Unit must be setup in Project settings.

## 6.6 GET CONTROL UNIT RATES

You can update the OB Mhrs/Unit, CB Mhrs/Unit, CE Mhrs/Unit, and Forecast Remaining Mhrs/Unit for quantity items with current rates from InEight Control. This lets you use the latest budget unit rates from Control multiplied by the latest forecasted Design quantity to understand the impacts to man hours on the project.



With Quantity Items tagged with a WBS from Control, the action lets you select which cost items to update the unit rates in Design. Control then shows the current unit rate applied in Design, the pending unit rate from Control, when the unit rate was last updated, and who performed the last update. Unit rates are never updated automatically with InEight Control unit rates. You must go through the Get Control unit rates action to update the rate applied to a Quantity Item.

#### 6.6.1 Mhrs Delta columns

The Mhrs/Unit delta and Mhrs Delta columns let you see any Mhrs/Unit or Mhrs change before applying the Pending Control Unit Rate. This is a read-only field that shows the difference between the



total Mhrs of quantity items with like WBS calculated using the current Quantity Forecasting rate and the total Mhrs calculated using the Pending Control rate.

Get CE Mhrs/Unit

1 Select Cost Items → 2 Get Unit Rates

WBS phase code	Description	Current Rate	Pending control rate	Manual Rate	Mhrs/Unit Delta	Mhrs Delta	Last update	Updated by
1007	KIE-Design ...	39.34769230...	39.34769230769		0.00000000...	0.00000000...	03/22/2024...	Mamatha R
1013	KIE-Project ...	38.12413793...	38.12413793103		0.00000000...	0.00000000...	02/09/2024...	Jakob Sjuts1
1014	KIE-Enginee...	37.66146993...	37.66146993318		0.00000000...	0.00000000...	02/09/2024...	Jakob Sjuts1
1016	QTO-Manag...	0.00000000000	0.00000000000		0.00000000...		02/09/2024...	Jakob Sjuts1
1017	QTO-Demo/...	0.00000000000	0.00000000000		0.00000000...	0.00000000...	02/09/2024...	Jakob Sjuts1

Buttons: Cancel, Back, Update

The Manual Rate column lets you specify a manual CE Mhrs unit rate for a WBS phase code, while still allowing other WBS phase codes to function off the unit rate from Control.

Get CE Mhrs/Unit

1 Select Cost Items → 2 Get Unit Rates

WBS phase code	Description	Current Rate	Pending control rate	Manual Rate	Mhrs/Unit Delta	Mhrs Delta	Last update	Updated by
1007	KIE-Design ...	39.34769230...	39.34769230769	45	5.65230769...	0.00000000...	02/09/2024...	Jakob Sjuts1
1013	KIE-Project ...	38.12413793...	38.12413793103		0.00000000...	0.00000000...	02/09/2024...	Jakob Sjuts1
1014	KIE-Enginee...	37.66146993...	37.66146993318		0.00000000...	0.00000000...	02/09/2024...	Jakob Sjuts1
1016	QTO-Manag...	0.00000000000	0.00000000000		0.00000000...		02/09/2024...	Jakob Sjuts1
1017	QTO-Demo/...	0.00000000000	0.00000000000		0.00000000...		02/09/2024...	Jakob Sjuts1

Buttons: Cancel, Back, Update

### 6.6.2 Get FC Remaining Mhrs/Unit - Manual Rate column

The Manual Rate column in the Get FC Remining Mhrs/Unit dialog box. This column lets you specify a manual FC Remaining unit rate for a WBS phase code, while still allowing other WBS phase codes to function off the unit rate from Control.

✕

Get FC Remaining MHrs/Unit

1 — 2

Select Cost Items
Get Unit Rates

WBS phase code	Description	Current Rate	Pending control rate	Manual Rate <span style="font-size: 0.8em;">↑</span>	MHrs/Unit Delta	MHrs Delta	Last update	Updated by
1006	Mech/Elec ...	0.08493639466	0.00000000000		-0.0849363...	0.00000000...	05/04/2022...	Mason Green

Cancel
Back
Update

### 6.6.3 Considerations

- You must have Level 3 – Account Admin permissions in InEight Platform or a role with the applicable permissions in Quantity Forecasting.
- Get OB MHrs/Unit and CB MHrs/Unit options must be setup in Project settings.

## 6.7 GET PLAN COMPONENTS

You can sync the components from InEight Plan to Design to let your Quantity Item Forecast (TO) quantity to be driven by the component quantity directly from Plan. The system automatically associates the integrated Plan components to the quantity items in Design based on the project settings for required and unique attributes and project values.

To navigate to Get Plan components, go to the projects home page > Design > Quantity forecasting > Quantity Items > **Actions**.

ID	Description	*UoM	Forecast (TO) qty	*D
2200245		LF	526.74	S
2030534		Ea	6.00	E
2030533		LF	280.00	E
2030532		LF	320.00	E
2030534		LF	80.00	E
2030533		Ea	2.00	E
2030532		Ea	4.00	E

A banner shows when the sync is in progress after you select **Get Plan components**.

ID	Description	*UoM	Forecast (TO) qty	*Discipline	*Design element	*Account code	Account code description	*WBS phase code
3422429	NNN	Wk	600.00	Operational Support	Dust Control	30.06.32.004	Support Services - D.	2930

During the sync, two things occur:

- As new or updated components are brought into Design, their attributes are compared to what is defined in the project settings, and then associations that occurred are created or updated.
- The quantity item's quantity is updated based on the new quantity that is brought over from Plan, and then update any Forecast (TO) quantity where Component Qty driver is set.

These are read-only fields that show the summed amounts for the quantity and installed quantity of components assigned to the quantity item.. You can view components assigned to a quantity item by opening the Edit quantity item slide-out of a quantity item, and then selecting the **Components** tab or by selecting the link available on the Component Qty amount in the grid.

QUANTITY ITEMS										ROLLUP VIEW	AUDIT LOG	View: Default
ID	Description	UoM	Forecast (TO) Qty	0% Qty	90% Qty	Design Complete	Component Qty	Installed qty				
45609		CY	158.00			✓	158.00	0.00				
45605		Ea	24.00			✓	24.00	0.00				
45604		LF	19.37			✓	19.37	0.00				
45603		LF	13.73			✓	13.73	0.00				
45602		Ea	1,905.00		1,905.00	✓	1,905.00	0.00				
45601		SF	20.16			✓	20.16	0.00				
45600		SF	10.50			✓	10.50	0.00				
45599		SF	10.50			✓	10.50	0.00				
45598		SF	56.50			✓	56.50	0.00				

Edit quantity item			
DETAILS	QUANTITIES	COMPONENTS	NOTES
Component ID	Component qty	Installed qty	Modified Date
Embed Concrete Heating Hoardin EC-300 (1) G.U.	4.00000	0.00000	11/21/2019 12:23:19 PM
Embed Concrete Heating Hoardin EC-300 (1) G.U.	11.00000	0.00000	11/21/2019 12:23:19 PM
Embed Concrete Heating Hoardin EC-301 (1) G.U.	23.00000	0.00000	11/21/2019 12:23:19 PM
Embed Concrete Heating Hoardin EC-301 (1) G.U.	19.00000	0.00000	11/21/2019 12:23:19 PM
Embed Concrete			
<b>Subtotal</b>	<b>158.00</b>		

## 6.7.1 Considerations

- You must have applicable permissions in Quantity forecasting.
- The Get Plan components action is available when Enable component integration with Plan is enabled and configured in the project settings > Quantity forecasting > Component integration > **Plan component integration**.

## 6.8 LOCK AND UNLOCK SCOPE

On the Quantity Items page, you can lock and unlock the scope of a project. When you lock the scope, the OB Qty and OB Man Hour fields are disabled, and the design stages are enabled to allow stage quantities to be maintained and updated. Locking scope maintains a snapshot of your initial estimate quantity to help in benchmarking post-project completion.

When you unlock the scope, the OB Qty and OB Man Hour fields are enabled, and all the design stages fields are disabled.

To lock or unlock the scope from the Quantity Items page, click **Actions**, and then select **Unlock Scope** or **Lock Scope** from the drop-down list.

QUANTITY ITEMS		ROLLUP VIEW	AUDIT LOG	View: Unsaved (Default)				
Actions	Description	*UoM	Forecast (TO) qty	OB qty	OB Mhrs	CB Mhrs	CE Mhrs	Forecast
Get Control unit rates								
Run report								
Get Plan components	NNN	Wk	600.00					156.08
Unlock scope	Test Bug 23619871	SY	0.00					0.00
Quantity			80.00					20.81
	2200248	LF	526.74					559.00
	2200247	Ea	6.00					2.16
	2200246	LF	280.00					8.40
	2200245	LF	320.00					9.60
	2030533	Ea	2.00					4.75
	2030532	Ea	4.00					9.50
	2030531	Ea	2.00					4.75
	2030530	Ea	2.00					4.75
Subtotals Count: 13,144				1,857,409.05	1,846,599.13	2,165,654.28		

### 6.8.1 Considerations

- The scope is unlocked by default for new projects.
- A warning banner shows when the scope is unlocked that reads “The scope is unlocked. Scope must be locked to add design quantities.”
- To lock the scope, you must have the permission Lock project.
- To unlock the scope, you must have the permission Unlock project.

## 6.9 QUANTITY CHANGE NOTES

In Quantity change notes, you can create notes to capture quantity change by discipline on a project. This lets you document changes throughout the life of the project to understand what changed, why it changed, and when it changed.

When an account code set is assigned to a project, the system only shows the design elements that are associated to the selected discipline in the account code set in the Quantity change notes dialog box drop-down fields.

To view, edit, or create a new note, select **Quantity change notes** in the Actions drop-down menu.

Actions		QUANTITY ITEMS	ROLLUP VIEW	AUDIT LOG	View: Unsaved (Default)				
		Description	*UoM	Forecast (TO) qty	*Discipline	*Design element	*Account code	Account code description	*WBS code
Get Control unit rates		NNN	Wk	600.00	Operational Support	Dust Control	30.06.32.004	Support Services - D...	2930
Run report		Test Bug 23619871	SY	0.00	Operational Support	Temporary Roads, P...	30.06.04.002	Temporary Roads, P...	3422
Get Plan components		Test Bug 2361987	LF	80.00	Electrical	Heat Trace - Cable	81.39.02	Heat Trace self-regu...	2930
Unlock scope		22002	LF	526.74	Subcontracts	Piping Subcontracts...	95.70	Piping Subcontracts	2657

In the dialog box, you can edit the existing notes directly. To create a new note, assign a discipline, design element, quantity, cause code, and tags, and then click **Add** to create the new note.

Quantity change notes

Add note to capture any quantity change by discipline

*Discipline	*Design element	*Qty	*UoM	*Cause code	*Note	Tags	Modified by	Modified date
Select discipline	Select design element	Enter qty	Select uom	Select cause code	Enter note	Select tags		
<input type="checkbox"/> Civil Utilities	Precast Cable Trench	100	LF	Design Change	test2		Jai-ob	6/23/2020 2:28:43 PM
<input type="checkbox"/> Building	Joint Sealants	10	LF	Design Change	test		Jai-ob	6/22/2020 2:59:43 PM

Notes: 2

[Close](#)

All additions, edits, and deletions are automatically saved.

### 6.9.1 Considerations

You must have applicable permissions in Quantity forecasting.